



United Nations

FCCC/ETF/SRR/2025/FRA



Framework Convention on
Climate Change

Distr.: General
5 August 2025

English only

Report on the simplified review of the national inventory report of France submitted in 2025

Summary

This report presents the results of the simplified review of the 2025 national inventory report of France, conducted by the secretariat in accordance with the modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement.



Abbreviations and acronyms

C ₂ F ₆	hexafluoroethane
C ₃ F ₈	octafluoropropane
C ₄ F ₁₀	perfluorobutane
C ₅ F ₁₂	perfluoropentane
C ₆ F ₁₄	perfluorohexane
C ₁₀ F ₁₈	perfluorodecalin
c-C ₃ F ₆	perfluorocyclopropane
c-C ₄ F ₈	perfluorocyclobutane
CF ₄	tetrafluoromethane
CH ₄	methane
CO ₂	carbon dioxide
CO ₂ eq	carbon dioxide equivalent
CRT	common reporting table
GHG	greenhouse gas
HFC	hydrofluorocarbon
HWP	harvested wood products
IE	included elsewhere
IEF	implied emission factor
LULUCF	land use, land-use change and forestry
MPGs	modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement
N ₂ O	nitrous oxide
NA	not applicable
NE	not estimated
NF ₃	nitrogen trifluoride
NIR	national inventory report
NO	not occurring
PFC	perfluorocarbon

I. Introduction

1. This report covers the simplified review of the NIR of France submitted in 2025. The review was conducted by the secretariat in accordance with the MPGs,¹ particularly chapter VII thereof, and the simplified review procedures.²
2. On 21 May 2025 a draft version of this report was transmitted to the Government of France, which provided comments on individual findings on 23 July 2025 that were addressed by the secretariat and incorporated, as appropriate, in this final version of the report.³ France did not provide any general comments on the report.
3. The secretariat conducted the simplified review of France's NIR, which involved an initial assessment of completeness and consistency with the MPGs.⁴
4. The findings of the initial assessment, presented in the annex, are the result of automated checks and do not necessarily indicate issues of completeness or consistency of the Party's reporting with the MPGs.
5. This report, including the findings listed in the annex and any comments provided by the Party (see para. 2 above), will be made available to and considered by the technical expert review team as part of the subsequent technical expert review of France's NIR.⁵

II. Initial assessment of completeness and consistency with the modalities, procedures and guidelines

A. Summary of findings

6. The table below provides a summary of the findings of the initial assessment by the secretariat. Tables I.1–I.7 list the findings and include detailed information on each one.

Summary of the initial assessment

Area of review	Description	Assessment
Dates of submission	2025 submission: CRTs, 15 April 2025 2024 submission: CRTs, 26 December 2024	
Recalculations	Recalculations that have changed estimated total GHG emissions or removals (excluding LULUCF) by more than 2 per cent for categories or subcategories above the threshold of significance (188.20 kt CO₂ eq for 2023) ^a Recalculations for 1990 (the reference year for the Party's nationally determined contribution) and 2022 since the previous submission	See table I.1
Completeness	Detection of notation key "NE", or of missing gases or sectors in CRT 10 emission trends summary	See table I.2
Notation keys	Changes in notation keys reported for 1990 and 2022 since the previous submission	See table I.3
Sectoral and reference approaches	Differences in estimated energy consumption or CO ₂ emissions, by fuel type, of more than 5 per cent between the reference and sectoral approaches for the latest reported year (2023)	See table I.4
Time-series consistency	The time series of emissions is assessed by calculating inter-annual changes for each category and gas and converting them to CO ₂ eq. Inter-annual changes exceeding the significance	See table I.5

¹ Decision 18/CMA.1, annex.

² Contained in paras. 15–19 of the conclusions and recommendations from the 2023 joint meeting of lead reviewers, available at <https://unfccc.int/documents/627213>.

³ As per para. 163 of the MPGs.

⁴ As per para. 155 of the MPGs.

⁵ As per para. 155 of the MPGs.

<i>Area of review</i>	<i>Description</i>	<i>Assessment</i>
	threshold are evaluated using the z-score method, ^b where outliers are identified as values exceeding a z-score of 3, based on the statistical distribution of the full time series	
IEFs	Comparison of IEFs reported for any significant subcategories under key categories with the range of IEFs reported by developed country Parties for the latest inventory year (2023) in their 2025 submission ^c	See table I.6
Key categories	New key categories identified since the previous submission for level (latest year) and trend	See table I.7
Previous areas of improvement	Status of implementation of previous areas of improvement identified in the latest report on the technical expert review of the Party's biennial transparency report	NA ^d

^a Threshold calculated by the secretariat as 0.05 per cent of the national total GHG emissions for 2023, excluding LULUCF, or 500 kt CO₂ eq, whichever is lower (see para. 32 of the MPGs).

^b Statistical measure that indicates how many standard deviations a data point is from the mean.

^c Range defined by the median plus or minus two times the standard deviation, calculated from all available data points per category.

^d As at the time of publication of this report, information on status of implementation of previous areas of improvement was not yet available.

B. Comments of the Party on the initial assessment

7. The Party did not provide any general comments.

Annex

Findings of the initial assessment of France's 2025 national inventory report

Tables I.1–I.7 detail the findings of the initial assessment by the secretariat of the Party's NIR.

