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## **Report on the technical review of the eighth national communication and the technical review of the fifth biennial report of France**

Parties included in Annex I to the Convention were requested by decision 6/CP.25 to submit their eighth national communication to the secretariat by no later than 31 December 2022. According to decision 15/CMP.1, Parties included in Annex I to the Convention that are also Parties to the Kyoto Protocol are required to include in their national communications supplementary information under Article 7, paragraph 2, of the Kyoto Protocol. This report presents the results of the technical review of the eighth national communication and relevant supplementary information under the Kyoto Protocol of France, 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” and the “Guidelines for review under Article 8 of the Kyoto Protocol”.

Developed country Parties were requested by decision 6/CP.25 to submit their fifth biennial report to the secretariat by no later than 31 December 2022. This report presents the results of the technical review of the fifth biennial report of France, 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”.

The review of these submissions took place in Paris from 22 to 26 May 2023.



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## Abbreviations and acronyms

AAU	assigned amount unit
AEA	annual emission allocation
AFD	French Development Agency
Annex I Party	Party included in Annex I to the Convention
Annex II Party	Party included in Annex II to the Convention
AR	Assessment Report of the Intergovernmental Panel on Climate Change
boe	barrel of oil equivalent
BR	biennial report
CER	certified emission reduction
CH <sub>4</sub>	methane
CITEPA	Interprofessional Technical Centre for Studies on Air Pollution
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> eq	carbon dioxide equivalent
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CRF	common reporting format
CTF	common tabular format
ERA-NET	European Research Area Network
ERT	expert review team
ERU	emission reduction unit
ESD	European Union effort-sharing decision
ESR	European Union effort-sharing regulation
EU	European Union
EU ETS	European Union Emissions Trading System
Eurostat	statistical office of the European Union
F-gas	fluorinated gas
GCOS	Global Climate Observing System
GDP	gross domestic product
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
IE	included elsewhere
IPCC	Intergovernmental Panel on Climate Change
IPPU	industrial processes and product use
ICER	long-term certified emission reduction
LDCF	Least Developed Countries Fund
LULUCF	land use, land-use change and forestry
MRV	measurement, reporting and verification
N <sub>2</sub> O	nitrous oxide
NA	not applicable
NC	national communication
NDC	nationally determined contribution
NE	not estimated
NF <sub>3</sub>	nitrogen trifluoride
NIR	national inventory report
NO	not occurring
non-Annex I Party	Party not included in Annex I to the Convention
PaMs	policies and measures

PFC	perfluorocarbon
reporting guidelines for supplementary information	“Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol. Part II: Reporting of supplementary information under Article 7, paragraph 2”
RMU	removal unit
SF <sub>6</sub>	sulfur hexafluoride
TA	technical assessment
tCER	temporary certified emission reduction
UNFCCC reporting guidelines on BRs	“UNFCCC biennial reporting guidelines for developed country Parties”
UNFCCC reporting guidelines on CTF tables	common tabular format for “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’
WMO	World Meteorological Organization

## I. Introduction and summary

### A. Introduction

1. This is a report on the in-country technical review of the NC8 and BR5 of France. 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” and “Part V: UNFCCC guidelines for the technical review of national communications from Parties included in Annex I to the Convention” (annex to decision 13/CP.20), and the “Guidelines for review under Article 8 of the Kyoto Protocol” (annex to decision 22/CMP.1 and annex I to decision 4/CMP.1).
2. In accordance with decision 13/CP.20, a draft version of this report was transmitted to the Government of France, which provided comments that were considered and incorporated, as appropriate, with revisions into this final version of the report.
3. The review was conducted from 22 to 26 May 2023 in Paris by the following team of nominated experts from the UNFCCC roster of experts: Abdelrhani Boucham (Morocco), Geoffrey Brouwer (Canada), Kamal Djemouai (Algeria), Akram Hamza (Tunisia), Gherghita Nicodim (Romania) and Róisín Moriarty (Ireland). Gherghita Nicodim and Kamal Djemouai were the lead reviewers. The review was coordinated by Karin Simonson and Jeeyoon Jung (secretariat).

### B. Summary

4. The ERT conducted a technical review of the information reported in the NC8 of France in accordance with the UNFCCC reporting guidelines on NCs,<sup>1</sup> the reporting guidelines for supplementary information, in particular the supplementary information required under Article 7, paragraph 2, and on the minimization of adverse impacts under Article 3, paragraph 14, of the Kyoto Protocol<sup>2</sup> and of the information reported in the BR5 of France in accordance with the UNFCCC reporting guidelines on BRs.<sup>3</sup>

#### 1. Timeliness

5. The NC8 was submitted on 6 January 2023, after the deadline of 31 December 2022 mandated by decision 6/CP.25. The NC8 was resubmitted on 2 March, 22 June (working version) and 12 July 2023 (official resubmission) to address issues raised during the review. The latest resubmission includes changes and additions to the executive summary, GHG inventory, PaMs, projections and the total effect of PaMs, and financial resources and transfer of technology sections. Unless otherwise specified, the information and values from the 22 June submission are used in this report.
6. France did not inform the secretariat about its difficulties with making a timely NC8 submission. In accordance with decision 13/CP.20, a Party should inform the secretariat thereof by the due date of the submission in order to facilitate the arrangement of the review process. The ERT noted with concern the delay in the submission and recommended that France make its next submission on time.
7. The BR5 was submitted on 6 January 2023, after the deadline of 31 December 2022 mandated by decision 6/CP.25. The CTF tables were submitted on 2 March 2023. The BR5 was resubmitted on 2 March, 22 June (working version) and 12 July 2023 (official resubmission) to address issues raised during the review. The CTF tables were resubmitted on 23 June (working version) and 13 July 2023 (official resubmission) to address issues

<sup>1</sup> Decision 6/CP.25, annex.

<sup>2</sup> Decision 15/CMP.1, annex, and decision 3/CMP.11, annex III.

<sup>3</sup> Decision 2/CP.17, annex.

raised during the review. The official resubmission includes changes to all sections of the BR5 (GHG emissions and removals, quantified economy-wide emission reduction target and related assumptions, conditions and methodologies, progress in achievement of targets and provision of support to developing country Parties). France resubmitted a third version of the CTF tables on 31 August 2023, which was considered by the ERT on an exceptional basis as the revision included several important corrections, notably to the values for financial, technological and capacity-building support. Unless otherwise specified, the descriptive information is taken from the 22 June submission, while the quantitative values are taken from the CTF tables in the 31 August resubmission, as appropriate.

8. France did not inform the secretariat about its difficulties with making a timely BR5 submission. In accordance with decision 13/CP.20, a Party should inform the secretariat thereof by the due date of the submission in order to facilitate the arrangement of the review process. The ERT noted with concern the delay in the submission.

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

9. Issues and gaps identified by the ERT related to the information reported by France in its NC8 are presented in tables 1–2. In addition to the issues and gaps presented in tables 1–2, the ERT noted that the Party did not organize the content of the NC8 in accordance with the outline contained in the appendix to decision 6/CP.25. The ERT therefore recommends that the Party improve the transparency of its NC reporting in subsequent reports by organizing the content of its next NC in accordance with this guidance. Regarding the information reported, including the supplementary information under the Kyoto Protocol, the ERT noted that it mostly adheres to the UNFCCC reporting guidelines on NCs. The ERT concludes that the issues of a mandatory nature related to supplementary information under the Kyoto Protocol do not influence the Party's ability to fulfil its commitments for the second commitment period of the Kyoto Protocol.

10. France made improvements to the reporting in its NC8 compared with that in its NC7, including by addressing some recommendations and encouragements from the previous review report. The ERT noted that the Party has improved:

(a) The transparency of the information reported on national circumstances relevant to GHG emissions and removals by including details on how its national circumstances are relevant to factors affecting GHG emissions and removals;

(b) The transparency of the GHG inventory information reported by aligning it with the latest NIR on the procedures followed to estimate the GHG emissions;

(c) The completeness of the information reported on projections and the total effects of PaMs by providing a WAM projections scenario, further information on the models used to produce the WEM and WEM scenarios and links to sources of further information, including references to the models in the NC8;

(d) The completeness of the information reported on financial, technological and capacity-building support by providing information on how it has determined resources as being “new and additional”.

Table 1

### Assessment of completeness and transparency of mandatory information reported by France in its eighth national communication

<i>Section of NC</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to description of recommendations</i>
Executive summary	Complete	Mostly transparent	See paragraph 9 above
National circumstances relevant to GHG emissions and removals	Complete	Transparent	–
GHG inventory	Mostly complete	Transparent	Issue 2 in table I.1
PaMs	Complete	Mostly transparent	Issues 3 and 5 in table I.2

<i>Section of NC</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to description of recommendations</i>
Projections and the total effect of PaMs	Complete	Mostly transparent	Issues 1 and 4 in table I.3
Vulnerability assessment, climate change impacts and adaptation measures	Complete	Transparent	–
Financial resources and transfer of technology	Mostly complete	Mostly transparent	Issues 1, 2, 4 and 5 in table I.4
Research and systematic observation	Complete	Transparent	–
Education, training and public awareness	Complete	Transparent	–

*Note:* A list of findings pertaining to the completeness and transparency issues identified in this table is included in annex I. The assessment of completeness and transparency by the ERT in this table is based only on the “shall” reporting requirements.

Table 2

**Assessment of completeness and transparency of mandatory supplementary information under the Kyoto Protocol reported by France in its eighth national communication**

<i>Supplementary information under the Kyoto Protocol</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to description of finding(s)</i>
National system	Complete	Transparent	–
National registry	Mostly complete	Transparent	Issue 1 in table I.8
Supplementarity relating to the mechanisms pursuant to Articles 6, 12 and 17	Complete	Transparent	–
PaMs in accordance with Article 2	Complete	Mostly transparent	Issue 2 in table I.8
Domestic and regional programmes and/or arrangements and procedures	Mostly complete	Transparent	Issue 3 in table I.8
Information under Article 10 <sup>a</sup>	Complete	Transparent	–
Financial resources	Complete	Transparent	–
Minimization of adverse impacts in accordance with Article 3, paragraph 14	Complete	Transparent	–

*Note:* A list of findings pertaining to the completeness and transparency issues identified in this table is included in annex I. The assessment of completeness and transparency by the ERT in this table is based only on the “shall” reporting requirements.

<sup>a</sup> The assessment refers to information provided by the Party on the provisions contained in Article 4, paras. 3, 5 and 7, of the Convention, as reported under Article 10 of the Kyoto Protocol, which is relevant to Annex II Parties only. An assessment of the information on the other provisions of Article 10 of the Kyoto Protocol is provided under the relevant substantive headings under the Convention, for example research and systematic observation.

11. Issues and gaps identified by the ERT related to the information reported by France in its BR5 are presented in table 3. The information reported mostly adheres to the UNFCCC reporting guidelines on BRs.

12. France made improvements to the reporting in its BR5 compared with that in its BR4, including by addressing some recommendations and encouragements from the previous review report. The ERT noted that the Party has improved:

(a) The transparency of the GHG inventory information reported by aligning it with the latest NIR on the procedures followed to estimate the GHG emissions;

(b) The completeness of the information reported on the provision of financial, technological and capacity-building support to developing country Parties by providing information on how it has determined resources as being “new and additional”.

Table 3

**Summary of completeness and transparency of mandatory information reported by France in its fifth biennial report**

<i>Section of BR</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to description of finding(s)</i>
GHG emissions and removals	Complete	Transparent	–
Quantified economy-wide emission reduction target and related assumptions, conditions and methodologies	Complete	Mostly transparent	Issue 1 in table II.1
Progress in achievement of targets	Complete	Mostly transparent	Issue 2 in table II.2
Provision of support to developing country Parties	Complete	Mostly transparent	Issue 2 in table II.4

*Note:* A list of findings pertaining to the completeness and transparency issues identified in this table is included in annex II. The assessment of completeness and transparency by the ERT in this table is based only on the “shall” reporting requirements.

## **II. Technical review of the information reported in the eighth national communication and fifth biennial report**

### **A. National circumstances relevant to greenhouse gas emissions and removals**

#### **1. Technical assessment of the reported information**

13. The NC8 contains key data on legislation, population trends, geography and land use, climate and climate change, economic developments, energy, transport, the buildings sector, industry, trade, the services sector, agriculture, forestry, resource efficiency and wastewater. The population of France was 67.8 million in 2021, including 2.2 million in the overseas territories, an increase of 0.3 per cent in comparison with 2020 due to the natural balance and net migration. In 2021 France’s GDP increased by 6.8 per cent compared with 2020 following a decrease of 7.8 per cent in 2020 compared with 2019 as a result of the coronavirus disease 2019 pandemic, the consequences of which translated into some important structural changes within economic sectors. These include the Party’s allocation of significant financial resources to mitigate the effects of the pandemic and contribute to a ‘green recovery’. Resources were provided through the Party’s recovery and resilience plan following the pandemic (France Relance), amounting to a total of EUR 100 billion, from which EUR 30 billion was allocated to financing the ecological transition through the decarbonization of industry, renovation and thermal insulation of buildings, greening of the various types of transportation (road transport and aviation), transition to ecological agriculture or implementing a circular economy. Given that all the planned investments are intended to contribute to the national economy and to the whole population becoming more sustainable, more resilient and prepared for the green and digital transition, their implementation results in a decreasing trend of GHG emissions.

14. The Party has in place a multi-year investment plan (France 2030), which includes EUR 30 billion in spending over a five-year period (2021–2025), half of which is dedicated to the ecological transition. The plan will stimulate technological innovation in the energy and transport sectors. Within the energy sector the focus will be on innovation in the field of producing green hydrogen and decarbonizing energy consumption in industry. The transport sector will be provided with almost EUR 4 billion to support the production in the near future of 2 million electric or hybrid vehicles per year, as well as the first low-carbon aircraft.

#### **2. Assessment of adherence to the reporting guidelines**

15. The ERT assessed the information reported in the NC8 of France and recognized that the reporting is complete and transparent, and thus adheres to the UNFCCC reporting



guidelines on NCs. There were no issues raised during the review relating to the topics discussed in this chapter of the review report.

## B. Greenhouse gas inventory information<sup>4</sup>

### 1. Technical assessment of the reported information

16. France reported information in its BR5 and NC8 on its historical GHG emissions. It clarified that, under the Convention, its obligations are to submit GHG inventories for two separate geographic areas: the area comprising EU member States included in the joint EU economy-wide emission reduction target of 20 per cent below the 1990 level by 2020 and the area covering the whole of France, including the overseas territories, which is not covered by a target. These two areas are subject to GHG inventory reporting in distinct sets of CRF tables.

17. The Party reported in its NC8 information on its GHG emissions from the most recent annual inventory submission at the time of the report's elaboration (i.e. 14 April 2022, submission version 1). Its report is focused on the figures corresponding to the geographic area covered by the joint EU economy-wide emission reduction target. Total GHG emissions<sup>5</sup> excluding emissions and removals from LULUCF decreased by 27.8 per cent between 1990 and 2020, while total GHG emissions including net emissions or removals from LULUCF decreased by 27.1 per cent over the same period. Emissions peaked in 1991 and decreased thereafter owing to implemented sector-specific measures, such as CH<sub>4</sub> recovery from landfills, a reduction in the amount of nitrogen fertilizers on agricultural soils and the implementation of abatement measures in industry. Emissions started to decrease significantly after 2005, followed by an increase between 2014 and 2018 due to low prices of fossil fuels and the unavailability of nuclear energy during maintenance of nuclear power plants in France. In 2020 the lower emission level of 392,962.57 kt CO<sub>2</sub> eq without LULUCF was achieved in France as a result of the pandemic and the measures that were taken to combat it, consequently reducing the corresponding GHG emissions. The changes in total emissions were driven mainly by factors such as mitigation actions implemented at the EU and domestic level, mostly after 2005, when implementation of the EU ETS across EU member States began.

18. Table 4 illustrates the emission trends by sector and by gas for France. The emissions reported in the 2023 inventory submission (which have not yet been subject to review) differ from the data reported in CTF table 1, which are based on the GHG inventory submission of April 2022. In comparison with the 2022 submission, the current GHG inventory does not present significant differences in the trend for the entire time series. The ERT noted a constant additional quantity of emissions each year, which is mainly the result of starting to apply GWPs from the AR5 in the 2023 submission.

Table 4

**Greenhouse gas emissions by sector and by gas for France for 1990–2021**

	GHG emissions (kt CO <sub>2</sub> eq)					Change (%)		Share (%)	
	1990	2000	2010	2020	2021	1990–2021	2020–2021	1990	2021
<i>Sector</i>									
1. Energy	370 559.86	385 788.24	363 799.32	272 062.99	293 275.78	–20.9	7.8	67.5	69.8
A1. Energy industries	66 537.12	63 096.58	60 763.07	38 302.96	40 126.33	–39.7	4.8	12.2	9.6
A2. Manufacturing industries and construction	66 007.13	68 729.97	58 669.97	45 492.52	47 444.32	–28.1	4.3	12.1	11.3
A3. Transport	123 313.04	141 980.25	134 851.99	111 272.79	125 220.61	1.5	12.5	22.5	29.8
A4. and A5. Other	102 912.65	103 698.05	103 539.16	73 827.10	77 793.47	–24.4	5.4	18.7	18.5

<sup>4</sup> GHG emission data in this section are based on France's 2022 annual submission, version 1.0. All emission data in subsequent chapters are based on France's BR5 CTF tables unless otherwise noted.

<sup>5</sup> In this report, the term "total GHG emissions" refers to the aggregated national GHG emissions expressed in terms of CO<sub>2</sub> eq excluding LULUCF and including indirect CO<sub>2</sub> emissions, unless otherwise specified.

	GHG emissions (kt CO <sub>2</sub> eq)					Change (%)		Share (%)	
	1990	2000	2010	2020	2021	1990– 2021	2020– 2021	1990	2021
B. Fugitive emissions from fuels	11 789.92	8 283.39	5 975.14	3 167.62	2 691.05	–7.2	–15.0	2.0	0.6
C. CO <sub>2</sub> transport and storage	NO	NO	NO, IE	NO, NA	NO, NA	–	–	–	–
2. IPPU	74 060.78	61 520.35	52 399.32	39 490.50	41 804.12	–43.6	5.9	14.4	10.0
3. Agriculture	78 176.82	78 506.06	72 289.01	67 668.49	66 529.31	–14.9	–1.7	14.8	15.8
4. LULUCF	–16 920.98	–21 069.94	–40 944.31	–22 236.51	–16 788.79	–0.8	–24.5	NA	NA
5. Waste	18 033.23	22 899.86	22 665.27	19 075.05	18 451.54	2.3	–3.3	3.2	4.4
6. Other <sup>a</sup>	NO	NO	NO	NO	NO	–	–	–	–
<i>Gas<sup>b</sup></i>						–	–		
CO <sub>2</sub>	399 166.17	416 290.48	390 493.65	296 194.91	320 908.30	–19.6	8.3	73.3	76.4
CH <sub>4</sub>	79 256.33	80 044.74	73 731.39	63 774.33	62 196.31	–21.5	–2.5	12.7	14.8
N <sub>2</sub> O	51 257.66	41 082.70	28 971.12	26 049.23	26 031.40	–49.2	–0.1	11.9	6.2
HFCs	4 226.21	6 328.37	16 410.87	11 281.20	9 984.62	136.3	–11.5	0.8	2.4
PFCs	4 684.56	2 699.87	539.72	471.59	390.18	–91.7	–17.3	1.0	0.1
SF <sub>6</sub>	2 224.35	2 249.72	976.09	517.77	538.34	–75.8	4.0	0.4	0.1
NF <sub>3</sub>	15.43	18.62	30.07	7.99	11.60	–24.8	45.1	0.0	0.0
<b>Total GHG emissions excluding LULUCF</b>	<b>540 830.69</b>	<b>548 714.51</b>	<b>511 152.92</b>	<b>398 297.03</b>	<b>420 060.76</b>	<b>–22.3</b>	<b>5.5</b>	<b>100.0</b>	<b>100.0</b>
<b>Total GHG emissions including LULUCF</b>	<b>523 909.71</b>	<b>527 644.57</b>	<b>470 208.61</b>	<b>376 060.52</b>	<b>403 271.96</b>	<b>–23.0</b>	<b>7.2</b>	–	–

Source: GHG emission data: France's 2023 annual submission, version 1.0. Scope of coverage is area covered by the joint EU economy-wide emission reduction target.

<sup>a</sup> Emissions and removals reported under the sector other (sector 6) are not included in total GHG emissions.

<sup>b</sup> Emissions by gas without LULUCF. The Party did not report indirect CO<sub>2</sub> emissions.

19. The Party did not provide detailed information on its national inventory arrangements in its NC8. It specified in its BR5 that its national inventory arrangements are the same as those in place for the national system, which was established in 2011 in accordance with the provisions of Article 5, paragraph 1, of the Kyoto Protocol through the interministerial order of 24 August 2011 on the national system for GHG and air pollutant emission inventories. The related institutional arrangements have not changed since that date (NC8, section B.2, national system for air emission inventories and GHG balance). The Party described how its national system is performing the general and specific function in accordance with the requirements of the Kyoto Protocol. The description contains information regarding the name and contact information for the designated national inventory system manager with overall responsibility for the national inventory, the roles and responsibilities of various agencies and entities in relation to the inventory development process, the process for collecting activity data, selecting emission factors and methods and development of emission estimates, the results of the key source identification and the recalculation process, and the quality assurance and quality control plan, and information on internal and external evaluation, as well as a description of the procedures for the official consideration and approval of the inventory.

20. In France, the Ministry of Energy Transition is responsible for the management of the national system. It has entrusted CITEPA with preparing the GHG emissions inventories, including implementation of the specific methodologies, activity data collection and processing, archiving, elaboration of the reports and other required information, as well as the management of quality control and quality assurance. Other ministries and public bodies included in the annex to the interministerial order mentioned in paragraph 19 above are data providers. The Ministry of Energy Transition facilitates the transfer of the relevant information to CITEPA as well as the results of the studies that it develops in cooperation with other institutions or within its own departments. It leads the Consultation and Information Group on Emission Inventories, which is comprised of representatives of the key ministries and departments. This group analyses the results of the GHG emission estimates,

providing advice on methodology implementation and on the improvement action plan for future inventories. The Ministry of Energy Transition, through the Directorate General for Energy and Climate, is responsible for submission of the GHG inventory to the secretariat.

## **2. Assessment of adherence to the reporting guidelines**

21. The ERT assessed the information reported in the NC8 and BR5 of France and identified an issue relating to transparency, and thus adherence to the UNFCCC reporting guidelines on NCs. The finding is described in table I.1.

## **3. National system for the estimation of anthropogenic emissions by sources and removals by sinks**

### **(a) Technical assessment of the reported information**

22. France provided in the NC8 a description of how its national system for the estimation of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol is performing the general and specific functions defined in the annex to decision 19/CMP.1 in conjunction with decisions 3/CMP.11 and 4/CMP.11. The description includes all the elements mandated by paragraph 30 of the annex to decision 15/CMP.1. The NC8 also contains a reference to the description of the national system provided in the interministerial order issued on 24 August 2011 and the NIR of the 2022 annual submission.

### **(b) Assessment of adherence to the reporting guidelines**

23. The ERT assessed the information reported in the NC8 of France and recognized that the reporting is complete and transparent, and thus adheres to the reporting guidelines for supplementary information. No issues relating to the topics discussed in this chapter of the review report were raised during the review.

## **4. National registry**

### **(a) Technical assessment of the reported information**

24. In its NC8 France provided information on how its national registry performs the functions in accordance with the annex to decision 13/CMP.1 in conjunction with decision 3/CMP.11 and the annex to decision 5/CMP.1 and complies with the requirements of the technical standards for data exchange between registry systems. The national registry functions have been performed by the EU registry since 20 June 2012, when the European Commission became responsible for the provision, maintenance and security of the member States' registry systems. However, the Party did not provide in its NC8 complete information on the functions of the national registry. The missing information is related to a description of the procedures employed in the national registry to minimize discrepancies in the actions of different type of units, and steps taken to terminate transactions where a discrepancy is notified; a list of the information publicly accessible by means of the user interface of the national registry; a description of measures taken to safeguard, maintain and recover data; and the results of any test procedures that might be available or developed with the aim of testing the performance, procedures and security measures of the national registry undertaken pursuant to the provisions of decision 19/CP.7 relating to the technical standards for data exchange between registry systems. During the review, the Party provided information on the functions of the national registry that had not been reported on in the NC8.

### **(b) Assessment of adherence to the reporting guidelines**

25. The ERT assessed the information reported in the NC8 of France and identified an issue relating to completeness and thus adherence to the reporting guidelines for supplementary information. The finding is described in table I.8.

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

### 1. Technical assessment of the reported information

26. France reported information on its economy-wide emission reduction target in its BR5. For France the Convention entered into force on 23 June 1994. Under the Convention France 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.

27. 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<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs and SF<sub>6</sub> 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.

28. The EU-wide targets are primarily implemented through the EU ETS and ESD. The EU ETS covers mainly point emissions sources in the energy, industry and aviation sectors. An EU-wide emission cap was put in place for 2013–2020 for the EU ETS with the goal of reducing emissions by 21 per cent below the 2005 level by 2020. For 2030, a reduction target of 62 per cent below the 2005 level has been set for emissions covered by the EU ETS. The ESD became operational in 2013 and covers sectors outside the EU ETS, including transport (excluding aviation and international maritime transport), residential and commercial buildings, agriculture, small industry and waste. The ESD is regulated through targets for each member State that add up to a reduction at the EU level of 10 per cent below the 2005 level by 2020. The ESR, the successor to the ESD, was adopted in 2018 and amended in 2023 with the target of reducing emissions covered under the ESR by 40 per cent below the 2005 level by 2030.

29. The EU generally allows its member States to use units from the Kyoto Protocol mechanisms for compliance purposes, subject to a number of restrictions in terms of origin and type of project and up to an established limit. Operators and airline operators can use such units to fulfil their requirements under the EU ETS, and member States can use such units for their national ESD targets, within specific limitations.

30. The European Commission set out its vision for a climate-neutral EU in November 2018, and in December 2019 presented the European Green Deal as a road map with actions for making the EU economy sustainable. The European Council endorsed in December 2019 the objective of making the EU climate-neutral by 2050. As part of the European Green Deal, the 2050 climate-neutrality target was made binding in the first European Climate Law, adopted in 2021. It also increased the ambition of the 2030 emission reduction target to at least 55 per cent below the 1990 level. Member States will set out any increased ambition in the update of their national energy and climate plans. This approach requires coordination across all government departments and it provides a level of planning that will ease public and private investment.

31. France has a national target of reducing its emissions to 14 per cent below the 2005 level by 2020 for ESD sectors. This target has been translated into binding quantified AEAs for 2013–2020. France's AEAs change following a linear path from 394,076.35 kt CO<sub>2</sub> eq in 2013 to 342,475.08 kt CO<sub>2</sub> eq in 2020.<sup>6</sup> Under the ESR, France has a national target of reducing emissions from covered sectors to 37 per cent below the 2005 level by 2030. This was modified to a more ambitious target under the revised ESR within the EU Fit for 55 legislative framework of 47.5 per cent below the 2005 level by 2030.

32. In 2022, the French Government agreed a new approach to ecological planning, under the direct authority of the Prime Minister, to facilitate urgent climate action. The National Low-Carbon Strategy was updated on 21 April 2020 by decree 2020-457 to chart France's course to a 40 per cent reduction in emissions (compared with 1990) by 2030 and achieve climate neutrality by 2050. The Strategy's objectives are integrated into sectoral legislation (e.g. the mobility law, the waste and circular economy law, or the Climate and Resilience

<sup>6</sup> According to the EU transaction log.

Law). Following the evaluation of the carbon budget, the Strategy is reviewed every five years, adjusting the trajectory and defining a new appropriate carbon budget. In 2022, the French Government agreed a new approach to ecological planning, under the direct authority of the Prime Minister, to facilitate urgent climate and government actions.

33. In 2020, France launched a dedicated process to give citizens a direct voice on climate policy via a citizen convention on climate, which included consultation with 150 randomly selected participants. The effort resulted in 149 citizen proposals, some of which were adopted as part of the 2021 Climate and Resilience Act. Since 2021, France has published an annual green budget, which aims to align all budgetary decisions with the objectives of the Paris Agreement. In 2023, the green budget rises to EUR 33.9 billion in support of actions on clean mobility and energy-efficient building retrofits. In 2023, the Party will enact a climate and energy planning law that will set the priorities for France's climate and energy policies, in conjunction with the French Climate and Energy Strategy, which aggregates legislation and planning documents under a single heading in order to increase the visibility to the general public and strengthen and link the mitigation and adaptation climate policies.

34. At the EU level, details on policies relevant to the implementation of the NDC have been reviewed by the adoption of the Fit for 55 legislative framework. EU emission reduction targets are covered by the EU ETS, the ESR and the EU LULUCF regulation, as well as additional legislation on renewable energy and energy efficiency. The EU has reviewed and amended EU ETS legislation, setting a new target to reduce emissions from the existing EU ETS sectors and from maritime transport of 62 per cent by 2030 compared with the 2005 level. With regard to commercial aviation, the EU ETS will continue to apply effective carbon pricing for intra-European flights and flights to the United Kingdom of Great Britain and Northern Ireland and to Switzerland. In addition, legislation is in place to apply CORSIA, as appropriate, to EU-based aircraft operators for flights to and from other third countries participating in CORSIA, and to apply carbon pricing to emissions from flights involving third countries that do not apply CORSIA from the start of 2027. A separate carbon pricing framework is applied to fuel combustion in road transport and buildings (EU ETS 2) and is designed to price emissions from 2027 without free allocation and to contribute to emission reductions of 42 per cent compared with the 2005 level in the sectors covered.

35. Under the ESR, to achieve a target of a reduction in emissions of 40 per cent compared with the 2005 level, the EU legislation sets individual binding reduction targets for member States for the sectors not covered by the EU ETS: domestic transport (except aviation), buildings, agriculture, waste and small industries. In the LULUCF sector, a net removals target of 310 Mt CO<sub>2</sub> eq is established, as a sum of the reported GHG net emissions and removals in the sector in 2030. The EU adopted legislation to reduce CO<sub>2</sub> emissions by 55 per cent for new cars and 50 per cent for new vans from 2030 until 2034, and for a reduction in CO<sub>2</sub> emission reductions of 100 per cent from 2035 for new cars and vans.

36. The EU has agreed to increase ambition on energy efficiency, ensuring a reduction in energy consumption at the EU level of at least 9 per cent by 2030 compared with the projections of the 2020 reference scenario, and a new target for increasing renewable energy in final energy consumption by at least 42.5 per cent by 2030, with an additional 2.5 per cent indicative top-up that would allow 45.0 per cent to be reached.

## **2. Assessment of adherence to the reporting guidelines**

37. The ERT assessed the information reported in the BR5 of France and identified issues relating to transparency and thus adherence to the UNFCCC reporting guidelines on BRs. The finding is described in table II.1.

## D. Information on policies and measures

### 1. Technical assessment of the reported information

38. France provided in its NC8 and BR5 information on its PaMs<sup>7</sup> implemented, adopted and planned to fulfil its commitments under the Convention. France's set of PaMs is similar to that previously reported, with a few exceptions.

39. France reported on its policy context and legal and institutional arrangements in place for implementing its commitments and monitoring and evaluating the effectiveness of its PaMs. France also provided information on changes to its institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of progress towards its target. France described recent developments relating to its institutional, legal, administrative and procedural arrangements used for national compliance, monitoring, reporting, archiving of information and evaluation of progress towards its goal. Recent developments concern in particular the institutional and administrative framework, such the creation of the High Council on Climate in 2019. This new entity is responsible for advising political decision makers on medium- and long-term guidelines and providing advice and recommendations on the implementation of PaMs aimed at reducing national GHG emissions and assessing their consistency with France's climate targets. In addition, France provided information on the most recent developments of the legal framework at the national and sectoral level, including the establishment of a new law on energy and climate in 2019 setting the target of carbon neutrality by 2050. The law on energy and climate establishes a set of measures that address different areas of the energy transition, including the fight against thermal leakage in buildings and the creation or revision of instruments for steering, governing and assessing national climate policy.

40. The evaluation and monitoring process is essentially related to the National Low-Carbon Strategy, which defines the policy and the strategic orientations for mitigation at the sectoral level. The strategic orientations of the Strategy are subject to a periodic monitoring, evaluation and review based on performance and monitoring indicators. In addition, an annual assessment of the necessary financial resources is made by the Government, the result of which is appended to the finance budget law presented to the parliament.

41. France's assessment of the economic and social consequences of its response measures includes a short description of the macroeconomic impacts of its National Low-Carbon Strategy, including its economic, social and environmental impacts. France helps developing countries through its cooperation projects, including the transfer of technology and technical expertise to strengthen their systems for observing the effects of climate change. The NC8 states that France's legislation should reflect European law and consider the system of assessing positive and negative impacts in the process of adopting policies, including the effects on other countries. The NC8 provides a qualitative assessment of the negative and positive effects of some PaMs. France provided a table listing the direct and indirect effects at the social, environmental and economic level for five PaMs, namely the EU ETS, the development of biofuels, the promotion of energy efficiency, the promotion of renewable energy and measures to promote low-emission vehicles. France reported that its actions to identify and review its own policies and practices that encourage activities that lead to greater levels of emissions are related to the process of the regular update of the National Low-Carbon Strategy. This process is an opportunity to adjust the emissions trajectory by identifying and integrating new possibilities to raise mitigation potential. For example, the report indicates that the sectoral orientations of the second version of the National Low-Carbon Strategy have been translated at the legislative level and structured by priority and by sector, encouraging long-term changes in each GHG-emitting sector (further information is provided in the NC8 (chap. 1, section A.2)).

42. In its reporting on PaMs, France provided the estimated emission reduction impacts for some of its PaMs. Where estimated impacts were not provided, the Party did not supply an explanation. For example, France provided quantified emission reductions for policies in

<sup>7</sup> The UNFCCC reporting guidelines on BRs use the term "mitigation actions", whereas the UNFCCC reporting guidelines on NCs use the term "policies and measures". The terms are used interchangeably in this report to refer to the relevant information in either the NC or BR.

the energy (buildings, transport and efficiency) sector but not for PaMs in the waste, IPPU, agriculture or LULUCF sectors. The Party explained during the review that estimated impacts were provided only for its main PaMs and noted, given the number of different measures, the challenge of estimating impacts for each. The ERT also notes that the Party provided quantified estimates of emission reductions for several PaMs in its NC7 and BR4 that were included but not estimated in its NC8 and BR5.