Table I.1
Findings on recalculations

ID#	Category	CRT	Gas	Inventory year	Estimate in latest submission (2025)	Estimate in previous submission (2024)	Difference Unit	Difference (%)	Difference (kt CO ₂ eq)
I.1.1.	1.A.3.d. Domestic navigation	Table1	CO ₂	1990	2 276.27	1 021.75	1 254.52 kt	122.8	1 254.52
I.1.2.	1.D.1.b. Navigation	Table1	CO ₂	1990	6 762.93	8 018.18	–1 255.25 kt	–15.7	–1 255.25
I.1.3.	1.A.1.a. Public electricity and heat production	Table1	CO ₂	2022	33 277.40	32 377.11	900.29 kt	2.8	900.29
I.1.4.	1.A.2.c. Chemicals	Table1	CO ₂	2022	8 148.39	8 543.84	–395.45 kt	–4.6	–395.45
I.1.5.	1.A.2.e. Food processing, beverages and tobacco	Table1	CO ₂	2022	7 427.86	7 182.12	245.73 kt	3.4	245.73
I.1.6.	1.A.2.f. Non-metallic minerals	Table1	CO ₂	2022	8 844.72	9 428.75	–584.02 kt	–6.2	–584.02
I.1.7.	1.A.2.g. Other	Table1	CO ₂	2022	7 290.04	7 683.10	–393.06 kt	–5.1	–393.06
I.1.8.	1.A.3.d. Domestic navigation	Table1	CO ₂	2022	1 618.37	1 254.71	363.66 kt	29.0	363.66
I.1.9.	1.A.4.a. Commercial/institutional	Table1	CO ₂	2022	19 592.49	17 301.04	2 291.45 kt	13.2	2 291.45
I.1.10.	1.A.4.b. Residential	Table1	CH ₄	2022	71.27	52.90	18.38 kt	34.7	514.60
I.1.11.	1.A.4.c. Agriculture/forestry/fishing	Table1	CO ₂	2022	10 379.33	10 768.17	–388.84 kt	–3.6	–388.84
I.1.12.	1.D.1.a. Aviation	Table1	CO ₂	2022	14 270.50	13 956.57	313.93 kt	2.2	313.93
I.1.13.	1.D.3. CO ₂ emissions from biomass	Table1	CO ₂	2022	65 242.29	63 649.27	1 593.01 kt	2.5	1 593.01
I.1.14.	3.A.1.a. Dairy cattle	Table3	CH ₄	1990	646.21	526.15	120.06 kt	22.8	3 361.72
I.1.15.	3.B.1.a. Dairy cattle	Table3	CH ₄	1990	82.96	62.21	20.75 kt	33.4	580.95
I.1.16.	3.D.2. Indirect N ₂ O emissions from managed soils	Table3	N ₂ O	1990	20.03	18.93	1.10 kt	5.8	292.52
I.1.17.	3.A.1.a. Dairy cattle	Table3	CH ₄	2022	484.42	410.54	73.88 kt	18.0	2 068.63
I.1.18.	3.B.1.a. Dairy cattle	Table3	CH ₄	2022	79.12	52.20	26.92 kt	51.6	753.70
I.1.19.	3.D.2. Indirect N ₂ O emissions from managed soils	Table3	N ₂ O	2022	15.86	15.12	0.75 kt	4.9	197.82
I.1.20.	4.A.1. Forest land remaining forest land	Table4	Net CO ₂ emissions/removals	1990	–24 718.02	–17 769.32	–6 948.70 kt CO ₂ eq	–39.1	–6 948.70
I.1.21.	4.A.2. Land converted to forest land	Table4	Net CO ₂ emissions/removals	1990	–20 815.40	–23 220.68	2 405.28 kt CO ₂ eq	10.4	2 405.28
I.1.22.	4.B.1. Cropland remaining cropland	Table4	Net CO ₂ emissions/removals	1990	1 537.91	1 190.79	347.12 kt CO ₂ eq	29.2	347.12

<i>ID#</i>	<i>Category</i>	<i>CRT</i>	<i>Gas</i>	<i>Inventory year</i>	<i>Estimate in latest submission (2025)</i>	<i>Estimate in previous submission (2024)</i>	<i>Difference</i>	<i>Unit</i>	<i>Difference (%)</i>	<i>Difference (kt CO₂ eq)</i>
I.1.23.	4.B.2. Land converted to cropland	Table4	Net CO ₂ emissions/removals	1990	25 858.36	23 306.07	2 552.29	kt CO ₂ eq	11.0	2 552.29
I.1.24.	4.C.1. Grassland remaining grassland	Table4	Net CO ₂ emissions/removals	1990	−1 072.31	−878.85	−193.46	kt CO ₂ eq	−22.0	−193.46
I.1.25.	4.C.2. Land converted to grassland	Table4	Net CO ₂ emissions/removals	1990	−4 905.26	−4 151.60	−753.67	kt CO ₂ eq	−18.2	−753.67
I.1.26.	4.D.2. Land converted to wetlands	Table4	Net CO ₂ emissions/removals	1990	201.21	516.09	−314.88	kt CO ₂ eq	−61.0	−314.88
I.1.27.	4.E.2. Land converted to settlements	Table4	Net CO ₂ emissions/removals	1990	3 893.57	5 281.11	−1 387.54	kt CO ₂ eq	−26.3	−1 387.54
I.1.28.	4.A.1. Forest land remaining forest land	Table4	Net CO ₂ emissions/removals	2022	−31 656.96	−23 022.38	−8 634.57	kt CO ₂ eq	−37.5	−8 634.57
I.1.29.	4.A.2. Land converted to forest land	Table4	Net CO ₂ emissions/removals	2022	−14 920.61	−11 852.80	−3 067.80	kt CO ₂ eq	−25.9	−3 067.80
I.1.30.	4.B.1. Cropland remaining cropland	Table4	Net CO ₂ emissions/removals	2022	618.44	−65.98	684.42	kt CO ₂ eq	1 037.3	684.42
I.1.31.	4.B.2. Land converted to cropland	Table4	Net CO ₂ emissions/removals	2022	11 063.63	9 378.21	1 685.43	kt CO ₂ eq	18.0	1 685.43
I.1.32.	4.C.1. Grassland remaining grassland	Table4	Net CO ₂ emissions/removals	2022	−739.91	−1 144.35	404.43	kt CO ₂ eq	35.3	404.43
I.1.33.	4.C.2. Land converted to grassland	Table4	Net CO ₂ emissions/removals	2022	−3 884.19	447.24	−4 331.43	kt CO ₂ eq	−968.5	−4 331.43
I.1.34.	4.D.2. Land converted to wetlands	Table4	Net CO ₂ emissions/removals	2022	531.00	1 248.83	−717.83	kt CO ₂ eq	−57.5	−717.83
I.1.35.	4.E.2. Land converted to settlements	Table4	Net CO ₂ emissions/removals	2022	3 980.87	5 119.78	−1 138.91	kt CO ₂ eq	−22.2	−1 138.91
I.1.36.	5.D.1. Domestic wastewater	Table5	N ₂ O	1990	8.04	3.31	4.73	kt	142.7	1 252.71
I.1.37.	5.D.1. Domestic wastewater	Table5	N ₂ O	2022	7.48	2.06	5.42	kt	262.8	1 435.66
I.1.38.	5.D.2. Industrial wastewater	Table5	N ₂ O	2022	1.66	0.10	1.56	kt	1 640.2	413.78