43. The key overarching related cross-sectoral policy in the EU is the 2020 climate and energy package, adopted in 2009, which includes the revised EU ETS and the ESD. The package is supplemented by renewable energy and energy efficiency legislation and legislative proposals on the 2020 targets for CO<sub>2</sub> emissions from cars and vans, the carbon capture and storage directive, and the general programmes for environmental conservation, namely the 7<sup>th</sup> Environment Action Programme and the clean air policy package. The 2021 European Climate Law, which forms part of the European Green Deal, made climate neutrality by 2050 legally binding and raised the EU-wide 2030 emission reduction target to at least 55 per cent compared with the 1990 level. In 2023, the European Parliament adopted a series of legislative proposals, collectively referred to as Fit for 55, intended to help achieve the new 2030 target. These new regulations strengthened both the ESR and EU ETS 2030 targets, extended the EU ETS to include maritime shipping in 2024 and established the Social Climate Fund to address equitability of mitigation impacts. The regulations also created the EU ETS 2 to cover at the point of distribution most fuel used in sectors not covered by the EU ETS, beginning in 2027.

44. The 2021–2030 EU-wide policies are operationalized through the national energy and climate plans of EU member States, which should set out national objectives for each of the five dimensions of the Energy Union, namely energy security; the internal energy market; energy efficiency; decarbonization; and research, innovation and competitiveness. The national energy and climate plans are periodically updated to reflect changes to EU policy, such as the implementation of the European Green Deal. France's national energy and climate plan contains two overarching policy and governance documents: the multi-year energy programme, which sets out priorities for the energy sector actors across two five-year periods focused on reducing energy consumption and the decarbonization of the energy sector; and the National Low-Carbon Strategy.

45. France introduced national-level policies to achieve its targets under the ESD and the ESR and domestic emission reduction targets. The key policies reported are thermal regulations for new buildings, implementing EU regulations for new vehicles and tax incentives for biofuels. The mitigation effect of the EU regulation for new vehicles is the most significant, partly because the transportation sector is France's largest emitting sector. Other policies that have delivered significant emission reductions are the closure of coal-fired power plants and regulations to reduce F-gases (F-Gas II). The ERT identified the energy renovation plan for buildings as a mitigation action of particular interest given its ambitious plan to decarbonize existing residential and commercial buildings through a suite of renovation and retrofit incentives, taking into consideration energy security of lower-income households. France has also implemented an extensive series of measures to reduce waste at the household level, including the phase-out of single-use plastic bags and improved sorting of mixed waste.

46. France highlighted the domestic mitigation actions that are under development, such as those being revised to align with the more ambitious 2030 target of the EU to reduce domestic emissions by at least 55 per cent compared with the 1990 level. Among the mitigation actions that provide a foundation for significant additional action is the trial provision of interest-free loans for the purchase of zero-emission vehicles planned for 2023, targeting low-income households and micro-businesses. France is also planning to implement a set of incentives for renovations to help to implement its goal of renovating all energy-intensive homes by 2028. In the waste sector, France continues to expand its Extended Producer Responsibility schemes based on the 'polluter pays' principle. Table 5 provides a summary of the reported information on the PaMs of France.

Table 5

**Summary of information on policies and measures reported by France**

<i>Sector</i>	<i>Key PaMs</i>	<i>Estimated mitigation impact in 2020 (kt CO<sub>2</sub> eq)</i>	<i>Estimated mitigation impact in 2030 (kt CO<sub>2</sub> eq)</i>
Policy framework and cross-sectoral measures			
Energy			
Energy efficiency	New building regulations	NE	14 700
	Tertiary eco-energy system/decreed	NE	6 000
Energy supply and renewable energy	Closure of last coal-fired power plant	NE	4 000
	Renovation obligations for energy-intensive housing (planned)	NE	6 000
Transport	EU regulation 2019/631 on new vehicle manufacturing	NE	12 560
	EU regulation 2019/1242 on heavy-duty goods vehicles	NE	3 125
IPPU	EU ETS	NE	NE
Agriculture	National Agricultural and Rural Development Programme	NE	NE
	National Plant Protein Strategy	NE	NE
LULUCF	National Forest and Wood Programme	NE	NE
Waste	Extended Producer Responsibility	NE	NE

*Note:* The estimated mitigation impacts are estimates of emissions of CO<sub>2</sub> eq avoided in a given year as a result of the implementation of mitigation actions.

## 2. Assessment of adherence to the reporting guidelines

47. The ERT assessed the information reported in the NC8 and BR5 of France and identified issues relating to completeness and transparency, and thus adherence to the UNFCCC reporting guidelines on NCs and the UNFCCC reporting guidelines on BRs. The findings are described in tables I.2 and II.2.

## 3. Domestic and regional programmes and legislative arrangements and procedures related to the Kyoto Protocol

### (a) Technical assessment of the reported information

48. In its NC8 France reported that the implementation of the Kyoto Protocol is underpinned by the National Low-Carbon Strategy, which establishes a series of five-year carbon budgets as the basis to set GHG emission reduction targets and meet the long-term objective to reduce GHG emissions by 75 per cent by 2050. The overall responsibility for climate change policymaking lies with the Ministry of Ecological Transition, while energy-related issues are handled by the Ministry of Energy Transition.

49. France has a coordinated, multi-layered approach to implementing climate policy. For example, in May 2022, the General Secretariat for Ecological Planning was created, which has responsibility for coordinating the development of national strategies on climate, energy, biodiversity and the circular economy. The General Secretariat ensures that these strategies are sustainable and appropriate to the characteristics of each region and evaluates progress through the publication of a list of 162 indicators. The High Council for the Climate, created by a decree on 14 May 2019, advises political decision makers on the most appropriate PaMs to reduce GHG emissions. In addition, the Prime Minister has a role in coordinating climate and biodiversity objectives, as well as air pollution, where these issues overlap. Local and regional authorities are responsible for municipal and regional transport policy, economic policy and planning for mitigation and adaptation to climate change, and for the development of regional climate, air and energy planning for communities with more than 20,000 inhabitants.



50. For the second commitment period of the Kyoto Protocol, from 2013 to 2020, France committed to contributing to the joint EU effort to reduce GHG emissions by 20 per cent below the base-year level (see paras. 26–31 above).

51. The Party has arrangements and enforcement procedures to meet its commitments under the Kyoto Protocol, including procedures for addressing non-compliance. The High Council for the Climate produces an annual report on France's compliance with its national GHG emission reduction targets as established in the National Low-Carbon Strategy, as well as on the implementation of climate policy at the national and regional level. A government response must be provided to the High Council for the Climate's report within a six-month period. In addition, every three years the High Council for the Climate produces a report reviewing the performance of local and regional authorities in reaching their climate-related objectives, to which the national Government must respond.

52. France has provisions in place to make information on legislative arrangements and administrative procedures related to compliance and enforcement publicly accessible. France has made significant efforts to involve the public at large in climate-related discussions and decision-making (see para. 33 above).

53. France has national legislative arrangements and administrative procedures in place that seek to ensure that the implementation of activities under Article 3, paragraph 3, and any elected activities under Article 3, paragraph 4, of the Kyoto Protocol also contributes to the conservation of biodiversity and the sustainable use of natural resources. However, the relevant information was not provided in the NC8. During the review, the Party indicated its goal to strengthen biodiversity conservation through the National Biodiversity Strategy (established in 2004 and revised in 2010 for 2011–2020). The Law on the Restoration of Biodiversity, Nature and the Countryside, which entered into force on 9 August 2016, is aimed at strengthening and renewing public policies in relation to biodiversity by establishing the principle of non-regression of environmental protection with a view to ensuring that any future change in the legislation will result in constant improvements in environmental protection. The French Agency for Biodiversity was established under this Act on 1 January 2017, bringing together pre-existing bodies, namely the National Office for Water and Aquatic Environment, the Technical Workshop for Natural Areas, the Marine Protected Areas Agency and the French national parks. This new body, aimed at strengthening knowledge, research and training in the field of biodiversity, has a unitary management system and a clear budget allocation.

**(b) Assessment of adherence to the reporting guidelines**

54. The ERT assessed the information reported in the NC8 of France and identified an issue relating to completeness and thus adherence to the reporting guidelines for supplementary information. The finding is described in table I.8.

**4. Policies and measures in accordance with Article 2 and minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol**

**(a) Technical assessment of the reported information**

55. In the NC8 France reported information on how it strives to implement PaMs under Article 2 of the Kyoto Protocol in such a way as to minimize adverse effects, including the adverse effects of climate change and effects on international trade and social, environmental and economic impacts on other Parties, especially developing country Parties. In this regard, France supports developing countries by providing them with information on climate through its climate observation network and research and cooperation projects. In addition, decisions on the implementation of specific PaMs at the EU level are taken following analysis of impact studies that estimate GHG emission reductions as well as the possible effects on other countries. It is thus possible to ensure that negative impacts on developing countries of an EU policy that has been transposed into the national legislation are minimized and respect the commitment made within the framework of Article 2 of the Kyoto Protocol.

56. The NC8 includes information on how France promotes and implements the decisions of the International Civil Aviation Organization and the International Maritime Organization

to limit emissions from aviation and marine bunker fuels. Aviation activities are included in the EU ETS, and EU regulation 757/2015 on the monitoring, reporting and verification of CO<sub>2</sub> emissions from maritime transport was amended to be in line with the International Maritime Organization's data-collection system. EU member States participate in the CORSIA first voluntary phase, which will be in effect between 2021 and 2026.

57. Further information on how France strives to implement its commitments under Article 3, paragraph 14, of the Kyoto Protocol in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties was reported in the 2023 annual submission. France reported in its 2023 NIR (chap. 15) and the NC8 (chap. IV, section C.2) a table indicating the estimated direct and indirect effects of some of France's climate PaMs on other countries. For example, a measure such as the development of biofuels has a direct positive social effect, but has also an indirect negative effect on the environment through deforestation and diminishing food resources; and the promotion of low-emission vehicles, while positive from a social point of view, has an indirect negative economic effect caused by the rising demand for raw materials and the subsequent pressure on their prices. The Party reported on its priorities in implementing its commitments under Article 3, paragraph 14, of the Kyoto Protocol, including capacity-building support related to adaptation to the effects of climate change, preparation and implementation of planned NDCs, and implementation of a national reporting system (GHG inventory, projections, PaMs on mitigation or adaptation). The Party provided detailed information in its 2023 NIR on bilateral and multilateral cooperation and provision of financial support through AFD to developing countries or through the operating entities of the Financial Mechanism.

**(b) Assessment of adherence to the reporting guidelines**

58. The ERT assessed the information reported in the NC8 of France and identified an issue relating to transparency and thus adherence to the reporting guidelines for supplementary information. The finding is described in table I.8.

**E. Estimates of emission reductions and removals and the use of units from market-based mechanisms and land use, land-use change and forestry and progress in achieving the quantified economy-wide emission reduction target**

**1. Technical assessment of the reported information**

59. France reported in its BR5 that it did not use units from market-based mechanisms to meet its commitment under the ESD. It reported in CTF tables 4 and 4(b) that it did not use any units from market-based mechanisms during 2010–2020. Given that the contribution of LULUCF activities is not included in the joint EU target under the Convention, reporting thereon is not applicable to France. Table 6 illustrates France's ESD emissions and use of units from market-based mechanisms for achieving its ESD target.

Table 6

**Summary of information on emissions covered by the European Union effort-sharing decision annual emission allocation and use of units from market-based mechanisms by France**

(kt CO<sub>2</sub> eq)

<i>Year</i>	<i>ESD emissions</i>	<i>AEA</i>	<i>Use of units from market-based mechanisms</i>	<i>AEAs transferred to (–) or from (+) other Parties</i>	<i>Annual AEA surplus/deficit</i>	<i>Cumulative AEA surplus/deficit</i>
2013	366 116.65	394 076.35	NA	NA	27 959.70	27 959.70
2014	353 528.79	389 460.76	NA	NA	35 931.97	63 891.67
2015	353 009.85	384 432.81	NA	NA	31 422.96	95 314.63
2016	351 924.67	379 404.87	NA	NA	27 480.20	122 794.83
2017	352 795.71	358 181.61	NA	NA	5 385.90	128 180.73
2018	342 199.87	352 946.10	NA	NA	10 746.23	138 926.96
2019	336 358.32	347 710.59	NA	NA	11 352.27	150 279.23
2020	307 767.72	342 475.08	NA	NA	34 707.36	184 986.59

*Sources:* France's BR5 and BR5 CTF table 4(b), information provided by the Party during the review and EU transaction log (AEAs).

*Note:* For a given year, a positive number (surplus) indicates that annual or cumulative ESD emissions were lower than the corresponding AEA or cumulative AEAs, while a negative number (deficit) indicates that annual or cumulative ESD emissions were higher than the corresponding AEA or cumulative AEAs.

## **2. Assessment of adherence to the reporting guidelines**

60. The ERT assessed the information reported in the BR5 of France, including the CTF tables submitted on 31 August 2023, and recognized that the reporting is complete and transparent, and thus adheres to the reporting guidelines. No issues relating to the topics discussed in this chapter of the review report were raised during the review.

## **3. Assessment of achievement of the quantified economy-wide emission reduction target**

61. In assessing the Party's contribution towards achievement of the 2020 joint EU target on the basis of the information reported in its BR5, the ERT noted that, under the EU 2020 climate and energy package, France committed to reducing its emissions under the ESD to 14 per cent below the 2005 level by 2020 (see para. 31 above). This target has been translated into binding quantified AEAs for 2013–2020. In 2020, France's ESD emissions were 10 per cent (307,767.72 kt CO<sub>2</sub> eq) below the AEA. France has a cumulative surplus of 184,986.59 kt CO<sub>2</sub> eq with respect to its AEAs between 2013 and 2020. The ERT noted that the Party did not make use of units from market-based mechanisms in 2020.

62. The ERT noted that the Party reported in its BR5 that the total GHG emissions excluding LULUCF of the EU and including the use of units from market-based mechanisms do not exceed the emission level corresponding to the target in 2020, and thus that the EU has achieved its joint target. See the report on the technical review of the NC8 and the technical review of the BR5 of the EU for further details. Therefore, the ERT concluded that, on the basis of the information reported in the BR5 and provided during the review, France has met its 2020 commitment under the Convention through its contribution to achieving the joint EU target. The ERT noted that the Party's ESD emissions in 2020 do not exceed its AEA for 2020.

# **F. Projections**

## **1. Projections overview, methodology and results**

### **(a) Technical assessment of the reported information**

63. France reported in its BR5 and NC8 updated projections for 2030–2050 relative to actual inventory data for 2019 under the WEM scenario. The WEM scenario reported by France includes PaMs implemented and adopted up to 31 December 2019.

64. In addition to the WEM scenario, France reported the WAM scenario. The WAM scenario includes both planned and additional PaMs. France provided a definition of its scenarios, explaining that its WEM scenario includes energy policies such as the extension of the energy saving certificate scheme and the heat scheme until the end of 2021, while its WAM scenario includes an extension of the same schemes until 2050. Transport policies included in the WEM scenario incorporate the 2019 EU vehicle regulations, the measures of the Mobility Orientation Law and fiscal measures taken until the end of 2019, while the WAM scenario includes ending the sale of new internal combustion engine cars and vans by 2040, the electrification of the car and van fleet and enhanced energy efficiency of cars by 2030, as well as a strong shift to cycling and public transport by 2050. France also reported differences between the WEM and WAM scenarios for construction, industry, F-gases, agriculture and forestry, and waste. The definitions indicate that the scenarios were prepared in accordance with the UNFCCC reporting guidelines on BRs.

65. The projections are presented on a sectoral basis, using the same sectoral categories as those used in the reporting on mitigation actions, and on a gas-by-gas basis for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFCs, HFCs and SF<sub>6</sub> (treating PFCs and HFCs collectively in each case) as well as NF<sub>3</sub> for 2030–2050. The projections are also provided in an aggregated format for each sector and

for a Party total using GWP values from the AR4. France reported on factors and activities affecting emissions for each sector.

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

66. The methodology used for the preparation of the projections is identical to that used in the preparation of the emission projections for the NC7 for the WAM scenario, and different from that used for the WEM scenario. France provided information on changes since the submission of its NC7 in the assumptions, methodologies, models and approaches used for the projection scenarios. France reported supporting information further explaining the methodologies and the changes made since the NC7. There were some notable differences in the process of producing France's WAM scenario. Previously, the development of scenarios was connected to updating national programmes, but for the new WAM scenario five working groups were set up (agriculture–forest–land, buildings, transport, industry and energy) for consultations on scenario development with relevant organizations (other Ministry of Energy Transition directorates, the Ministry of Agriculture and Food's Directorate General for Economic and Environmental Performance of Enterprises, the Ministry for the Economy's Directorate General of the Treasury, the French Agency for Ecological Transition and external modelling groups CITEPA and the Scientific and Technical Center for Building).

67. The main difference in the modelling approach is the replacement of MedPro with GESTime (an internal tool developed by the Directorate General for Energy and Climate) for energy and industry aspects of projections. MedPro is a bottom-up simulation model for GHG emission forecasting, while GESTime is an accounting model that allows energy consumption and GHG emissions to be represented statistically for a given time-horizon as a function of a series of levers in each of the sectors. New tools have also been used to model land artificialization and air transport.

68. To prepare its projections, France relied on key underlying assumptions relating to energy prices, carbon price under the EU ETS, population and economic development indicators (i.e. growth rate in GDP and industrial value added). The assumptions were updated on the basis of the most recent economic developments known at the time of the preparation of the projections. It should be noted that different underlying assumptions were used for the WEM and WAM model scenarios as they were developed at different times. The following assumptions described in CTF table 5 were used in the WEM scenario: the international oil price increases from USD 42/boe in 2020 to USD 95/boe in 2035; the international gas price increases from USD 162/boe in 2020 to USD 314/boe in 2035; the international coal price increases from USD 82/boe in 2020 to USD 144/boe in 2035; the EU ETS price increases from EUR 25/t CO<sub>2</sub> in 2020 to EUR 40/t CO<sub>2</sub> in 2035; the population increases from 67 million in 2019 to 70 million in 2035; and the GDP growth rate decreases from 1.32 per cent in 2019 to –8.25 per cent in 2020 and then increases to 0.87 per cent in 2025, to 1.06 per cent in 2030 and to 1.33 per cent in 2035. Information was given on the underlying assumptions as part of the supplementary materials and the data sets and models used to determine the underlying assumptions and information used were also described and the resulting assumptions calculated. For example, assumptions related to population have been updated in the WAM scenario to the Eurostat scenario provided by the European Commission. One reason for this change is that 2019 observations from this data set have shown that the previously used population data from the National Institute of Statistics and Economic Studies overestimated the population of France by around 2 million inhabitants in 2050. For economic growth, assumptions from the European Commission are used, which are consistent with the Ministry of the Economy's assumptions. These assumptions take into consideration the impact of the pandemic and assume a rapid recovery of the economy.