Table I.2
Findings on completeness

ID#	Sector, category or gas	CRT	Gas	Inventory year	Notation key Finding type
I.2.1.	1.B.1.b. Fuel transformation	Table1	N ₂ O	1990	NE Reporting of “NE” detected
I.2.2.	1.D.2. Multilateral operations	Table1	CH ₄	1990	NE Reporting of “NE” detected
I.2.3.	1.D.2. Multilateral operations	Table1	N ₂ O	1990	NE Reporting of “NE” detected
I.2.4.	1.B.1.b. Fuel transformation	Table1	N ₂ O	2023	NE Reporting of “NE” detected
I.2.5.	1.D.2. Multilateral operations	Table1	CH ₄	2023	NE Reporting of “NE” detected
I.2.6.	1.D.2. Multilateral operations	Table1	N ₂ O	2023	NE Reporting of “NE” detected
I.2.7.	2.D.3. Other	Table2(I)	CH ₄	1990	NA, NE, NO Reporting of “NE” detected
I.2.8.	2.D.3. Other	Table2(I)	N ₂ O	1990	NA, NE, NO Reporting of “NE” detected
I.2.9.	2.D.3. Other	Table2(I)	CH ₄	2023	NA, NE, NO Reporting of “NE” detected
I.2.10.	2.D.3. Other	Table2(I)	N ₂ O	2023	NA, NE, NO Reporting of “NE” detected
I.2.11.	5.F.1. Long-term storage of carbon in waste disposal sites	Table5	CO ₂	1990	NE Reporting of “NE” detected
I.2.12.	5.F.1. Long-term storage of carbon in waste disposal sites	Table5	Total GHG emissions	1990	NE Reporting of “NE” detected
I.2.13.	5.F.2. Annual change in total long-term carbon storage	Table5	CO ₂	1990	NE Reporting of “NE” detected
I.2.14.	5.F.2. Annual change in total long-term carbon storage	Table5	Total GHG emissions	1990	NE Reporting of “NE” detected
I.2.15.	5.F.3. Annual change in total long-term carbon storage in HWP waste	Table5	CO ₂	1990	NE Reporting of “NE” detected
I.2.16.	5.F.3. Annual change in total long-term carbon storage in HWP waste	Table5	Total GHG emissions	1990	NE Reporting of “NE” detected
I.2.17.	Unspecified mix of HFCs and PFCs	Table10s6	–	1990	NO Gas or sector not reported
I.2.18.	Unspecified mix of HFCs and PFCs	Table10s6	–	2023	NO Gas or sector not reported

Table I.3
Changes in notation keys reported since the previous submission

ID#	Category	CRT	Gas	Inventory year	Notation key reported in latest submission (2025)	Notation key reported in previous submission (2024)
I.3.1.	2.B.10. Other	Table2(I)	HFCs	1990	–	NA
I.3.2.	2.B.10. Other	Table2(I)	PFCs	1990	–	NA
I.3.3.	2.B.10. Other	Table2(I)	SF ₆	1990	–	NA
I.3.4.	2.B.10. Other	Table2(I)	NF ₃	1990	–	NA