**(c) Results of projections**

69. The projected emission levels under different scenarios and information on the quantified economy-wide emission reduction target are presented in table 7 and figure 1. WEM projections for 2030 are 367,049 kt CO<sub>2</sub> eq per year, which is a 32.5 per cent decrease in relation to the 1990 level and a 6.6 per cent decrease in relation to the 2020 level.

Table 7  
Summary of greenhouse gas emission projections for France

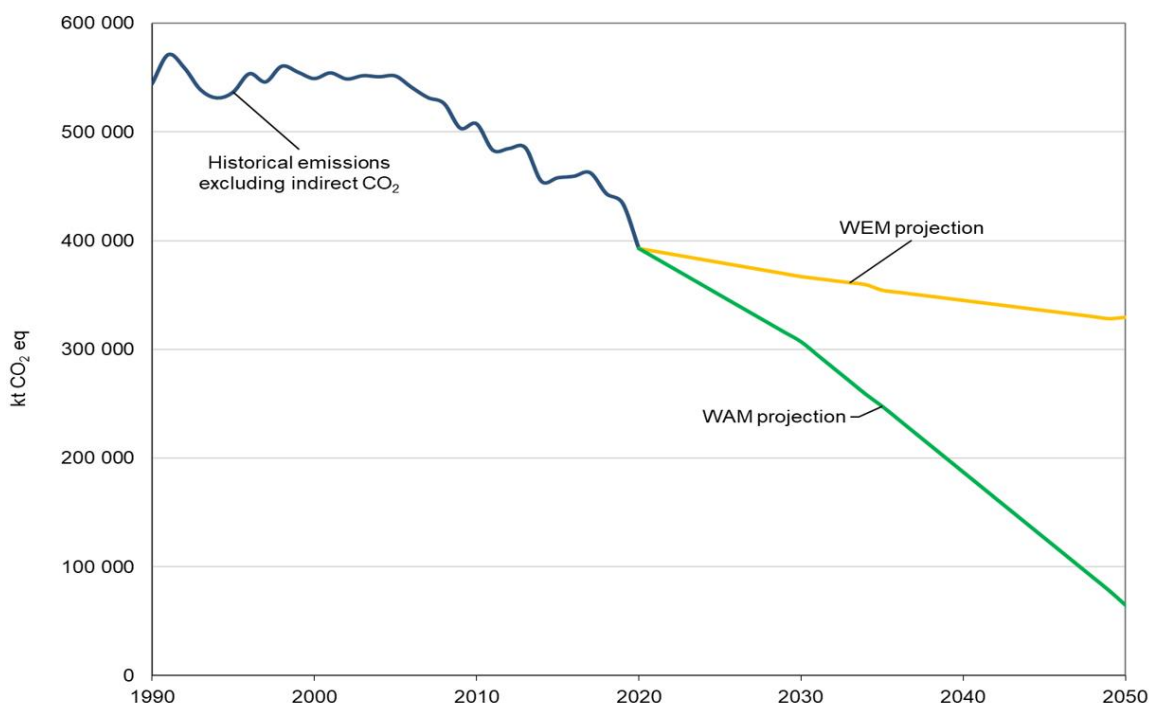
	GHG emissions (kt CO <sub>2</sub> eq/year) <sup>a</sup>	Change in relation to 1990 level (%)	Change in relation to 2020 level (%)
Inventory data 1990	544 086.41	NA	NA
Inventory data 2020	392 962.57	–27.8	NA
WEM projections for 2030	367 049.00	–32.5	–6.6
WAM projections for 2030	307 095.00	–43.6	–21.9
WEM projections for 2050	329 653	–39.4	–6.1
WAM projections for 2050	64 551	–88.1	–83.6

Sources: France's BR5 (12 July 2023 resubmission) and BR5 CTF table 6. Updated projections were provided by France during the review.

Note: The projections are of GHG emissions excluding LULUCF and excluding indirect CO<sub>2</sub>.

<sup>a</sup> Decimal places of figures in this column are as reported by the Party.

Figure 1  
Greenhouse gas emission projections reported by France

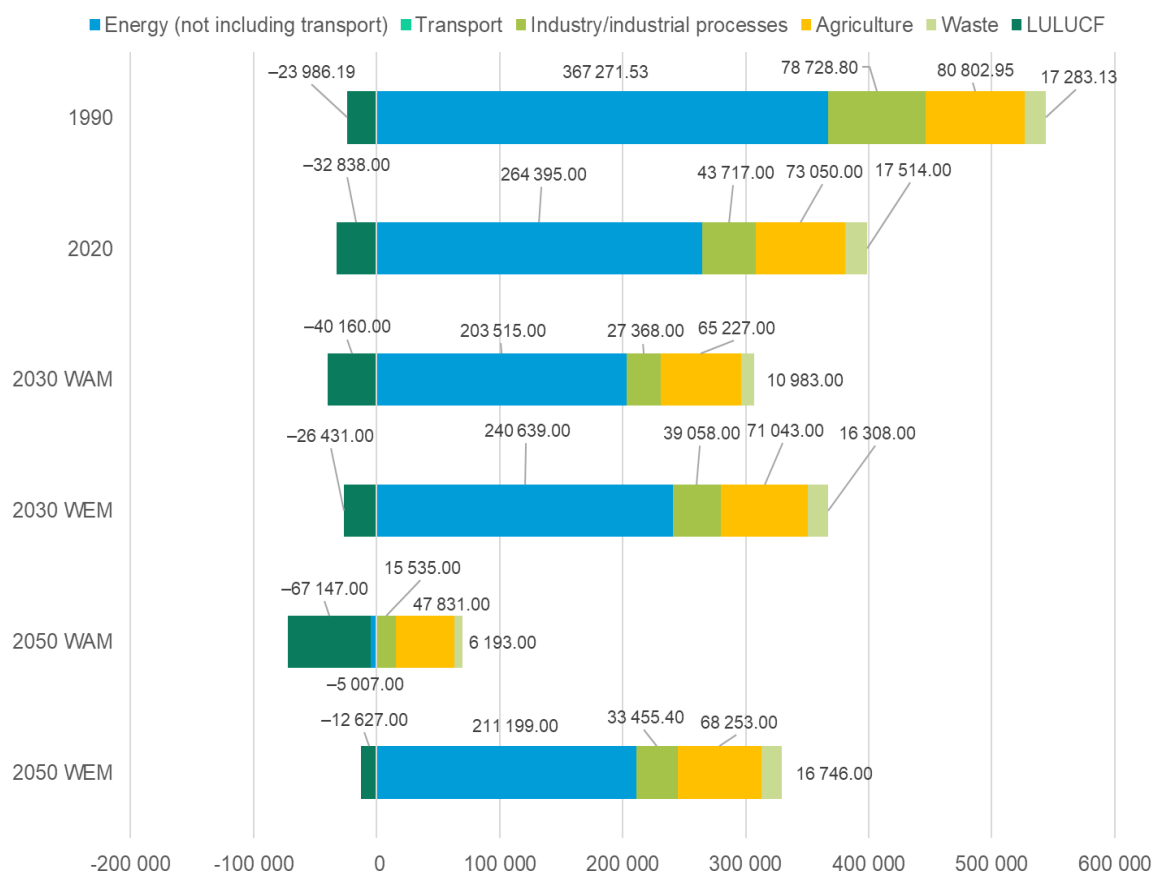


Sources: France's BR5 (12 July 2023 resubmission) and BR5 CTF tables 1 and 6 (total GHG emissions excluding LULUCF). Updated projections were provided by France during the review.

70. France's total GHG emissions excluding LULUCF are projected under the WEM scenario to decrease by 32.5 and 39.4 per cent respectively below the 1990 level in 2030 and 2050. When including LULUCF, total GHG emissions are projected under the WEM scenario to decrease by 34.5 and 39.1 per cent respectively below the 1990 level in 2030 and 2050. Under the WAM scenario, emissions in 2030 and 2050 are projected to be lower than those in 1990 by 43.6 and 88.1 per cent respectively excluding LULUCF.

71. France presented the WEM and WAM scenarios by sector for 2030 and 2050, as summarized in figure 2 and table 8.

Figure 2

**Greenhouse gas emission projections for France presented by sector**(kt CO<sub>2</sub> eq)

Sources: France's BR5 (12 July 2023 resubmission) and BR5 CTF table 6. Updated projections were provided by France during the review.

Table 8

**Summary of greenhouse gas emission projections for France presented by sector**

Sector	GHG emissions and removals (kt CO <sub>2</sub> eq)					Change (%)			
	1990	2030 <sup>a</sup>		2050		1990–2030		1990–2050	
		WEM	WAM	WEM	WAM	WEM	WAM	WEM	WAM
Energy (not including transport)	367 271.53	240 639.00	203 515.00	211 199.00	-5 007.00	-34.5	-44.6	-42.5	-101.4
Transport	IE	IE	IE	IE	IE	–	–	–	–
Industry/industrial processes	78 728.80	39 058.00	27 368.00	33 455.40	15 535.00	-50.4	-65.2	-57.5	-80.3
Agriculture	80 802.95	71 043.00	65 227.00	68 253.00	47 831.00	-12.1	-19.3	-15.5	-40.8
LULUCF	-23 986.19	-26 431.00	-40 160.00	-12 627.00	-67 147.00	10.6	67.4	-47.4	179.9
Waste	17 283.13	16 308.00	10 983.00	16 746.00	6 193.00	-5.6	-36.5	-3.1	-64.2
Other	NO	NO	NO	NO	NO	–	–	–	–
<b>Total GHG emissions excluding LULUCF</b>	<b>544 086.41</b>	<b>367 049.00</b>	<b>307 095.00</b>	<b>329 653.00</b>	<b>64 551.00</b>	<b>-32.5</b>	<b>-43.6</b>	<b>-39.4</b>	<b>-88.1</b>

Source: France's BR5 (12 July 2023 resubmission) and BR5 CTF table 6. Updated projections were provided by France during the review.

<sup>a</sup> Decimal places in figures in this column are as reported by the Party.

72. According to the projections reported for 2030 under the WEM scenario, the most significant absolute emission reductions are expected to occur in the energy sector,

amounting to projected reductions of 34.5 per cent between 1990 and 2030. The pattern of projected emissions reported for 2050 under the same scenario remains the same. In the energy sector, which includes transport, the strongest measures are those as a result of the EU vehicle regulation adopted in 2019, the 2012 thermal regulation, energy saving certificates and shutting down all coal-fired power plants.

73. France presented the WEM and WAM scenarios by gas for 2030 and 2050, as summarized in table 9.

Table 9

**Summary of greenhouse gas emission projections for France presented by gas**

<i>Gas<sup>a</sup></i>	<i>GHG emissions and removals (kt CO<sub>2</sub> eq)</i>					<i>Change (%)</i>			
	<i>2030<sup>b</sup></i>		<i>2050</i>			<i>1990–2030</i>		<i>1990–2050</i>	
	<i>1990</i>	<i>WEM</i>	<i>WAM</i>	<i>WEM</i>	<i>WAM</i>	<i>WEM</i>	<i>WAM</i>	<i>WEM</i>	<i>WAM</i>
CO <sub>2</sub>	398 424.79	272 039.00	220 992.00	241 265.00	6 447.00	–31.72	–44.53	–39.4	–98.4
CH <sub>4</sub>	69 160.89	52 448.00	44 507.00	51 049.80	32 465.00	–24.17	–35.65	–26.2	–53.1
N <sub>2</sub> O	64 724.84	36 922.00	35 559.00	35 003.50	22 856.00	–42.96	–45.06	–45.9	–64.7
HFCs	4 402.20	5 053.00	5 241.00	1 830.70	2 109.00	14.78	19.05	–58.4	–52.1
PFCs	5 202.47	218.00	330.00	130.90	205.00	–95.81	–93.66	–97.5	–96.1
SF <sub>6</sub>	2 154.74	359.00	460.00	363.00	463.00	–83.34	–78.65	–83.2	–78.5
NF <sub>3</sub>	16.48	10.00	6.00	10.50	6.00	–39.32	–63.59	–36.3	–63.6
<b>Total GHG emissions without LULUCF</b>	<b>544 086.41</b>	<b>367 049.00</b>	<b>307 095.00</b>	<b>329 653.00</b>	<b>64 551.00</b>	<b>–32.54</b>	<b>–43.56</b>	<b>–39.4</b>	<b>–88.1</b>

Source: France's BR5 (12 July 2023 resubmission) and BR5 CTF table 6. Updated projections were provided by France during the review.

<sup>a</sup> France did not include indirect CO<sub>2</sub> emissions in its projections.

<sup>b</sup> Decimal places in figures in this column are as reported by the Party.

**(d) Assessment of adherence to the reporting guidelines**

74. The ERT assessed the information reported in the NC8 and BR5 of France and identified issues relating to completeness and transparency, and thus adherence to the UNFCCC reporting guidelines on NCs and the UNFCCC reporting guidelines on BRs. The findings are in tables I.3 and II.3.

**2. Assessment of the total effect of policies and measures****(a) Technical assessment of the reported information**

75. In its NC8 France presented the estimated and expected total effect of implemented and adopted PaMs and an estimate of the total effect of its PaMs, in accordance with the WEM scenario, compared with a situation without such PaMs. Information is presented in terms of GHG emissions avoided or sequestered, by gas (on a CO<sub>2</sub> eq basis), in 2030 and 2050. It also presented relevant information on factors and activities for each sector for 1990–2030, including information on the effect of those PaMs that can be assessed individually, such as the 2019 EU vehicle regulation, tax incentives for biofuels, regulatory measures on new buildings and F-gas regulations.

76. France reported that the total estimated effect of its implemented and adopted PaMs is 367,049.00 kt CO<sub>2</sub> eq in 2030 and 329,653.00 kt CO<sub>2</sub> eq in 2050. According to the information reported in its NC8, PaMs implemented in the energy sector will deliver the largest emission reductions.

**(b) Assessment of adherence to the reporting guidelines**

77. The ERT assessed the information reported in the NC8 of France and identified issues relating to completeness and transparency, and thus adherence to the UNFCCC reporting guidelines on NCs. The findings are described in table I.4.

### **3. Supplementarity relating to the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol**

#### **(a) Technical assessment of the reported information**

78. In the NC8 France provided information on how its use of the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol is supplemental to domestic action. The ERT noted that France does not plan to use market-based mechanisms to meet its Kyoto Protocol target. Although the French companies included in the EU ETS can use for compliance ERUs and CERs from developed projects (clean development mechanism or joint implementation) up to a limit of 13.5 per cent of their initial allocation of allowances, this flexibility has not been used by France to achieve its EU objectives.

#### **(b) Assessment of adherence to the reporting guidelines**

79. The ERT assessed the information reported in the NC8 of France and recognized that the reporting is complete and transparent, and thus adheres to the reporting guidelines for supplementary information. No issues relating to the topics discussed in this chapter of the review report were raised during the review.

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

### **1. Technical assessment of the reported information**

#### **(a) Approach and methodologies used to track support provided to non-Annex I Parties**

80. In its NC8 and BR5 France reported information on its provision of financial, technological and capacity-building support to non-Annex I Parties.

81. France has provided support that it considers to be “new and additional”. Its definition of “new and additional” is newly committed or disbursed climate finance during 2021. In its climate finance reporting, France provides information only on those newly committed or disbursed resources included in its 2021 budget year. However, for the benefit of comparison between the different Parties, France also mentioned the evolution of its climate finance since the signing of the Paris Agreement, which is a baseline shared by several Parties. In this regard, France provided EUR 6.1 billion of new and additional climate finance in 2021, representing a significant increase since the 2015 baseline (e.g. EUR 3 billion). According to France, the level of financial support has increased by 36 per cent in relation to 2017 and, in 2020, France confirmed an annual commitment of EUR 6 billion for 2021–2025.

82. France reported on the support that it has provided to non-Annex I Parties, distinguishing between support for mitigation and adaptation activities and identifying the capacity-building elements of such support. Most of the support provided is being handled bilaterally by AFD, which identifies support for adaptation and mitigation through its local representatives.

83. France’s national approach to tracking the provision of support, including information on indicators, delivery mechanisms used and allocation channels tracked, is based on the methodology developed and used by AFD for tracking climate finance commitments. During the review, France further provided information on how the AFD tracking methodology was used for the provision of climate finance support, and explained that 50 per cent of its overall budget was allocated to climate co-benefit activities in non-Annex I Parties, while 30 per cent was allocated to adaptation activities.

84. France’s methodology and underlying assumptions used for collecting and reporting information on financial support, including the AFD accounting methodology for climate projects, were developed based on the common principles agreed by members of the International Development Finance Club and the multilateral development banks. During the review, the Party also referred to the use of Organisation for Economic Co-operation and Development Rio markers for all bilateral contributions. However, France did not elaborate on the methodologies it uses to assess its multilateral support, including underlying



assumptions, guidelines, eligibility criteria and indicators. During the review, the Party acknowledged the issue and the need for improvement in future submissions.

85. During the review, France expressed the concern that while tracking allocated financial resources from public sources is possible and working well, it faces difficulties in tracking the mobilization of private financing, in particular from the private sector in non-Annex I Parties.

86. In its NC8 and BR5 France reported information on the provision of financial support to non-Annex I Parties beyond the reporting periods for the respective reports. While the reporting period is 2018–2021 for the NC8 and 2019–2020 for the BR5, some financial support started in 2017 and some financial support ended in 2022.

## (b) Financial resources

87. France reported in its NC8 and BR5 information on its provision of financial support to non-Annex I Parties as required under the Convention, including on financial support committed and disbursed, allocation channels and annual contributions. For bilateral support in particular, France reported on the AFD climate strategy for 2017–2022, which stipulates its key objective of making all AFD financing consistent with low-carbon and resilient development, the “100 per cent Paris Agreement” objective. The Party reported that this objective is one of the pillars of the Strategic Orientation Plan adopted in 2018 for the AFD Group.

88. France reported on “new and additional” financial resources provided for non-Annex I Parties through its multilateral, regional, bilateral and other channels during the two calendar years (2019–2020) in CTF table 7. Table 10 summarizes the information reported by France on its provision of financial support.

Table 10

### Summary of information on provision of financial support by France in 2019–2020

(Millions of United States dollars)

<i>Allocation channel of public financial support</i>	<i>Disbursement in 2019–2020</i>
Official development assistance	43 257.14
Climate-specific contributions through multilateral channels, including:	858.37
Global Environment Facility	99.02
LDCF	14.04
Green Climate Fund	223.26
Other multinational climate change funds	81.51
Financial institutions, including regional development banks	440.53
Climate-specific contributions through bilateral, regional and other channels	12 090.41

*Sources:* France’s BR5 CTF tables and Query Wizard for International Development Statistics, available at <http://stats.oecd.org/qwids/>.

89. France’s climate-specific public financial support<sup>8</sup> totalled USD 6,694.12 million in 2019 and USD 6,254.66 million in 2020, representing an increase of 18.4 per cent since the BR4 (2017–2018).<sup>9</sup> With regard to future financial pledges aimed at enhancing the implementation of the Convention by developing countries, France has committed to providing EUR 6 billion per year for 2021–2025.

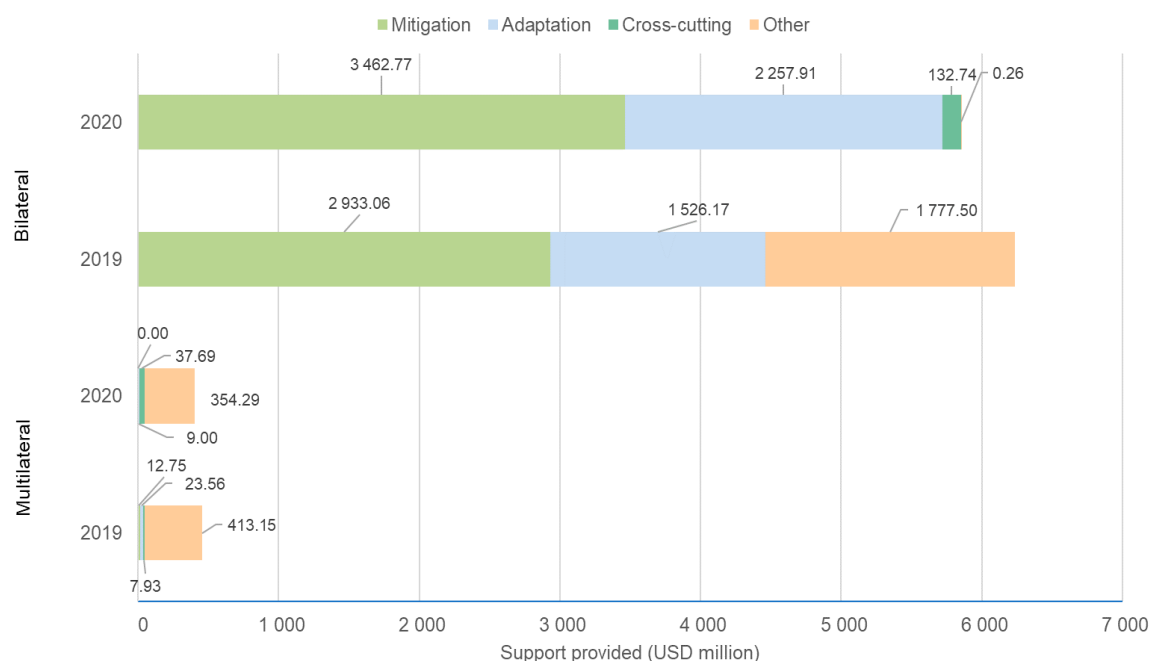
90. France contributed through multilateral channels USD 858.37 million in 2019–2020. The contributions were made to specialized multilateral climate change funds, such as the Global Environment Facility, the LDCF, the Trust Fund for Supplementary Activities and

<sup>8</sup> For the remainder of this chapter, the term “financial support” means climate-specific financial support, unless otherwise noted.

<sup>9</sup> Comparisons with data from previous years have been calculated directly without adjusting for inflation.

the Green Climate Fund. Information on financial support from the public sector provided through multilateral and bilateral channels and the allocation of that support by target area is presented in figure 3 and table 11.

Figure 3

**Provision of support by France in 2019–2020**

Source: France's BR5 CTF tables 7, 7(a) and 7(b).

Table 11

**Summary of information on channels of financial support reported by France**

(Millions of United States dollars)

Allocation channel of public financial support	Amount disbursed in 2019–2020	Amount disbursed in 2017–2018	Change (%) <sup>a</sup>	Share of total (2019–2020) (%)
Detailed information by type of channel				
Multilateral channels				
Mitigation	12.75	77.41	–83.5	1.5
Adaptation	32.56	85.35	–61.9	3.8
Cross-cutting	45.62	1 221.03	–96.3	5.3
Other	767.44	0	NA	89.4
<b>Total multilateral</b>	<b>858.37</b>	<b>1 383.79</b>	<b>–38.0</b>	<b>100.0</b>
Bilateral channels				
Mitigation	6 395.83	6 328.41	1.1	52.9
Adaptation	3 784.08	1 951.57	93.9	31.3
Cross-cutting	132.74	1 276.37	–89.6	1.1
Other	1 777.76	0	NA	14.7
<b>Total bilateral</b>	<b>12 090.41</b>	<b>9 556.35</b>	<b>26.5</b>	<b>100.0</b>
<b>Total multilateral and bilateral</b>	<b>12 948.78</b>	<b>10 940.14</b>	<b>18.4</b>	<b>100.0</b>

Sources: France's BR5 CTF tables 7, 7(a) and 7(b); the report on the technical review of the BR4 of France for 2017–2018 data.

<sup>a</sup> Note that variances in contribution amounts from year to year can occur that are not reflective of trends, owing to factors such as the biennial or triennial contribution cycles of some multilateral funds, the timing of approvals for individual bilateral projects or changes in exchange rates.

91. The Party reported detailed information on the total financial support provided through bilateral (USD 12,090.41 million) channels in 2019–2020. During the reporting period,

France placed a particular focus on Africa, noting that more than 70 per cent of its support is allocated to this region and that it has more than 81 projects in Africa.

92. The NC8 and the BR5 provide information on the types, sectors and instruments of support provided. The information reported shows that in 2019–2020 the average shares of bilateral and regional financial support allocated to mitigation, adaptation and cross-cutting projects were 52.9, 31.3 and 1.1 per cent respectively. In 2019–2020, the majority of financial contributions through bilateral and regional channels were allocated to the energy, agriculture, forestry, industry, water and sanitation, and cross-cutting sectors. The ERT noted that the grants and loans provided in 2019–2020 accounted for most of the bilateral and regional financial support.

93. France explained that private finance is mainly mobilized for exporting goods, technologies and services in the environment and energy sectors and for commercial activities. France explained its approach to reporting, highlighting its success stories in reporting on private financial flows leveraged by bilateral climate finance for mitigation and adaptation activities in non-Annex I Parties.

94. An example of France's support is its continued provision of climate finance to developing countries in line with its climate finance programmes, including through its 2050 Facility initiative to strengthen climate policy dialogue through the financing of studies and capacity-building activities in support of 30 of the highest emitting and most vulnerable developing countries in their transition to a low-carbon and resilient development model.

**(c) Technology development and transfer**

95. France reported on its measures and activities related to technological cooperation but not on technology transfer, access and deployment benefiting developing countries. It also reported under the technology section on action that can be considered as enabling activities but not technology transfer, development and/or deployment activities, such as its contribution to the Climate Technology Centre and Network, enhancing skills, capacity-building, collaboration, networking, calls for tenders or academic or feasibility studies. Examples of support provided for the deployment and enhancement of the endogenous capacities and technologies of non-Annex I Parties include the 2050 Facility and other technical assistance from Expertise France, part of the AFD Group.

96. France focused the provision of its measures and activities related to technology on multi-country recipients (e.g. in Africa and globally).

97. Since its last NC and BR, France has planned and is implementing ongoing additional measures and activities as part of its initiatives, such as Mission Innovation, a multilateral coalition that aims to strengthen public support for research and innovation in low-carbon technologies, the Global Alliance for Buildings and Construction, which brings together 36 countries and more than 200 bodies for intergovernmental cooperation to enable resilient buildings with close to zero emissions to become the industry standard by 2030, and a network of women mayors in Cameroon, which empowers local elected women to implement pilot actions for public lighting and electricity supply to public buildings. However, France did not clearly indicate whether the projects/initiatives (technology transfer activities) are new compared with the previous NC and BR. France did not describe in its NC8 and BR5 success and failure stories in relation to technology transfer and, in particular, measures taken to promote, facilitate and finance the transfer and deployment of climate-friendly technologies.

98. The ERT noted that France did not clearly indicate whether the reported technology transfer activities are consistent with the reporting periods for the NC8 and BR5.

**(d) Capacity-building**

99. France reported on its capacity-building support for mitigation, adaptation and technology that responds to the existing and emerging needs identified by non-Annex I Parties. It described individual measures and activities related to capacity-building support in textual and tabular format. France indicated that this support is being implemented through initiatives and activities defined by AFD, with the support of its local representatives in

different recipient countries. This is done through initiatives such as the AFD Group's AdaptAction Facility (phase I), where EUR 30 million was deployed during 2017–2022 to more than 70 projects in 15 developing countries to support the implementation of recipient countries' adaptation strategies through technical assistance and capacity-building activities to consolidate their climate governance, better integrate adaptation to climate change into their public policies and implement foundational adaptation projects; the Francophone Cluster of the Partnership for Transparency in the Paris Agreement, a partnership that enables the exchange of information, expertise and experience between francophone partner countries on GHG inventories, the development of mitigation measures, the MRV process and the formulation of NDCs; and RISQ software for the MRV of GHG emissions and air pollutants, which contributes to the transparency, accuracy, reliability, coverage and consistency of GHG inventories, and scalability of MRV systems between countries and between central and local governments. France's support has responded to the existing and emerging capacity-building needs of non-Annex I Parties by following the principles of national ownership, stakeholder participation and country-driven demand.

100. France has supported climate-related capacity development activities relating to adaptation, mitigation and other sectors. Since the BR4, the focus of support has remained the same. A related success story was reported by France through its AdaptAction Facility for capacity-building activities.

## **2. Assessment of adherence to the reporting guidelines**

101. The ERT assessed the information reported in the NC8 and BR5 of France and identified issues relating to completeness and transparency, and thus adherence to the UNFCCC reporting guidelines on NCs and the UNFCCC reporting guidelines on BRs. The findings are described in tables I.4 and II.4.

## **3. Reporting on finance and capacity-building information related to the Kyoto Protocol**

### **(a) Technical assessment of the reported information**

102. In its NC8 France reported its activities, actions and programmes undertaken in fulfilment of its commitments under Article 10 of the Kyoto Protocol. France provided information on steps taken to promote, facilitate and finance the transfer of technology to developing countries and to build their capacity in order to facilitate implementation of Article 10 of the Kyoto Protocol. France is a major contributor to the Global Environment Facility. The Global Environment Facility manages the provision of financial resources to the LDCF, which is dedicated to adaptation and technology transfer in developing countries. France indicated that detailed information can be found in its NIR (chap. 15). The Party also indicated that the French Agency for Ecological Transition manages measures and activities related to technology transfer by developing mitigation projects financed by the French Agency for Ecological Transition in African countries. Detailed information on the technology transfer activities deployed by the Party is provided in paragraphs 97–100 above.

103. France provided information on its implementation of Article 11 of the Kyoto Protocol, including the activities undertaken by the French institutions to provide financial and capacity-building support. CITEPA is the French institution that provides support for the elaboration of GHG inventories in developing countries. AFD provides technical assistance through specific programmes focused on identifying and addressing the capacity-building needs of developing countries.

104. France is also involved in providing support for developing countries to plan adaptation PaMs. On the African continent, which is highly vulnerable to climate change effects, France is particularly interested in supporting the development of effective climate risk management tools with the aim of developing the most appropriate adaptation strategies. Detailed information on financial support deployed by the Party is provided in paragraphs 87–94 above.

**(b) Assessment of adherence to the reporting guidelines**

105. The ERT assessed the information reported in the NC8 of France and recognized that the reporting is complete and transparent, and thus adheres to the reporting guidelines for supplementary information. No issues relating to the topics discussed in this chapter of the review report were raised during the review.

**H. Vulnerability assessment, climate change impacts and adaptation measures****1. Technical assessment of the reported information**

106. In its NC8 France provided information on the expected impacts of climate change in the country; the adaptation policies covering regional, sectoral and cross-sectoral vulnerabilities and considerations; and an outline of the action taken to implement Article 4, paragraph 1(b) and (e), of the Convention with regard to adaptation.

107. France provided information related to the expected increase in extreme events (due to heatwaves, droughts, intense rainfall and rising sea levels) that could strongly impact the health of the population and agricultural and industrial production and lead to the weakening of ecosystems. The Party also reported that some overseas departments and regions are exposed to the most severe cyclones and tropical storms, which are expected to increase in intensity.

108. France reported in the NC8 that 2022 was the warmest year that France has measured since 1900. Changes have been noticed in the frequency and intensity of extreme weather events, which cause economic and human damage and have a major impact on many people's quality of life. Impacts also concern changes in precipitation patterns that differ according to region and season. An overall deficit of 2 billion m<sup>3</sup> water per year is deemed to affect economic sectors sensitive to water resources, such as industry, agriculture and drinking water supply. The glaciers of the French Alps and the Pyrenees show loss of their mass balance. There is also increased pressure on water resources; a significant increase in natural hazards; and considerable impacts on biomass production. The agriculture and agrifood sectors are also impacted by the water deficit. Tourism is expected to be impacted, in part owing to the lack of reliable snow cover for winter sports.

109. Road infrastructure and forests are also impacted by climate change and excess mortality is rising owing to heatwaves. The spread of vector-borne diseases due to the increase in temperature is linked to the population area of the Asian tiger mosquito, responsible for transmitting a variety of diseases, including chikungunya, dengue and Zika viruses.

110. According to the current and future vulnerability analyses, recommendations are to be formulated and preventative and adaptive measures are to be taken to attenuate the hazards associated with climate change. Those measures, linked to economic sectors, concern land-use planning, water resources, public health, the protection of people and property, biodiversity, cultural heritage and modification of natural ecosystems because of their particular vulnerability (the coastline and sea, mountains and forests). The success of the implementation of these adaptation measures is closely dependent on the involvement of local actors and the results of research and studies which are used in plans and laws.

111. France has addressed adaptation matters through the adoption of the National Climate Change Adaptation Plan at the end of 2018, which provided further direction to government agencies on enhancing preparedness for climate change. It is being implemented over the next five years and its objectives are to better protect the French population from extreme weather events and to build up the resilience of the main sectors of the economy (agriculture, industry, tourism) to climate change. Explore 2, a project launched in 2021, will enhance knowledge about the availability of water resources in the future.

112. There are also regional plans for planning, sustainable development and territorial equality, which are targeted at the development of renewable energy and which also define climate change mitigation and adaptation strategies for each of the 11 regions of France. All

11 regional plans have now been approved. In 2015, France promulgated the law on the New Territorial Organization of the Republic, which reinforces the territorial aspect of adaptation by obliging municipalities with more than 20,000 inhabitants to draft a territorial energy climate plan. Table 12 summarizes the information on vulnerability and adaptation to climate change presented in the NC8 of France.