ID#	Category	CRT	Gas	Inventory year	Notation key reported in latest	Notation key reported in previous
					submission (2025)	submission (2024)
I.3.5.	2.C.7. Other	Table2(I)	HFCs	1990	–	NA
I.3.6.	2.C.7. Other	Table2(I)	PFCs	1990	–	NA
I.3.7.	2.C.7. Other	Table2(I)	Unspecified mix of HFCs and PFCs	1990	–	NA
I.3.8.	2.C.7. Other	Table2(I)	NF ₃	1990	–	NO
I.3.9.	2.D.3. Other	Table2(I)	CH ₄	1990	NA, NE, NO	NO
I.3.10.	2.D.3. Other	Table2(I)	N ₂ O	1990	NA, NE, NO	NO
I.3.11.	2.E.1. Integrated circuit or semiconductor	Table2(I)	Unspecified mix of HFCs and PFCs	1990	–	NO
I.3.12.	2.E.5. Other	Table2(I)	N ₂ O	1990	–	NO
I.3.13.	2.B.10. Other	Table2(I)	HFCs	2022	–	NA
I.3.14.	2.B.10. Other	Table2(I)	PFCs	2022	–	NA
I.3.15.	2.B.10. Other	Table2(I)	SF ₆	2022	–	NA
I.3.16.	2.B.10. Other	Table2(I)	NF ₃	2022	–	NA
I.3.17.	2.C.7. Other	Table2(I)	HFCs	2022	–	NA
I.3.18.	2.C.7. Other	Table2(I)	PFCs	2022	–	NA
I.3.19.	2.C.7. Other	Table2(I)	Unspecified mix of HFCs and PFCs	2022	–	NA
I.3.20.	2.C.7. Other	Table2(I)	NF ₃	2022	–	NO
I.3.21.	2.D.3. Other	Table2(I)	CH ₄	2022	NA, NE, NO	NO
I.3.22.	2.D.3. Other	Table2(I)	N ₂ O	2022	NA, NE, NO	NO
I.3.23.	2.E.1. Integrated circuit or semiconductor	Table2(I)	Unspecified mix of HFCs and PFCs	2022	–	NO
I.3.24.	2.E.5. Other	Table2(I)	N ₂ O	2022	–	NO
I.3.25.	2.B.9. Fluorochemical production	Table2(II)	HFC-134a	1990	NO	IE, NO
I.3.26.	2.B.9.b. Fugitive emissions	Table2(II)	HFC-134a	1990	NO	IE, NO
I.3.27.	2.B.10. Other	Table2(II)	HFC-23	1990	–	NA
I.3.28.	2.B.10. Other	Table2(II)	HFC-32	1990	–	NA
I.3.29.	2.B.10. Other	Table2(II)	HFC-41	1990	–	NA
I.3.30.	2.B.10. Other	Table2(II)	HFC-43-10mee	1990	–	NA
I.3.31.	2.B.10. Other	Table2(II)	HFC-125	1990	–	NA
I.3.32.	2.B.10. Other	Table2(II)	HFC-134	1990	–	NA
I.3.33.	2.B.10. Other	Table2(II)	HFC-134a	1990	–	NA
I.3.34.	2.B.10. Other	Table2(II)	HFC-143	1990	–	NA
I.3.35.	2.B.10. Other	Table2(II)	HFC-143a	1990	–	NA
I.3.36.	2.B.10. Other	Table2(II)	HFC-152	1990	–	NA
I.3.37.	2.B.10. Other	Table2(II)	HFC-152a	1990	–	NA
I.3.38.	2.B.10. Other	Table2(II)	HFC-161	1990	–	NA
I.3.39.	2.B.10. Other	Table2(II)	HFC-227ea	1990	–	NA
I.3.40.	2.B.10. Other	Table2(II)	HFC-236cb	1990	–	NA

ID#	Category	CRT	Gas	Inventory year	Notation key	Notation key
					reported in latest submission (2025)	reported in previous submission (2024)
I.3.41.	2.B.10. Other	Table2(II)	HFC-236ea	1990	–	NA
I.3.42.	2.B.10. Other	Table2(II)	HFC-236fa	1990	–	NA
I.3.43.	2.B.10. Other	Table2(II)	HFC-245ca	1990	–	NA
I.3.44.	2.B.10. Other	Table2(II)	HFC-245fa	1990	–	NA
I.3.45.	2.B.10. Other	Table2(II)	HFC-365mfc	1990	–	NA
I.3.46.	2.B.10. Other	Table2(II)	CF ₄	1990	–	NA
I.3.47.	2.B.10. Other	Table2(II)	C ₂ F ₆	1990	–	NA
I.3.48.	2.B.10. Other	Table2(II)	C ₃ F ₈	1990	–	NA
I.3.49.	2.B.10. Other	Table2(II)	C ₄ F ₁₀	1990	–	NA
I.3.50.	2.B.10. Other	Table2(II)	c-C ₄ F ₈	1990	–	NA
I.3.51.	2.B.10. Other	Table2(II)	C ₅ F ₁₂	1990	–	NA
I.3.52.	2.B.10. Other	Table2(II)	C ₆ F ₁₄	1990	–	NA
I.3.53.	2.B.10. Other	Table2(II)	C ₁₀ F ₁₈	1990	–	NA
I.3.54.	2.B.10. Other	Table2(II)	c-C ₃ F ₆	1990	–	NA
I.3.55.	2.B.10. Other	Table2(II)	SF ₆	1990	–	NA
I.3.56.	2.B.10. Other	Table2(II)	NF ₃	1990	–	NA
I.3.57.	2.C.7. Other	Table2(II)	HFC-23	1990	–	NA
I.3.58.	2.C.7. Other	Table2(II)	HFC-32	1990	–	NA
I.3.59.	2.C.7. Other	Table2(II)	HFC-41	1990	–	NA
I.3.60.	2.C.7. Other	Table2(II)	HFC-43-10mee	1990	–	NA
I.3.61.	2.C.7. Other	Table2(II)	HFC-125	1990	–	NA
I.3.62.	2.C.7. Other	Table2(II)	HFC-134	1990	–	NA
I.3.63.	2.C.7. Other	Table2(II)	HFC-134a	1990	–	NA
I.3.64.	2.C.7. Other	Table2(II)	HFC-143	1990	–	NA
I.3.65.	2.C.7. Other	Table2(II)	HFC-143a	1990	–	NA
I.3.66.	2.C.7. Other	Table2(II)	HFC-152	1990	–	NA
I.3.67.	2.C.7. Other	Table2(II)	HFC-152a	1990	–	NA
I.3.68.	2.C.7. Other	Table2(II)	HFC-161	1990	–	NA
I.3.69.	2.C.7. Other	Table2(II)	HFC-227ea	1990	–	NA
I.3.70.	2.C.7. Other	Table2(II)	HFC-236cb	1990	–	NA
I.3.71.	2.C.7. Other	Table2(II)	HFC-236ea	1990	–	NA
I.3.72.	2.C.7. Other	Table2(II)	HFC-236fa	1990	–	NA
I.3.73.	2.C.7. Other	Table2(II)	HFC-245ca	1990	–	NA
I.3.74.	2.C.7. Other	Table2(II)	HFC-245fa	1990	–	NA
I.3.75.	2.C.7. Other	Table2(II)	HFC-365mfc	1990	–	NA
I.3.76.	2.C.7. Other	Table2(II)	Unspecified mix of HFCs	1990	–	NA

ID#	Category	CRT	Gas	Inventory year	Notation key reported in latest	Notation key reported in previous
					submission (2025)	submission (2024)
I.3.77.	2.C.7. Other	Table2(II)	CF ₄	1990	—	NA
I.3.78.	2.C.7. Other	Table2(II)	C ₂ F ₆	1990	—	NA
I.3.79.	2.C.7. Other	Table2(II)	C ₃ F ₈	1990	—	NA
I.3.80.	2.C.7. Other	Table2(II)	C ₄ F ₁₀	1990	—	NA
I.3.81.	2.C.7. Other	Table2(II)	c-C ₄ F ₈	1990	—	NA
I.3.82.	2.C.7. Other	Table2(II)	C ₅ F ₁₂	1990	—	NA
I.3.83.	2.C.7. Other	Table2(II)	C ₆ F ₁₄	1990	—	NA
I.3.84.	2.C.7. Other	Table2(II)	C ₁₀ F ₁₈	1990	—	NA
I.3.85.	2.C.7. Other	Table2(II)	c-C ₃ F ₆	1990	—	NA
I.3.86.	2.C.7. Other	Table2(II)	Unspecified mix of PFCs	1990	—	NA
I.3.87.	2.C.7. Other	Table2(II)	Unspecified mix of HFCs and PFCs	1990	—	NA
I.3.88.	2.C.7. Other	Table2(II)	NF ₃	1990	—	NO
I.3.89.	2.E.1. Integrated circuit or semiconductor	Table2(II)	Unspecified mix of HFCs and PFCs	1990	—	NO
I.3.90.	2.B.10. Other	Table2(II)	HFC-23	2022	—	NA
I.3.91.	2.B.10. Other	Table2(II)	HFC-32	2022	—	NA
I.3.92.	2.B.10. Other	Table2(II)	HFC-41	2022	—	NA
I.3.93.	2.B.10. Other	Table2(II)	HFC-43-10mee	2022	—	NA
I.3.94.	2.B.10. Other	Table2(II)	HFC-125	2022	—	NA
I.3.95.	2.B.10. Other	Table2(II)	HFC-134	2022	—	NA
I.3.96.	2.B.10. Other	Table2(II)	HFC-134a	2022	—	NA
I.3.97.	2.B.10. Other	Table2(II)	HFC-143	2022	—	NA
I.3.98.	2.B.10. Other	Table2(II)	HFC-143a	2022	—	NA
I.3.99.	2.B.10. Other	Table2(II)	HFC-152	2022	—	NA
I.3.100.	2.B.10. Other	Table2(II)	HFC-152a	2022	—	NA
I.3.101.	2.B.10. Other	Table2(II)	HFC-161	2022	—	NA
I.3.102.	2.B.10. Other	Table2(II)	HFC-227ea	2022	—	NA
I.3.103.	2.B.10. Other	Table2(II)	HFC-236cb	2022	—	NA
I.3.104.	2.B.10. Other	Table2(II)	HFC-236ea	2022	—	NA
I.3.105.	2.B.10. Other	Table2(II)	HFC-236fa	2022	—	NA
I.3.106.	2.B.10. Other	Table2(II)	HFC-245ca	2022	—	NA
I.3.107.	2.B.10. Other	Table2(II)	HFC-245fa	2022	—	NA
I.3.108.	2.B.10. Other	Table2(II)	HFC-365mfc	2022	—	NA
I.3.109.	2.B.10. Other	Table2(II)	CF ₄	2022	—	NA
I.3.110.	2.B.10. Other	Table2(II)	C ₂ F ₆	2022	—	NA
I.3.111.	2.B.10. Other	Table2(II)	C ₃ F ₈	2022	—	NA
I.3.112.	2.B.10. Other	Table2(II)	C ₄ F ₁₀	2022	—	NA