Table 12

**Summary of information on vulnerability and adaptation to climate change reported by France**

<i>Vulnerable area</i>	<i>Examples/comments/adaptation measures reported</i>
Agriculture and food security	<p>Vulnerability: crop yields will increase for areas at high altitudes (since the local temperature will increase by less than 3 °C and the higher CO<sub>2</sub> concentration will have a positive effect on photosynthetic activity). Crop yields at lower altitudes will decrease. Viral, bacterial and parasitical diseases will emerge.</p> <p>Adaptation: genetic research to enhance and conserve crop and fruit varieties is being undertaken; long-term water management policies to improve the irrigation of small areas (capacity to store excess winter rainfall) are being assessed.</p>
Biodiversity and natural ecosystems	<p>Vulnerability: loss of biodiversity, reduced areas of coral ecosystems. An economic assessment of biodiversity losses based on the concept of ecosystem services, applied to coral ecosystems and non-goods services provided by forests, indicates a negative impact.</p> <p>Adaptation: new forecast models for the modification of biodiversity in line with the climatic scenarios and the economic evaluation of ecosystem services have been developed; strengthening of cross-border collaboration is planned.</p>
Coastal zones	<p>Vulnerability: sea level will rise.</p> <p>Adaptation: rolling back of the infrastructure inland is forecast; water evacuation systems, equipment for floodable areas, raising of foundations of buildings and reinforcing protection services are planned; sea level rise will be mainstreamed in coastal town and country planning documents.</p>
Tourism	<p>Vulnerability: snowfall will dramatically decrease at low altitudes, and to a lesser extent at higher altitudes. The maximum depth of accumulated snow will decrease at all altitudes. This will shorten the skiing season and will have a negative impact on the tourism industry in mountain areas.</p> <p>Adaptation: implementation of a research programme to anticipate local snow cover depletion; promotion of alternative recreational activities for winter tourism in the mountain areas.</p>
Forests	<p>Vulnerability: forest productivity is projected to increase until 2050 (owing to a shorter cold period) and is projected to decrease in the long term (until 2100) (owing to more frequent extreme weather events and the spread of the Mediterranean forest).</p> <p>Adaptation: changes in forestry management by harvesting appropriate species and amounts; research and observation on species robustness/resistance, as well as genetic improvements, is ongoing; management of protected forest areas; development of standards for and promotion of wood use in construction.</p>
Human health	<p>Vulnerability: the risk of heatwaves will increase distinctly. A number of pathologies are likely to be noted; for example, more than 10 million people in France are affected by pollen allergies.</p> <p>Adaptation: monitoring of new climate-related risk factors, such as pollen, fungi, insects and vector-borne diseases, and toxin-producing microorganisms; solar ultraviolet radiation early warning system is established; a heatwave management scheme is in place; related health services will be upgraded.</p>
Water resources	<p>Vulnerability: by 2020, water collection is expected to decrease by 20.0 per cent; shortage of 2 billion m<sup>3</sup> water for industry, agriculture and drinking is expected by 2050. Disturbances to the hydrological cycle could be accompanied, in some circumstances, by more frequent and more intense flooding.</p> <p>Adaptation: develop water-saving measures and ensure more efficient use of water; make 20 per cent savings in water abstracted, excluding winter water stocks, by 2020.</p>

113. France provided a detailed description of international adaptation activities, including the integrated plan for coastal zone and water resources and agriculture. France has used

methodologies and guidance for assessing climate change impacts and vulnerability and adaptation. In 2010, the French climate science community (made up of researchers from various institutes and agencies) was engaged by the Ministry of Ecological Transition to produce a scientific assessment of France's climate conditions in the twenty-first century that could serve as a basis for the development of climate change adaptation policies.

## **2. Assessment of adherence to the reporting guidelines**

114. The ERT assessed the information reported in the NC8 of France and identified an issue relating to transparency and thus adherence to the UNFCCC reporting guidelines on NCs. The finding is described in table I.5.

## **I. Research and systematic observation**

### **1. Technical assessment of the reported information**

115. In its NC8 France provided information on its actions relating to research and systematic observation. National research alliances were formed in 2009 and 2010 (the National Alliance for Life Sciences and Health, the National Alliance for Energy Research Coordination, the Alliance of Digital Sciences, the National Alliance of Environmental Research and the Alliance for Human and Social Sciences) to bring together researchers to break down barriers and strengthen coordination between scientific programmes in France and to better coordinate the actions and programmes of the various research bodies.

116. In the field of Earth system sciences, two specialist national commissions exist among the public research bodies coordinated by the National Institute of Sciences of the Universe (at the National Centre for Scientific Research: the Specialized Commission for the Ocean–Atmosphere and the Specialized Commission for Continental Areas and Interfaces).

117. In France, the National Research Strategy is working in five areas taking account of economic and social impacts, the current international dynamic and the maturity of the action envisaged (big data; Earth system: observation, forecasting and adapting; system and application biology; from the laboratory to the patient; and humans and cultures). In addition, climate research relies on observation facilities approved by the Specialized Commission for the Ocean–Atmosphere and managed locally by the Observatories of Sciences of the Universe. For the past 10 years, the organization of the national infrastructure landscape has reflected France's desire to maintain existing observation systems, which are necessary for climate research in particular, in line with European or international research infrastructures.

118. According to the NC8, France participates in GCOS, a joint observation system comprising four areas of observation with specific networks: the atmosphere, the ocean, the terrestrial networks (glaciers and carbon fluxes); and space. This programme comes under the aegis of WMO, the International Science Council, the Intergovernmental Oceanographic Commission and the United Nations Environment Programme.

119. France has implemented international and domestic policies and programmes on climate change research, systematic observation and climate modelling that aim to advance capabilities to predict and observe the physical, chemical, biological and human components of the Earth's system over space and time (e.g. EUMETSAT operational space programmes and the Copernicus Earth observation programme). Météo-France, through links with WMO, offers a national meteorological and climatological service to ensure the meteorological safety of people and property; it also has a role to play in cutting-edge research and the latest scientific advances in the field of observation, forecasting and climate modelling. France also contributes to programmes of the European Space Agency in the field of Earth and climate observation. At the national level, France has many research organizations, such as the National Centre for Scientific Research, the French Alternative Energies and Atomic Energy Commission, the National Institute for Agricultural, Food and Environmental Research and Météo-France.

120. In terms of activities related to systematic observation, France reported on national plans, programmes and support for ground- and space-based climate observing systems, including satellite and non-satellite climate observation. France also reported on challenges

related to the maintenance of a consistent and comprehensive observation system. Several scientific missions to observe the climate have been developed under the French space policy, such as MicroCarb, initiated by the French Space Agency in partnership with the United Kingdom Space Agency with the aim of charting the sources and sinks of CO<sub>2</sub> at the planetary level. The Surface Water and Ocean Topography mission is a joint enterprise between the French Space Agency and the National Aeronautics and Space Administration in cooperation with the Canadian Space Agency and the United Kingdom Space Agency. Launched in 2022, it is devoted to the measurement of water levels in lakes and water courses, river flow rates and very precise determination of ocean dynamics. France, at the European level, supports the 10 Joint Programming Initiatives with the purpose of coordinating European research and uses in particular transnational European funding instruments, such as the ERA-NET Cofund.

121. France also participates in the development of the EU Copernicus programme, which has the goal of combining all the data gathered from environmental satellites and on-site measuring instruments to produce a complete overview of the state of the Earth.

122. French research is involved in major European and international programmes. According to the NC8, at the international level France is involved in the work of the IPCC and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Since 2016, thanks to joint funding by various government ministries, France has hosted the IPCC Working Group 1 Technical Support Unit.

123. The NC8 also reports that France supports major international programmes such as Future Earth, launched in 2015, which brings together three major international programmes: DIVERSITAS, an international programme that aims to synthesize and disseminate scientific knowledge on biodiversity; the International Geosphere–Biosphere Programme, a research programme that studies the phenomenon of global change; and the International Human Dimensions Programme on Global Environmental Change, a research programme that studied the human and societal aspects of the phenomenon of global change in partnership with the World Climate Research Programme.

124. The NC8 reflects actions taken to support capacity-building and the establishment and maintenance of observation systems and related data and monitoring systems in developing countries. France provided funding for scientists from developing countries working on global climate change research. Concerning France's research collaboration with developing countries, there are two national research organizations (the National Research Institute for Sustainable Development and the Agricultural Research Centre for International Development), under the dual supervision of the Ministry of Higher Education and Research and the Ministry of Foreign Affairs, which carry out research and development activities with and for developing countries. The National Research Institute for Sustainable Development aims to better understand the processes that are the source of climate variations and improve forecasting capabilities in tropical regions with a view to enabling climate change scenarios to be refined over 10-year and 100-year timescales. The Agricultural Research Centre for International Development is a research body with 1,800 staff, including 800 scientists, that focuses on life sciences, social sciences and engineering science applied to agriculture, food and rural lands. In partnership with developing countries, the Agricultural Research Centre for International Development produces and transmits new knowledge to support agricultural development and contribute to the international debate on agronomy. It has defined six priority lines of research (ecological intensification, biomass energy, food, animal welfare, emerging diseases and public policies) and works in rural areas in cooperation with more than 90 countries in Africa, the Indian Ocean, Asia and South America.

125. The National Research Institute for Sustainable Development contributes to developing the research capabilities of partners in more than 90 countries in the Global South through temporary missions. To support research and innovation projects, France has two main funding agencies, the National Research Agency and the French Agency for Ecological Transition. In addition, the National Research Institute for Sustainable Development mobilizes an annual budget of EUR 230 million towards developing the research capabilities of partners in the Global South.



## 2. Assessment of adherence to the reporting guidelines

126. The ERT assessed the information reported in the NC8 of France and identified issues relating to completeness and thus adherence to the UNFCCC reporting guidelines on NCs. The findings are described in table I.6.

## J. Education, training and public awareness

### 1. Technical assessment of the reported information

127. In its NC8 France provided information on its actions relating to education, training and public awareness at the domestic and international level. The Party provided information on the general policy on education, training and public awareness; primary, secondary and higher education; public information campaigns; training programmes; educational materials; resource or information centres; the involvement of the public and non-governmental organizations; and its participation in international activities.

128. The General Commission for Sustainable Development at the Ministry of Ecological Transition informs, through the provision of data and knowledge and the analysis of the data, the actions of the ministry in all its fields of competence and helps to lend a global perspective to the ministry's actions. Concerning education, training and public awareness, it is responsible, in liaison with the General Secretariat and with the support of the regional directorates of the ministry, for the collection of data on housing, energy, transport and the environment. It steers environmental dialogue on political choices and priorities through the National Council for Ecological Transition.

129. According to the NC8, at the end of 2022, 33 per cent of French people considered that the environment and ecological transition were a major concern for France, the third issue of most concern after rising prices (68 per cent) and public health (36 per cent).

130. In French schools, elected 'eco-delegate' pupils play a role in training and contributing to raising the awareness of all pupils. Their actions and projects target the environment and sustainable development, particularly in relation to climate. These eco-delegates are supported by the education community (teachers, management teams, canteen managers, technical staff, etc.) and by outside partners (local authorities, scientific experts, etc.).

131. France highlighted its overarching approach to education on sustainable development, which addresses all environmental issues, including climate change issues, as well as the economic and social aspects of sustainable development. Education on sustainable development is cross-curricular and can be found in the curriculum of all school subjects. It involves all pupils in all branches of the national education system (general, technological and vocational), throughout their schooling, from nursery school to the end of secondary school.

132. In the NC8 France reported on public information and education materials, resource or information centres, training programmes and participation in international activities, highlighting the contribution of the resource centre for adaptation to climate change and the work of the national observatory on the effects of climate change in enhancing public information and providing access to education materials.

133. Regarding public information and increased public awareness, the Climate and Resilience Law (2021) seeks to combat climate change and strengthen resilience by managing the promotion and advertisement of products with an excessive negative impact on the climate, while better informing consumers by encouraging all actors (advertisers, public relations agencies, editors and the media) to upgrade their practices.

134. Information was also reported in the NC8 on the 2023 Guide for Environmental Claims, published by the National Consumer Council. The purpose of this guide, developed by both professionals and consumers and overseen by the Directorate General for Competition Policy, Consumer Affairs and Fraud Control and the General Commission for Sustainable Development, is to combat greenwashing and limit unregulated environmental claims.

## 2. Assessment of adherence to the reporting guidelines

135. The ERT assessed the information reported in the NC8 of France and identified issues relating to completeness and thus adherence to the UNFCCC reporting guidelines on NCs. The findings are described in table I.7.

## III. Conclusions and recommendations

136. The ERT conducted a technical review of the information reported in the NC8 of France in accordance with the UNFCCC reporting guidelines on NCs. The ERT concluded that the reported information mostly adheres to the UNFCCC reporting guidelines on NCs and that the NC8 provides an overview of the national climate policy of France.

137. The information provided in the NC8 includes most of the elements of the supplementary information under Article 7, paragraph 2, of the Kyoto Protocol. France reported on the national system, the national registry, supplementarity relating to the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol, PaMs in accordance with Article 2 of the Kyoto Protocol, domestic and regional programmes and/or legislative arrangements and enforcement and administrative procedures, information under Article 10 of the Kyoto Protocol, and financial resources provided to developing country Parties. Supplementary information under Article 7, paragraph 1, of the Kyoto Protocol on the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol was provided by France in its 2022 and 2023 annual submissions.

138. The ERT conducted a technical review of the information reported in the BR5 and BR5 CTF tables of France in accordance with the UNFCCC reporting guidelines on BRs. The ERT concluded that the reported information mostly adheres to the UNFCCC reporting guidelines on BRs and that the BR5 and its CTF tables provide 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; the progress of France towards achieving its target; and the Party's provision of support to developing country Parties.

139. In its NC8 France reported on its key national circumstances related to GHG emissions and removals. The measures taken by France as part of the green recovery following the pandemic are expected to pave the way to a meaningful contribution to achieving the EU and global climate goals.

140. France's total GHG emissions excluding LULUCF in 2020 were estimated to be 27.8 per cent below its 1990 level. Emissions peaked in 1991 and decreased thereafter. The changes in total emissions were driven mainly by factors such as mitigation actions implemented at the EU and domestic level, the most important driver of emission reductions being the implementation in 2005 of the EU ETS across EU member States.

141. As reported in the BR5, under the Convention France committed to contributing to the achievement of the joint EU quantified economy-wide target of a 20 per cent reduction in emissions below the 1990 level by 2020. The target covers all sectors and CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs and SF<sub>6</sub>, expressed using GWP values from the AR4. Emissions and removals from the LULUCF sector are not included. Under the ESD France has a target of reducing its emissions by 14 per cent below the 2005 level by 2020.

142. The EU has a joint 2030 emission reduction target of at least 55 per cent below the 1990 level. This will be primarily implemented through the EU ETS and ESR, which have targets to reduce emissions by 2030 by 62 and 43 per cent respectively compared with the 2005 level.

143. The ERT noted that the total GHG emissions of the EU excluding LULUCF do not exceed the emission level corresponding to the target in 2020, and thus that the EU has achieved its joint target. The ERT therefore concluded that France has met its 2020 commitment under the Convention through its contribution to achieving the joint target of the EU. The ERT noted that the Party met its 2020 ESD target because its ESD emissions in 2020 do not exceed its AEA for 2020.

144. The GHG emission projections provided by France in its NC8 and BR5 correspond to the WEM and WAM scenarios. Under the WEM scenario, emissions in 2030 are projected to be 32.5 per cent below the 1990 level and 6.6 per cent below the 2020 level. Under the WAM scenario, emissions in 2030 are projected to be 43.5 per cent below the 1990 level and 21.9 per cent below the 2020 level.

145. France's main policy framework relating to energy and climate change includes the multi-year energy programme, which sets out priorities for the energy sector actors, and the National Low-Carbon Strategy. The Party described the mitigation actions that it has implemented to help it achieve its 2020 and longer-term targets, which include thermal regulations for new buildings, implementing EU regulations for new vehicles, tax incentives for biofuels, closure of coal-fired power plants and regulations to reduce F-gases. The mitigation effect of the EU regulation for new vehicles is the most significant, partly because the transportation sector is France's largest emitting sector.

146. France continued to provide climate financing to developing countries in line with its climate finance programmes such as AdaptAction Facility. It has increased the level of its financial support since the BR4; its public financial support in 2019–2020 totalled USD 12,948.78 million. For those years, France provided more support for mitigation. The biggest share of support went to projects and programmes in the energy, agriculture and water sectors and to cross-cutting projects.

147. France continued to provide support for technology development and transfer and capacity-building. Priority for technological support was given to projects and programmes in mitigation and adaptation in Africa, Latin America, and Asia and the Pacific. Over time, the focus has remained the same. Priority for capacity-building support was given to projects and programmes in mitigation and adaptation in Africa, Latin America, and Asia and the Pacific. Over time, the focus has remained the same.

148. In its NC8 France provided information on the expected impacts of climate change in the country; the adaptation policies covering regional, sectoral and cross-sectoral vulnerabilities and considerations; and an outline of the action taken to implement Article 4, paragraph 1(b) and (e), of the Convention with regard to adaptation. At the end of 2018 France adopted the National Climate Change Adaptation Plan, which provided further direction to government agencies on enhancing preparedness for climate change. The plan is being implemented to better protect the French population from extreme weather events and to build up the resilience of the main sectors of the economy (agriculture, industry, tourism) to climate change. Explore 2, a project launched in 2021, will enhance knowledge about the availability of water resources in the future.

149. In its NC8 France provided information on its activities relating to research and systematic observation. France is actively engaged in various research alliances, international and regional collaborations and observational programmes to study climate change, promote sustainable development and strengthen research capabilities globally. It participates in global climate observation initiatives such as GCOS, a joint observation system comprising four areas of observation with specific networks: the atmosphere, the ocean, the terrestrial networks (glaciers and carbon fluxes) and space. This programme comes under the aegis of WMO, the International Science Council, the Intergovernmental Oceanographic Commission and the United Nations Environment Programme. France is also involved in the EU Copernicus programme (2021–2027), with services dedicated to the monitoring and forecasting of the Earth's subsystems contributing directly to the monitoring of climate change.

150. In its NC8 France provided information on its actions relating to education, training and public awareness. These include policies on education, primary, secondary and higher education, public information campaigns, training programmes, educational materials, and the involvement of the public and non-governmental organizations. The General Commission for Sustainable Development publishes and analyses relevant data and knowledge related to education, training and public awareness, thus playing a crucial role in disseminating information and fostering understanding among the public.