ID#	Category	CRT	Gas	Inventory year	Notation key reported in latest	Notation key reported in previous
					submission (2025)	submission (2024)
I.3.113.	2.B.10. Other	Table2(II)	c-C ₄ F ₈	2022	–	NA
I.3.114.	2.B.10. Other	Table2(II)	C ₅ F ₁₂	2022	–	NA
I.3.115.	2.B.10. Other	Table2(II)	C ₆ F ₁₄	2022	–	NA
I.3.116.	2.B.10. Other	Table2(II)	C ₁₀ F ₁₈	2022	–	NA
I.3.117.	2.B.10. Other	Table2(II)	c-C ₃ F ₆	2022	–	NA
I.3.118.	2.B.10. Other	Table2(II)	SF ₆	2022	–	NA
I.3.119.	2.B.10. Other	Table2(II)	NF ₃	2022	–	NA
I.3.120.	2.C.7. Other	Table2(II)	HFC-23	2022	–	NA
I.3.121.	2.C.7. Other	Table2(II)	HFC-32	2022	–	NA
I.3.122.	2.C.7. Other	Table2(II)	HFC-41	2022	–	NA
I.3.123.	2.C.7. Other	Table2(II)	HFC-43-10mee	2022	–	NA
I.3.124.	2.C.7. Other	Table2(II)	HFC-125	2022	–	NA
I.3.125.	2.C.7. Other	Table2(II)	HFC-134	2022	–	NA
I.3.126.	2.C.7. Other	Table2(II)	HFC-134a	2022	–	NA
I.3.127.	2.C.7. Other	Table2(II)	HFC-143	2022	–	NA
I.3.128.	2.C.7. Other	Table2(II)	HFC-143a	2022	–	NA
I.3.129.	2.C.7. Other	Table2(II)	HFC-152	2022	–	NA
I.3.130.	2.C.7. Other	Table2(II)	HFC-152a	2022	–	NA
I.3.131.	2.C.7. Other	Table2(II)	HFC-161	2022	–	NA
I.3.132.	2.C.7. Other	Table2(II)	HFC-227ea	2022	–	NA
I.3.133.	2.C.7. Other	Table2(II)	HFC-236cb	2022	–	NA
I.3.134.	2.C.7. Other	Table2(II)	HFC-236ea	2022	–	NA
I.3.135.	2.C.7. Other	Table2(II)	HFC-236fa	2022	–	NA
I.3.136.	2.C.7. Other	Table2(II)	HFC-245ca	2022	–	NA
I.3.137.	2.C.7. Other	Table2(II)	HFC-245fa	2022	–	NA
I.3.138.	2.C.7. Other	Table2(II)	HFC-365mfc	2022	–	NA
I.3.139.	2.C.7. Other	Table2(II)	Unspecified mix of HFCs	2022	–	NA
I.3.140.	2.C.7. Other	Table2(II)	CF ₄	2022	–	NA
I.3.141.	2.C.7. Other	Table2(II)	C ₂ F ₆	2022	–	NA
I.3.142.	2.C.7. Other	Table2(II)	C ₃ F ₈	2022	–	NA
I.3.143.	2.C.7. Other	Table2(II)	C ₄ F ₁₀	2022	–	NA
I.3.144.	2.C.7. Other	Table2(II)	c-C ₄ F ₈	2022	–	NA
I.3.145.	2.C.7. Other	Table2(II)	C ₅ F ₁₂	2022	–	NA
I.3.146.	2.C.7. Other	Table2(II)	C ₆ F ₁₄	2022	–	NA
I.3.147.	2.C.7. Other	Table2(II)	C ₁₀ F ₁₈	2022	–	NA
I.3.148.	2.C.7. Other	Table2(II)	c-C ₃ F ₆	2022	–	NA

ID#	Category	CRT	Gas	Inventory year	Notation key reported in latest	Notation key reported in previous
					submission (2025)	submission (2024)
I.3.149.	2.C.7. Other	Table2(II)	Unspecified mix of PFCs	2022	–	NA
I.3.150.	2.C.7. Other	Table2(II)	Unspecified mix of HFCs and PFCs	2022	–	NA
I.3.151.	2.C.7. Other	Table2(II)	NF ₃	2022	–	NO
I.3.152.	2.E.1. Integrated circuit or semiconductor	Table2(II)	Unspecified mix of HFCs and PFCs	2022	–	NO
I.3.153.	4.H. Other (please specify)	Table4	N ₂ O	1990	–	NO
I.3.154.	4.H. Other (please specify)	Table4	N ₂ O	2022	–	NA, NO

Table I.4
Differences between the sectoral and reference approaches for the latest reported year

ID#	CRT table	Fuel type	Description	Difference between reference and sectoral approaches (%)
I.4.1.	Table1.A(c)	Solid fuels (excluding international bunkers)	Energy consumption	–9.5
I.4.2.	Table1.A(c)	Solid fuels (excluding international bunkers)	CO ₂ emissions	–9.3

Table I.5
Findings on time-series consistency

ID#	Category	CRT	Gas	Year 1	Year 2	Value 1	Value 2	Difference	Unit	Difference (CO ₂ eq)	Difference (%)	Z-score
I.5.1.	1.A.1.b. Petroleum refining	Table1	CO ₂	2011	2012	10 582.14	8 618.45	–1 963.69	kt	–1 963.69	–18.6	–3.1
I.5.2.	1.A.1.c. Manufacture of solid fuels and other energy industries	Table1	CO ₂	2019	2020	2 841.37	2 101.35	–740.02	kt	–740.02	–26.0	–3.7
I.5.3.	1.A.2.a. Iron and steel	Table1	CO ₂	2008	2009	8 938.91	6 081.82	–2 857.09	kt	–2 857.09	–32.0	–3.4
I.5.4.	1.A.2.b. Non-ferrous metals	Table1	CO ₂	1990	1991	2 256.85	3 332.44	1 075.59	kt	1 075.59	47.7	3.6
I.5.5.	1.A.2.b. Non-ferrous metals	Table1	CO ₂	1992	1993	2 693.75	1 605.88	–1 087.88	kt	–1 087.88	–40.4	–3.3
I.5.6.	1.A.2.d. Pulp, paper and print	Table1	CO ₂	1990	1991	4 470.52	5 606.38	1 135.86	kt	1 135.86	25.4	3.8
I.5.7.	1.A.2.e. Food processing, beverages and tobacco	Table1	CO ₂	1990	1991	8 654.84	10 625.64	1 970.80	kt	1 970.80	22.8	3.3
I.5.8.	1.A.2.f. Non-metallic minerals	Table1	CO ₂	1990	1991	15 049.55	18 154.66	3 105.12	kt	3 105.12	20.6	3.0
I.5.9.	1.A.2.f. Non-metallic minerals	Table1	CO ₂	1991	1992	18 154.66	14 515.34	–3 639.32	kt	–3 639.32	–20.0	–3.1
I.5.10.	1.A.3.a. Domestic aviation	Table1	CO ₂	2019	2020	4 973.27	3 053.71	–1 919.56	kt	–1 919.56	–38.6	–4.4
I.5.11.	1.A.3.b. Road transportation	Table1	CO ₂	2019	2020	122 214.64	103 797.92	–18 416.72	kt	–18 416.72	–15.1	–4.0
I.5.12.	1.A.3.b. Road transportation	Table1	N ₂ O	1998	1999	7.78	4.43	–3.35	kt	–887.44	–43.0	–4.7
I.5.13.	1.A.4.a. Commercial/institutional	Table1	CO ₂	2010	2011	28 542.85	20 447.94	–8 094.91	kt	–8 094.91	–28.4	–3.5
I.5.14.	1.A.4.c. Agriculture/forestry/fishing	Table1	CO ₂	2019	2020	9 743.62	10 899.53	1 155.91	kt	1 155.91	11.9	3.4

ID#	Category	CRT	Gas	Year 1	Year 2	Value 1	Value 2	Difference	Unit	Difference (CO ₂ eq)	Difference (%)	Z-score
I.5.15.	1.B.1.a. Coal mining and handling	Table1	CH ₄	1995	1996	196.12	149.06	-47.06	kt	-1 317.66	-24.0	-3.4
I.5.16.	1.D.1.a. Aviation	Table1	CO ₂	2019	2020	19 074.00	8 186.25	-10 887.74	kt	-10 887.74	-57.1	-4.9
I.5.17.	2.B.1. Ammonia production	Table2(I)	CO ₂	2005	2006	2 240.91	1 452.92	-787.99	kt	-787.99	-35.2	-3.3
I.5.18.	2.B.3. Adipic acid production	Table2(I)	N ₂ O	1997	1998	56.20	31.36	-24.84	kt	-6 581.28	-44.2	-4.1
I.5.19.	2.B.8. Petrochemical and carbon black production	Table2(I)	CO ₂	2021	2022	3 608.65	2 614.77	-993.88	kt	-993.88	-27.5	-3.1
I.5.20.	2.B.9. Fluorochemical production	Table2(I)	HFCs	1992	1993	4 101.74	2 373.69	-1 728.05	kt CO ₂ eq	-1 728.05	-42.1	-3.9
I.5.21.	2.B.9. Fluorochemical production	Table2(I)	PFCs	1994	1995	1 192.51	288.76	-903.75	kt CO ₂ eq	-903.75	-75.8	-4.5
I.5.22.	2.C.1. Iron and steel production	Table2(I)	CO ₂	2008	2009	14 736.99	8 832.37	-5 904.63	kt	-5 904.63	-40.1	-3.4
I.5.23.	2.C.3. Aluminium production	Table2(I)	CO ₂	1991	1992	473.75	694.80	221.05	kt	221.05	46.7	4.0
I.5.24.	2.C.3. Aluminium production	Table2(I)	PFCs	2001	2002	1 352.94	2 704.03	1 351.09	kt CO ₂ eq	1 351.09	99.9	3.4
I.5.25.	2.F.2. Foam blowing agents	Table2(I)	HFCs	2008	2009	500.91	155.58	-345.33	kt CO ₂ eq	-345.33	-68.9	-4.2
I.5.26.	2.F.4. Aerosols	Table2(I)	HFCs	1995	1996	565.92	1 351.48	785.56	kt CO ₂ eq	785.56	138.8	3.1
I.5.27.	2.B.9. Fluorochemical production	Table2(II)	HFC-23	1993	1994	174.93	76.60	-98.33	t	-1 219.29	-56.2	-4.2
I.5.28.	2.B.9. Fluorochemical production	Table2(II)	HFC-143a	1992	1993	404.87	21.15	-383.72	t	-1 841.86	-94.8	-5.3
I.5.29.	2.B.9. Fluorochemical production	Table2(II)	CF ₄	2002	2003	41.76	74.40	32.64	t	216.40	78.2	3.1
I.5.30.	2.B.9.a. By-product emissions	Table2(II)	HFC-23	1993	1994	174.93	76.60	-98.33	t	-1 219.29	-56.2	-4.2
I.5.31.	2.B.9.a. By-product emissions	Table2(II)	CF ₄	2002	2003	41.76	74.40	32.64	t	216.40	78.2	3.1
I.5.32.	2.B.9.b. Fugitive emissions	Table2(II)	HFC-143a	1992	1993	404.87	21.15	-383.72	t	-1 841.86	-94.8	-5.3
I.5.33.	2.C.3. Aluminium production	Table2(II)	CF ₄	2001	2002	143.81	286.33	142.52	t	944.91	99.1	3.3
I.5.34.	2.C.3. Aluminium production	Table2(II)	C ₂ F ₆	2001	2002	35.99	72.58	36.59	t	406.18	101.7	3.5
I.5.35.	2.F.2. Foam blowing agents	Table2(II)	HFC-134a	2008	2009	273.46	12.72	-260.75	t	-338.97	-95.4	-4.6
I.5.36.	2.F.4. Aerosols	Table2(II)	HFC-134a	1995	1996	435.32	1 039.60	604.27	t	785.56	138.8	3.1
I.5.37.	3.A.1.b. Non-dairy cattle	Table3	CH ₄	1999	2000	854.89	902.59	47.70	kt	1 335.55	5.6	3.1
I.5.38.	3.B.1.b. Non-dairy cattle	Table3	CH ₄	1999	2000	78.12	84.88	6.76	kt	189.31	8.7	3.6
I.5.39.	4.A.1. Forest land remaining forest land	Table4	Net CO ₂ emissions/removals	1999	2000	-42 908.50	-24 352.25	18 556.25	kt CO ₂ eq	18 556.25	-43.2	3.3
I.5.40.	4.C.1. Grassland remaining grassland	Table4	Net CO ₂ emissions/removals	2017	2018	-1 226.34	-2 679.64	-1 453.30	kt CO ₂ eq	-1 453.30	118.5	-3.4
I.5.41.	4.C.1. Grassland remaining grassland	Table4	Net CO ₂ emissions/removals	2018	2019	-2 679.64	-930.30	1 749.34	kt CO ₂ eq	1 749.34	-65.3	4.0
I.5.42.	4.C.2. Land converted to grassland	Table4	Net CO ₂ emissions/removals	1990	1991	-4 905.26	-9 314.10	-4 408.84	kt CO ₂ eq	-4 408.84	89.9	-3.6
I.5.43.	4.E.2. Land converted to settlements	Table4	Net CO ₂ emissions/removals	2000	2001	4 398.07	5 429.76	1 031.69	kt CO ₂ eq	1 031.69	23.5	3.2
I.5.44.	4.H. Other (please specify)	Table4	CH ₄	1995	1996	107.90	79.81	-28.10	kt	-786.73	-26.0	-3.5
I.5.45.	5.A.1. Managed waste disposal sites	Table5	CH ₄	2012	2013	518.63	455.58	-63.04	kt	-1 765.25	-12.2	-3.1