151. In the course of the review, the ERT formulated the following recommendations for France to improve its adherence to the UNFCCC reporting guidelines on NCs in its next NC:

- (a) To improve the completeness of its reporting by:
  - (i) Providing information on its national inventory arrangements in accordance with the reporting requirements (see issue 2 in table I.1);
  - (ii) Providing information on how it supports developing countries that are particularly vulnerable to the adverse effects of climate change in meeting the costs of adaptation (see issue 2 in table I.4);
  - (iii) Providing information on how the capacity-building support it has provided to non-Annex I Parties responds to the existing and emerging capacity-building needs identified by non-Annex I Parties (see issue 6 in table I.4);
- (b) To improve the transparency of its reporting by:
  - (i) Providing estimates of mitigation impacts in the PaMs section in its next NC or, where that is not possible, explaining why it has not estimated these impacts (see issue 3 in table I.2);
  - (ii) Providing information on how it believes its PaMs are modifying longer-term trends in GHG emissions or including a cross reference to where this information could be found (see issue 5 in table I.2);
  - (iii) Providing observation data for all years they are available (see issue 1 in table I.3);
  - (iv) Providing information on the effect of PaMs in the most recent inventory year and in subsequent years extending at least 15 years from the most recent inventory year (see issue 4 in table I.3);
  - (v) Providing information on financial support for the previous two calendar or financial years without overlapping with the previous reporting periods (see issue 1 in table I.4);
  - (vi) Providing information on technology transfer indicating that activities reported on since the previous NC and BR are new activities that have taken place during the reporting period, and, in textual and tabular formats, on measures and activities related to technology transfer planned and implemented since its last NC and BR (see issue 5 in table I.4);
- (c) To improve the timeliness of its reporting by submitting its next NC on time (see para. 5 above).

152. In the course of the review of France's NC8, the ERT formulated the following recommendations relating to adherence to the reporting guidelines for supplementary information:

- (a) To improve the completeness of its reporting by:
  - (i) Including all elements regarding the national registry performing functions as defined in the annex to decision 13/CMP.1 (see issue 1 in table I.8);
  - (ii) Providing information related to its national legislative arrangements and administrative procedures in place that seek to ensure that the implementation of activities under Article 3, paragraphs 3–4, of the Kyoto Protocol contributes to the conservation of biodiversity and the sustainable use of natural resources (see issue 3 in table I.8);
- (b) To improve the transparency of its reporting by referring to national activities that address PaMs implemented and/or further elaborated, as well as cooperation with other Parties to achieve its commitment, at the same time promoting sustainable development (see issue 2 in table I.8).

153. In the course of the review of France's BR5, the ERT formulated the following recommendations relating to adherence to the UNFCCC reporting guidelines on BRs:

- (a) To improve the transparency of its reporting by:

- (i) Including correct and consistent information when describing its quantified economy-wide emission reduction targets (see issue 1 in table II.1);
  - (ii) Providing all necessary information related to CTF table 3, including the estimated impact and objectives of its PaMs or, where that is not possible, explaining why this could not be done (see issue 2 in table II.2);
  - (iii) Providing information indicating that the technology transfer activities reported on since the previous NC and BR are new activities that have taken place during the reporting period (see issue 4 in table II.4);
- (b) To improve the timeliness of its reporting by submitting its next BR on time (see para. 7 above).

## Annex I

### Assessment of adherence to the reporting guidelines for the eighth national communication of France

Tables I.1–I.8 summarize the ERT assessment of adherence to the UNFCCC reporting guidelines on NCs for France's NC8.

Table I.1

#### Findings on greenhouse gas inventory information from the review of the eighth national communication of France

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 7  Issue type: transparency  Assessment: encouragement	The Party reported in its NC8 (chap. III, section B.5) descriptive summaries and figures illustrating its GHG emissions and removals. However, the ERT noted that the descriptive summaries were not consistent with the emission trends of the GHG inventory sectors, as reported in annex II to the NC8, and it used the emission trends aggregated by economic sector (e.g. transport, agriculture, industry).  During the review, the Party informed the ERT that it considers such descriptive summaries more relevant for the domestic policymaking processes than the GHG inventory sectors.  The ERT encourages the Party to improve the transparency of its reporting by including in its next submission a description of the GHG emissions summary tables and figures illustrating the GHG emissions as reported in the summary tables.
2	Reporting requirement specified in paragraph 8  Issue type: completeness  Assessment: recommendation	In its NC8 France provided information on its national inventory system in accordance with the provisions of the Kyoto Protocol, without information on or a brief description or summary of the national inventory arrangements.  During the review, the Party indicated that the national inventory arrangements are similar to those in place for the national inventory system.  The ERT recommends that the Party improve the completeness of its reporting by providing in its next NC information on its national inventory arrangements in accordance with the reporting requirements.

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

Table I.2

#### Findings on policies and measures from the review of the eighth national communication of France

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 10  Issue type: transparency  Assessment: encouragement	The ERT noted that the Party provided textual descriptions for its PaMs by sector and estimated impacts were provided, but only for some of the PaMs. As a result, it is difficult for the ERT to assess whether the Party has given priority to PaMs that have the most significant impact on GHG emissions and removals.  During the review, France explained that the estimated impacts were provided only for the PaMs it considers to be most important.  The ERT encourages the Party to improve the transparency of its reporting by indicating how it has given priority to PaMs that have the most significant impact on emissions and/or removals in its next NC, for example by providing information on the estimated mitigation impact of all PaMs or by describing how the measures are significant to the broader policy framework.
2	Reporting requirement specified in paragraph 15  Issue type: transparency	The ERT noted that it was not easy to identify changes to PaMs that have been maintained over time since the previous submissions and no reference has been provided in the NC related to maintained PaMs.  During the review, France explained that the PaMs listed in the BR4 are still in place, with some changes in the amounts of financial aid or taxes.

No.	<i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
	Assessment: encouragement	The ERT encourages the Party to improve the transparency of its reporting by providing a brief description of PaMs maintained since the previous submission, focusing on any changes to the policy or measure or effects achieved.
3	Reporting requirement specified in paragraph 20 Issue type: transparency Assessment: recommendation	<p>The ERT noted that France did not provide an estimate of the mitigation impact of any of its PaMs in the PaMs chapter and included only a few estimates of the mitigation impact of some measures in the chapter on projections. In addition, these estimates differed in scope and value from those reported in the BR5.</p> <p>During the review, France explained that information reported in the projections chapter represents only the estimated impact of its main PaMs and highlighted the difficulty in assessing the impacts of all individual PaMs listed in the NC. In addition, France indicated that the estimated impacts reported will be checked and updated to ensure consistency between the different submissions in the future.</p> <p>The ERT reiterates its recommendation made in the previous review report that the Party improve the transparency of its reporting by providing estimated mitigation impacts of its PaMs in the next NC, as appropriate, or where that is not possible, explaining why it has not estimated these impacts. The ERT notes that the Party should also ensure consistency of reporting, as appropriate.</p>
4	Reporting requirement specified in paragraph 21 Issue type: completeness Assessment: encouragement	<p>The ERT noted that France did not provide information on the costs and non-GHG mitigation impacts of its PaMs in the NC8, or explain why it did not include this information.</p> <p>During the review, France explained that given the large number of measures listed, it does not currently have the ability to assess costs and non-GHG impacts of each policy and measure. However, France noted that a study of the macroeconomic and socioeconomic impacts is being conducted on all measures under the National Low-Carbon Strategy, including costs and non-GHG impacts, and this information will be included in the next NC.</p> <p>The ERT reiterates its encouragement to the Party in the previous review report to improve the completeness of its reporting by including information on costs and non-GHG mitigation impacts in the next NC.</p>
5	Reporting requirement specified in paragraph 22 Issue type: transparency Assessment: recommendation	<p>The ERT noted that France did not provide explicit information on how it believes its PaMs are modifying longer-term trends in GHG emissions and removals.</p> <p>During the review, the Party indicated that the information is included in the BR5.</p> <p>The ERT reiterates the recommendation made in the previous review report that France report in its next NC information on how it believes its PaMs are modifying longer-term trends in GHG emissions or include a cross reference to where this information could be found.</p>
6	Reporting requirement specified in paragraph 23 Issue type: transparency Assessment: encouragement	<p>The ERT noted that there is no information in the NC8 indicating which PaMs are no longer in place since the last NC.</p> <p>During the review, Party explained that all PaMs listed in its previous reports (NC7 and BR4) are still in place.</p> <p>The ERT encourages the Party to improve the transparency of its reporting by providing information that clearly indicates whether there are any PaMs which are no longer in place since the last NC, and whether any PaMs have been discontinued, explaining why this is the case.</p>

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

Table I.3

**Findings on projections including aggregate effects of policies and measures reported in the eighth national communication of France**

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 28 Issue type: transparency Assessment: recommendation	<p>The ERT noted that France provided actual inventory data up to 2019, based on the 2022 NIR, but not including 2020, instead using projections data for 2020 in its NC8. France explained in the NC8 that the projections were based on an earlier inventory (2021 NIR) and give projections from 2020.</p> <p>During the review, France explained that its projections scenarios are not always produced simultaneously and in a manner that aligns with the reporting guidelines. It also explained that it endeavours to ensure internal consistency between observations and projections.</p> <p>The ERT recommends that France improve the transparency of its reporting by including observation data for all years they are available.</p>
2	Reporting requirement specified in paragraph 29 Issue type: transparency Assessment: encouragement	<p>The ERT noted that France did not use the most recent inventory year as the starting point for the WEM and WAM scenarios in its NC8. As France provided the WEM scenario starting in 2019, and the WAM scenario starting in 2015, the ERT noted that this is not aligned with the most recent national GHG inventory submission of 2020. The ERT also noted that each scenario (AME2021, which represents the WEM scenario including all PaMs decided and implemented up to 31 December 2021, and AMS2018, which represents the WEM scenario including all PaMs decided and implemented between 1 July 2017 and 31 December 2019) has different underlying (baseline scenario) assumptions.</p> <p>During the review, France explained that owing to the delay between producing the WAM scenario and producing the NC8, the starting dates for the WAM and WEM scenarios may not align and that the underlying assumptions for each model are different. France further noted that given the complexity of modelling the WAM scenario and the resources involved in its production, more frequent modelling of this scenario would not be feasible.</p> <p>The ERT encourages France to improve the transparency of its reporting by using the most recent inventory year as the starting point for the WEM and WAM scenarios. The ERT notes that the Party should include consistent information on the underlying assumptions for each projections scenario in the next NC.</p>
3	Reporting requirement specified in paragraph 32 Issue type: completeness Assessment: encouragement	<p>The ERT noted that France did not report projections for indirect GHGs or for sulfur oxides in its NC8.</p> <p>During the review, France explained that its projections are based on GHGs, but that for other reporting purposes it also produces projections for air pollutants, which include several of the indirect GHGs and sulfur oxides, and provided links to this information.</p> <p>The ERT reiterates its encouragement in the previous review report for France to improve the completeness of its reporting by providing information on projections of indirect GHGs and sulfur oxides or including a reference to these projections in the next NC.</p>
4	Reporting requirement specified in paragraph 37 Issue type: transparency Assessment: recommendation	<p>France presented the total effect of its PaMs for the WEM and WAM scenarios in terms of GHG emissions avoided or sequestered. However, the observation data do not extend to the most recent year of the annual inventory submission, the 2022 NIR, but stops at 2019. Furthermore, information is presented for the WAM scenario but for 2050 the data in the CTF tables do not reflect the total effect of PaMs for the WAM scenario in 2050.</p> <p>During the review, France made a resubmission based on preliminary findings. While changes have been made, observations have not been extended to 2020 and the total effect of PaMs under the WAM scenario for 2050 in the CTF tables is inconsistent with the value reported in the text of the NC8.</p> <p>The ERT encourages the Party to improve the transparency of its reporting by presenting the effect of PaMs in the most recent inventory year and in subsequent years extending at least 15 years from the most recent inventory year. The ERT notes that in the case of France this would be 2050.</p>



No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
5	Reporting requirement specified in paragraph 43  Issue type: completeness  Assessment: encouragement	The ERT noted that France did not discuss the sensitivity of the projections to underlying assumptions quantitatively or qualitatively.  During the review, France explained that it did not produce a sensitivity analysis on GDP, population or energy prices since this would require considerable work, given their modelling architecture, while providing little value for policymaking.  The ERT encourages the Party to improve the completeness of its reporting by discussing the sensitivity of the projections qualitatively and, where possible, quantitatively.

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

Table I.4

#### Findings on financial, technological and capacity-building support from the review of the eighth national communication of France

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 52  Issue type: transparency  Assessment: recommendation	The ERT noted that France, in its NC8, reported information on the provision of financial support to non-Annex I Parties beyond the reporting periods for the respective reports, some starting in 2017 and others ending in 2022.  During the review, France acknowledged the issue of misalignment but the issue was not resolved in the resubmission. The ERT noted that France faces institutional challenges in reporting relevant information.  The ERT recommends that the Party improve the transparency of its reporting by including information on financial support for the previous two calendar or financial years without overlapping with the previous reporting periods.
2	Reporting requirement specified in paragraph 54  Issue type: completeness  Assessment: recommendation	In its NC8 France did not provide detailed information on the assistance it provided to developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting the costs of adaptation to those adverse effects.  During the review, France indicated that it does not account climate finance for adaptation. Rather, France informed the ERT that it finances adaptation for the least developed countries through AFD, noting that other developing countries are also particularly vulnerable to the adverse effects of climate change and need support in meeting the costs of adaptation. France confirmed its statement in its resubmission, allocating 21 per cent of its funding for adaptation for the least developed countries. It did not provide additional information on the support for other developing countries that are particularly vulnerable to the adverse effects of climate change in meeting the costs of adaptation.  The ERT recommends that the Party improve the completeness of its reporting by providing information on how it supports developing countries that are particularly vulnerable to the adverse effects of climate change in meeting the costs of adaptation.
3	Reporting requirement specified in paragraph 56  Issue type: completeness  Assessment: encouragement	The ERT noted that France did not specify in its NC8 the types of financial instruments it uses in the provision of its assistance for developing countries through multilateral channels. The ERT noted, however, that this information is provided in BR5 CTF table 7(b) for 2019 and 2020 for regional and bilateral financial support.  During the review, the Party was not able to provide further information in response to the question raised by the ERT on this matter. The ERT noted that France faces institutional challenges in reporting relevant information.  The ERT encourages the Party to improve the completeness of its reporting by providing information that specifies the type of instrument used in the provision of its support through multilateral channels by indicating the instrument type, such as a grant or concessional loan.
4	Reporting requirement specified in paragraph 58	The ERT noted that France provided in its NC8, in textual and tabular format, information on measures and activities related to technology transfer implemented since its previous NC and BR. However, it did not provide clear information on whether the projects/initiatives (technology transfer activities) are new compared with the previous

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
	Issue type: transparency	NC and BR. It also did not clearly explain whether the technology transfer activities reported are consistent with the relevant reporting period.
	Assessment: recommendation	Furthermore, the ERT noted that the information provided by France in its NC8 in relation to technology transfer issues is mainly related to technological cooperation rather than to the effective transfer, development and/or deployment of climate-related technologies for the benefit of recipient non-Annex I Parties. The ERT further noted that activities such as contributions to the Climate Technology Centre and Network, CITEPA collaboration and contribution to capacity-building and skills strengthening, support to women and climate networking, calls for tenders or academic or feasibility studies are not considered as technology transfer, development and deployment activities.  During the review, the Party was not able to provide further information in response to the question raised by the ERT on this matter. The ERT noted that France faces institutional challenges in reporting the relevant information.  The ERT recommends that France improve the transparency of its reporting by providing in its next NC information indicating that the technology transfer activities reported on since the previous NC and BR are new activities that have taken place during the reporting period, and in textual and tabular format, on measures and activities related to technology transfer planned and implemented since its previous NC and BR.
5	Reporting requirement specified in paragraph 59	The Party did not report on how it has provided capacity-building support that responds to the existing and emerging capacity-building needs identified by non-Annex I Parties in the areas of mitigation, adaptation and technology development and transfer.
	Issue type: completeness	During the review, the Party was not able to provide further information in response to the question raised by the ERT on this matter. The ERT noted that France faces institutional challenges in reporting the relevant information.
	Assessment: recommendation	The ERT recommends that France increase the completeness of its reporting by including in its next NC, to the extent possible, information on how the capacity-building support it has provided to non-Annex I Parties responds to the existing and emerging capacity-building needs identified by non-Annex I Parties.

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

Table I.5

**Findings on vulnerability assessment, climate change impacts and adaptation measures from the review of the eighth national communication of France**

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 47	The ERT noted that France reported the relevant information on vulnerability assessment, climate change impacts and adaptation measures, but did not adhere to the reporting structure outlined in the reporting guidelines.
	Issue type: transparency	During the review, France explained that owing to staff changes, those involved in the preparation of the NC8 were unaware that the reporting guidelines had been revised and therefore followed the structure used in the NC7.
	Assessment: encouragement	The ERT encourages France to improve the transparency of its reporting by presenting in its next NC information in a manner that follows the structure outlined in the reporting guidelines.

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

Table I.6

**Findings on research and systematic observation from the review of the eighth national communication of France**

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 65 Issue type: completeness Assessment: encouragement	The ERT noted that France did not identify opportunities for and barriers to free and open exchange of data and information and report on action taken to overcome such barriers. During the review, France explained that the information is still under the validation process and will be published before the end of 2023. The ERT encourages France to improve the completeness of its reporting by identifying opportunities for and barriers to free and open exchange of data and information and report on action taken to overcome such barriers in its next NC.
2	Reporting requirement specified in paragraph 66 Issue type: completeness Assessment: encouragement	The ERT noted that France did not provide information on highlights, innovations and significant efforts made on the climate process and climate system studies, including paleoclimatic studies; climate modelling and prediction, including global and regional climate models; research on the impacts of climate change; socioeconomic analysis, including analysis of the impacts of climate change and response options; and research on and development of mitigation and adaptation approaches, including technologies. During the review, France explained that the information is still under the validation process and will be published before the end of 2023. The ERT encourages France to increase the completeness of its reporting by including information on the above-mentioned issues in its next NC.