Table I.6

Comparison between implied emission factors reported for key categories and the range of implied emission factors from the 2025 national inventory reports of developed country Parties

<i>ID#</i>	<i>Category</i>	<i>CRT</i>	<i>Gas</i>	<i>Unit</i>	<i>IEF reported</i>	<i>Comparison</i>
I.6.1.	1.A.3.b. Road transportation – other liquid fuels	Table1.A(a)s3	CH ₄	kg/TJ	27.603	Above range
I.6.2.	2.F.1.a. Commercial refrigeration – HFC-143a	Table2(II).B-Hs2	Product manufacturing factor	%	14.760	Above range
I.6.3.	2.F.1.c. Industrial refrigeration – HFC-143a	Table2(II).B-Hs2	Product manufacturing factor	%	12.189	Above range
I.6.4.	2.F.1.d. Transport refrigeration – HFC-143a	Table2(II).B-Hs2	Product manufacturing factor	%	9.949	Above range
I.6.5.	2.F.1.e. Mobile air conditioning – HFC-32	Table2(II).B-Hs2	Product manufacturing factor	%	1.265	Above range
I.6.6.	2.F.1.f. Stationary air conditioning – HFC-125	Table2(II).B-Hs2	Product manufacturing factor	%	4.562	Above range
I.6.7.	3.A.2. Sheep	Table3.A	CH ₄	kg CH ₄ /head/year	12.969	Above range
I.6.8.	3.A.2.a. Other (please specify)	Table3.A	CH ₄	kg CH ₄ /head/year	12.969	Above range
I.6.9.	3.A.3. Swine	Table3.A	CH ₄	kg CH ₄ /head/year	0.744	Below range
I.6.10.	3.A.3.a. Other (please specify)	Table3.A	CH ₄	kg CH ₄ /head/year	0.744	Below range
I.6.11.	3.A.4.d. Goats	Table3.A	CH ₄	kg CH ₄ /head/year	15.047	Above range
I.6.12.	3.A.4.e. Horses	Table3.A	CH ₄	kg CH ₄ /head/year	21.400	Above range
I.6.13.	3.B.4.d. Goats	Table3.B(a)	CH ₄	kg CH ₄ /head/year	1.871	Above range
I.6.14.	3.B.4.d. Goats	Table3.B(b)	N ₂ O	kg N ₂ O/head/year	0.195	Above range
I.6.15.	5.C.1. Waste incineration	Table5.C	CO ₂	kg/t waste	4 644.169	Above range
I.6.16.	5.C.1.a.i. Municipal solid waste	Table5.C	CO ₂	kg/t waste	3 711.778	Above range
I.6.17.	5.C.1.b. Non-biogenic	Table5.C	CO ₂	kg/t waste	52 616.687	Above range
I.6.18.	5.C.2.b. Non-biogenic	Table5.C	CO ₂	kg/t waste	1 906.557	Above range
I.6.19.	5.D.2. Industrial wastewater	Table5.D	CH ₄	kg/kg degradable organic component	0.307	Above range

Table I.7
Identification of new key categories

<i>ID#</i>	<i>New key category</i>	<i>Gas</i>	<i>Criteria</i>	<i>Inventory year</i>
I.7.1.	1.A.3.b. Road transportation	CH ₄	Trend	2023
I.7.2.	1.A.3.d. Domestic navigation – liquid fuels	CO ₂	Level	2023
I.7.3.	3.D.2. Indirect N ₂ O emissions from managed soils	N ₂ O	Trend	2023
I.7.4.	4.A.1. Forest land remaining forest land	CO ₂	Trend	2023
I.7.5.	4.C.1. Grassland remaining grassland	CO ₂	Trend	2023
I.7.6.	4.C.2. Land converted to grassland	CO ₂	Level	2023
I.7.7.	5.D. Wastewater treatment and discharge	N ₂ O	Level	2023
I.7.8.	5.D. Wastewater treatment and discharge	N ₂ O	Trend	2023