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

Table I.7

**Findings on education, training and public awareness from the review of the eighth national communication of France**

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 68 Issue type: completeness Assessment: encouragement	The ERT noted that France reported information describing public participation in the preparation of the domestic review of national policies with regard to mitigation and adaptation measures. However, the ERT noted that France did not report on public participation in the domestic review of the NC. During the review, France explained that this information was not provided owing to a change in the staff responsible for the preparation of the NC8. The ERT encourages France to improve the completeness of its reporting by including information on the extent of public participation in the domestic review of the NC.
2	Reporting requirement specified in paragraph 69 Issue type: completeness Assessment: encouragement	The ERT noted that France did not report in its NC8 information related to the monitoring, review and evaluation of the implementation of Article 6 of the Convention. During the review, France explained that this information was not provided owing to a change in the staff responsible for the preparation of the NC8. The ERT encourages France to improve the completeness of its reporting by including information on all elements of the information outlined in the reporting requirements in its next NC.

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

Table I.8

**Findings on minimization of adverse impacts and supplementary information related to the Kyoto Protocol reported in the eighth national communication of France**

No.	<i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation</i>
1	<p>Reporting requirement specified in paragraph 32</p> <p>Issue type: completeness</p> <p>Assessment: recommendation</p>	<p>The ERT noted that France provided information in its NC8 on how its national registry performs the functions defined in the annex to decision 13/CMP.1. However, the ERT noted that the Party did not provide the following information:</p> <ul style="list-style-type: none"> <li>(a) A description of the procedures employed in the national registry to minimize discrepancies in the issuance, transfer, acquisition, cancellation and retirement of ERUs, CERs, tCERs, ICERs, AAUs and/or RMUs, and replacement of tCERs and ICERs, and of the steps taken to terminate transactions where a discrepancy is notified and to correct problems in the event of a failure to terminate the transactions;</li> <li>(b) An overview of the security measures employed in the national registry to prevent unauthorized manipulations and to prevent operator error and of how these measures are kept up to date;</li> <li>(c) A list of the information publicly accessible by means of the user interface to the national registry;</li> <li>(d) A description of measures taken to safeguard, maintain and recover data in order to ensure the integrity of data storage and the recovery of registry services in the event of a disaster;</li> <li>(e) The results of any test procedures that might be available or developed with the aim of testing the performance, procedures and security measures of the national registry undertaken pursuant to the provisions of decision 19/CP.7 relating to the technical standards for data exchange between registry systems.</li> </ul> <p>During the review, the Party provided information on the functions that had not been reported in the NC8 on the national registry performance.</p> <p>The ERT recommends that France improve the completeness of its reporting by including all elements regarding the performance of national registry functions as defined in the annex to decision 13/CMP.1.</p> <p>The ERT concludes that this potential problem of a mandatory nature does not influence the Party's ability to fulfil its commitments for the second commitment period of the Kyoto Protocol.</p>
2	<p>Reporting requirement specified in paragraph 34</p> <p>Issue type: transparency</p> <p>Assessment: recommendation</p>	<p>The ERT noted that France did not provide information on how it specifically addresses PaMs implemented and/or further elaborated as well as cooperation with other such Parties in achieving its quantified emission limitation and reduction commitment under Article 3 of the Kyoto Protocol, in order to promote sustainable development. Nevertheless, the ERT noted that the Party provided in its NC8 (chap. 4, section A.3) information on the government report on the public and private financial resources used to finance the ecological and energy transition and their suitability, including in relation to the 2030 Agenda for Sustainable Development.</p> <p>During the review, the Party indicated that it provided in its report all available information regarding the national PaMs.</p> <p>The ERT recommends that France improve the transparency of its reporting by providing a reference in its report to the national activities that address PaMs implemented and/or further elaborated as well as cooperation with other Parties to achieve its commitment, at the same time promoting sustainable development.</p> <p>The ERT concludes that this potential problem of a mandatory nature does not influence the Party's ability to fulfil its commitments for the second commitment period of the Kyoto Protocol.</p>
3	<p>Reporting requirement specified in paragraph 38</p> <p>Issue type: completeness</p> <p>Assessment: recommendation</p>	<p>The ERT noted that the Party provided information on its PaMs but did not provide a description of any national legislative arrangements and administrative procedures that seek to ensure that the implementation of activities under Article 3, paragraph 3, and any elected activities under Article 3, paragraph 4, of the Kyoto Protocol also contribute to the conservation of biodiversity and sustainable use of natural resources.</p> <p>During the review, the Party provided detailed information on its national legislative arrangements and administrative procedures in place that seek to ensure that the implementation of activities under Article 3, paragraph 3, of the Kyoto Protocol also</p>

No.	<i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation</i>
		<p>contributes to the conservation of biodiversity and the sustainable use of natural resources.</p> <p>The ERT recommends that France improve the completeness of its reporting by including the information related to its national legislative arrangements and administrative procedures in place that seek to ensure that the implementation of activities under Article 3, paragraph 3, and any elected activities under Article 3, paragraph 4, of the Kyoto Protocol also contributes to the conservation of biodiversity and the sustainable use of natural resources.</p> <p>The ERT concludes that this potential problem of a mandatory nature does not influence the Party's ability to fulfil its commitments for the second commitment period of the Kyoto Protocol.</p>

*Note:* Item listed under reporting requirement refers to the relevant paragraph of the reporting guidelines for supplementary information. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the reporting guidelines for supplementary information.

## Annex II

### Assessment of adherence to the reporting guidelines for the fifth biennial report of France

The BR5 of France is the final BR under the MRV system established under the Convention.<sup>1</sup> Nevertheless, ERTs continue to provide recommendations and encouragements to the Parties on completeness, transparency and adherence to the UNFCCC reporting guidelines on BRs. Parties may find these recommendations and encouragements relevant, as appropriate, when preparing their initial biennial transparency report under the enhanced transparency framework of the Paris Agreement. Tables II.1–II.4 summarize the ERT assessment of adherence to the UNFCCC reporting guidelines on BRs for France's BR5.

Table II.1

#### Findings on the quantified economy-wide emission reduction target from the review of the fifth biennial report of France

No.	Reporting requirement and issue type	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 5 Issue type: transparency Assessment: recommendation	The ERT noted that France provided information describing its quantified economy-wide emission reduction target. Nevertheless, the ERT noted inconsistencies between the descriptions in the main text of the BR5 and the descriptions provided in the CTF tables with respect to the gases and sectors covered by the target, along with misleading use of notation keys in the case of the market-based mechanisms and erroneous information on the target period covered.  During the review, the Party acknowledged the inconsistencies of its reporting and indicated that it will amend the errors in its resubmission.  The ERT recommends that France increase the transparency of its reporting by including correct and consistent information when describing its quantified economy-wide emission reduction targets.

*Note:* Item 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 and transparent, and thus adheres to the UNFCCC reporting guidelines on BRs.

Table II.2

#### Findings on mitigation actions and their effects from the review of the fifth biennial report of France

No.	Reporting requirement and issue type	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 8 Issue type: completeness Assessment: encouragement	The ERT noted that the Party did not provide information on the assessment of the economic and social consequences of response measures. However, France reported information on minimizing adverse effects on developing countries in accordance with the Kyoto Protocol provisions.  During the review, the Party indicated that a study of the macroeconomic and socioeconomic impacts is being conducted on all the measures of the National Low-Carbon Strategy.  The ERT encourages the Party to improve the completeness of its reporting, as appropriate, by reporting information, to the extent possible, on the assessment of the economic and social consequence of response measures.
2	Reporting requirement specified in CTF table 3	The ERT noted that a quantitative estimate of the impacts of several individual PaMs was not reported in CTF table 3. France also did not include information in the objectives column of the table. No explanation was provided as to why the estimate of GHG emission reductions was not provided in CTF table 3, or why it the objectives column

<sup>1</sup> The Conference of the Parties, by decision 1/CP.24, decided that the final BRs shall be those submitted to the secretariat no later than 31 December 2022 and reaffirmed that, for Parties to the Paris Agreement, following the submission of the final BR, the modalities, procedures and guidelines contained in the annex to decision 18/CMA.1 will supersede the MRV system established under decision 1/CP.16, paras. 40–47 and 60–64, and decision 2/CP.17, paras. 12–62.

<i>No.</i>	<i>Reporting requirement and issue type</i>	<i>Description of the finding with recommendation or encouragement</i>
	Issue type: transparency Assessment: recommendation	<p>was omitted. The ERT noted that the Party presented several policies as main policies in their respective sectors, but their impact was not included in the BR5. For example, the Party did not estimate the impact of any PaMs across the IPPU, agriculture, LULUCF or waste sectors.</p> <p>During the review, France explained that it estimated the impact of only the main PaMs and highlighted the difficulty with assessing impacts of all individual PaMs.</p> <p>The ERT recommends that the Party increase the transparency of its reporting by providing all necessary information related to CTF table 3, including the estimated impact and objectives of its PaMs or, in cases where that is not possible, providing an explanation outlining why this could not be done. The ERT also notes that the notation key “NE” can be used to improve transparency in cases where estimates are not provided.</p>

*Note:* Item listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs or to the CTF table number from the UNFCCC reporting guidelines on CTF tables. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on BRs.

Table II.3

**Findings on projections reported in the fifth biennial report of France**

<i>No.</i>	<i>Reporting requirement and issue type</i>	<i>Description of the finding with recommendation or encouragement</i>
1	Reporting requirement specified in paragraph 29 Issue type: transparency Assessment: encouragement	<p>The ERT noted that France did not use the most recent inventory year as the starting point for the WEM and WAM scenarios in its BR5. As France provided the WEM scenario starting in 2019, and the WAM scenario starting in 2015, the ERT notes that this is not aligned with the most recent national GHG inventory submission of 2020. The ERT also noted that each scenario (AME2021, which represents the WEM scenario including all PaMs decided and implemented up to 31 December 2021, and AMS2018, which represents the WEM scenario including all PaMs decided and implemented between 1 July 2017 and 31 December 2019) has different underlying (baseline scenario) assumptions.</p> <p>During the review, France explained that owing to the delay between producing the WAM scenario and producing the BR5, the starting dates for the WAM and WEM scenarios may not align and that the underlying assumptions for each model are different. France further noted that given the complexity of modelling the WAM scenario and the resources involved in its production, more frequent modelling of this scenario would not be feasible.</p> <p>The ERT encourages the Party to improve the transparency of its reporting by using the most recent inventory year as the starting point for the WEM and WAM scenarios.</p>
2	Reporting requirement specified in paragraph 32 Issue type: completeness Assessment: encouragement	<p>The ERT noted that France did not report projections for indirect GHGs or for sulfur oxides in its BR5.</p> <p>During the review, France explained that its projections are based on GHGs, but that for other reporting purposes it also produces projections for air pollutants, which include several of the indirect GHGs and sulfur oxides, and provided links to this information.</p> <p>The ERT encourages France to increase the completeness of its reporting by providing information on its projections for indirect GHGs or for sulfur oxides, or providing a reference to other documents where such projections could be found.</p>
3	Reporting requirement specified in paragraph 34 Issue type: transparency Assessment: encouragement	<p>The ERT noted that France provided actual inventory data up to 2019, based on the NIR 2022, but not including 2020, instead using projections data for 2020 in its BR5. France explained in the BR5 that the projections were based on an earlier inventory (2021 NIR) and give projections from 2020.</p> <p>During the review, France explained that its projections scenarios are not always produced simultaneously and in a manner that aligns with the reporting guidelines. France also explained that it endeavours to ensure internal consistency between observations and projections.</p> <p>The ERT encourages France to improve the transparency of its reporting by reporting observation data for all years they are available.</p>
4	Reporting requirement specified in paragraph 37	<p>France presented the total effect of its PaMs for the WEM and WAM scenarios in terms of GHG emissions avoided or sequestered. However, the observation data do not extend to the most recent year of the annual inventory submission, the 2022 NIR, but stops at 2019. Furthermore, information is presented for the WAM scenario but for 2050 the data in the</p>

No.	Reporting requirement and issue type	Description of the finding with recommendation or encouragement
	Issue type: transparency	tables in chapter 4 of the BR5 do not reflect the total effect of PaMs for the WAM scenario in 2050.
	Assessment: encouragement	<p>During the review, France made a resubmission based on preliminary findings. While changes have been made, observations have not been extended to 2020 and the total effect of PaMs under the WAM scenario for 2050 reported in the tables is inconsistent with the value reported in the text of the BR5.</p> <p>The ERT encourages the Party to improve the transparency of its reporting by providing information on historical emissions that is consistent with the recent annual inventory submission and by providing information on the WAM 2050 scenario that is consistent with the reporting on the total effect of PaMs.</p>
5	Reporting requirement specified in paragraph 43	France reported that no sensitivity analysis was carried out on the underlying assumptions, noting that such an analysis was carried out for the BR4 and the results would be similar. However, further discussion of the sensitivity of the projections to the underlying assumptions in a qualitative or quantitative manner warrants inclusion in the NC8.
	Issue type: completeness	During the review, France explained that it did not produce a sensitivity analysis on GDP, population or energy prices since this would require considerable work, given their modelling architecture, while providing little value for policymaking.
	Assessment: encouragement	The ERT encourages the Party to improve the completeness of its reporting by reporting a sensitivity analysis on underlying assumptions.
6	Reporting requirement specified in paragraph 44	<p>The ERT noted that France reported information on underlying assumptions and values of variables such as GDP growth and population growth in its BR5. However, France did not provide the historical data that were used to develop the GHG projections reported.</p> <p>During the review, France updated the projections values in CTF table 5.</p>
	Issue type: completeness	The ERT encourages France to report the historical data that were used to develop the GHG projections in CTF table 5 to improve the completeness of its reporting.
	Assessment: encouragement	

*Note:* Item listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on NCs, as per para. 11 of the UNFCCC reporting guidelines on BRs. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on NCs and on BRs.

Table II.4

**Findings on provision of financial, technological and capacity-building support to developing country Parties from the review of the fifth biennial report of France**

No.	Reporting requirement and issue type	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 20  Issue type: completeness  Assessment: encouragement	<p>The ERT noted that France, in its BR5, did not specify the types of financial instruments it uses in the provision of its assistance for developing countries through multilateral channels. The ERT noted, however, that this information is provided in BR5 CTF table 7(b) for 2019 and 2020 for regional and bilateral financial support.</p> <p>During the review, the Party was not able to provide further information in response to the question raised by the ERT on this matter.</p> <p>The ERT encourages the Party to improve the completeness of its reporting by providing information that specifies the type of instrument used in the provision of its support through multilateral channels by indicating the instrument type, such as a grant or concessional loan.</p>
2	Reporting requirement specified in paragraph 22  Issue type: transparency  Assessment: recommendation	<p>The ERT noted that France provided in its BR5, in textual and tabular format, information on measures and activities related to technology transfer implemented since its previous NC and BR. However, it did not provide clear information on whether the projects/initiatives (technology transfer activities) are new compared with the previous NC and BR. It also did not clearly indicate whether the technology transfer activities reported are consistent with the relevant reporting period.</p> <p>During the review, the Party was not able to provide further information in response to the question raised by the ERT on this matter. The ERT noted that France faces institutional challenges in reporting the relevant information.</p>



No.	<i>Reporting requirement and issue type</i>	<i>Description of the finding with recommendation or encouragement</i>
		The ERT recommends that France improve the transparency of its reporting by providing information indicating that the technology transfer activities reported on since the previous NC and BR are new activities which have taken place during the reporting period.

*Note:* Item 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 and transparent, and thus adheres to the UNFCCC reporting guidelines on BRs.

## Annex III

### Documents and information used during the review

#### A. Reference documents

2022 GHG inventory submission of France.

Available at <https://unfccc.int/ghg-inventories-annex-i-parties/2022>.

BR4 of France. Available at <https://unfccc.int/BR4>.

BR5 CTF tables of France. Available at <https://unfccc.int/BR5>.

BR5 of France. Available at <https://unfccc.int/BR5>.

BR5 of the EU. Available at <https://unfccc.int/BR5>.

“Common tabular format for ‘UNFCCC biennial reporting guidelines for developed country Parties’”. Annex to decision 19/CP.18. Available at <https://unfccc.int/resource/docs/2012/cop18/eng/08a03.pdf>.

“Compilation of economy-wide emission reduction targets to be implemented by Parties included in Annex I to the Convention”. FCCC/SBSTA/2014/INF.6. Available at <http://unfccc.int/resource/docs/2014/sbsta/eng/inf06.pdf>.

European Green Deal. European Commission document COM(2019) 640 final. Available at [https://ec.europa.eu/info/files/communication-european-green-deal\\_en](https://ec.europa.eu/info/files/communication-european-green-deal_en).

“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/2019/13/Add.1. Available at <https://unfccc.int/documents/210471>.

“Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol”. Annex to 15/CMP.1. Available at <https://unfccc.int/documents/4253>.

“Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol”. Annex III to decision 3/CMP.11. Available at <https://unfccc.int/documents/9101>.

“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>.

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Report on the individual review of the annual submission of France submitted in 2018. FCCC/ARR/2018/FRA. Available at <https://unfccc.int/documents/181486>.

Report on the technical review of the BR4 of France. FCCC/TRR.4/FRA. Available at <https://unfccc.int/documents/231920>.

Report on the technical review of the NC8 and the technical review of the BR5 of the EU. FCCC/IDR.8/EU–FCCC/TRR.5/EU. Available at <https://unfccc.int/documents/630393>.

“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 Gwenaél Podesta (Ministry of Ecological Transition).

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