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Report on the simplified review of the national inventory report of the United Kingdom of Great Britain and Northern Ireland submitted in 2025

Summary

This report presents the results of the simplified review of the 2025 national inventory report of the United Kingdom of Great Britain and Northern Ireland, 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_3F_8	octafluoropropane
CF_4	tetrafluoromethane
CH_4	methane
CO_2	carbon dioxide
CO_2 eq	carbon dioxide equivalent
CRT	common reporting table
DC	degradable organic component
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_2O	nitrous oxide
NA	not applicable
NE	not estimated
NF_3	nitrogen trifluoride
NID	national inventory document
NIR	national inventory report
NO	not occurring
PFC	perfluorocarbon
SF_6	sulfur hexafluoride
TFT	thin film transistor

I. Introduction

1. This report covers the simplified review of the NIR of the United Kingdom of Great Britain and Northern Ireland 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 11 June 2025 a draft version of this report was transmitted to the Government of the United Kingdom, which provided comments on individual findings on 9 July 2025 that were addressed by the secretariat and incorporated, as appropriate, in this final version of the report.[3] In addition, the United Kingdom provided general comments on the report (see chap. II.B below).

3. The secretariat conducted the simplified review of the United Kingdom'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 the United Kingdom'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, 24 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 (193.98 kt CO_2 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	Difference 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

[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.

Area of review	*Description*	*Assessment*
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 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	See table I.5
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 CO_2 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 provided general comments,[6] which are reported in the box below.

> The United Kingdom thanks the secretariat for sharing this assessment of the United Kingdom's 1990–2023 National GHG inventory submission. The United Kingdom found it to be a helpful exercise to explain the findings of the automated checks and have noted down some potential areas for improvement that would be unlikely to be identified during the conventional expert review process.
>
> As stated in the NID, section 1.7.5, the United Kingdom had some issues with the functionality of the CRT, which heavily compressed timescales for populating and checking the entries. The United Kingdom prioritised making sure the emissions data reported were complete and consistent with our reference data, but this meant that there was insufficient time to complete some of the checking processes we had planned for the non-emissions data. These issues were most evident in the reference approach vs sectoral approach checks presented in table I.4, where the comparisons found by the secretariat do not align well with the United Kingdom's reference and sectoral approach calculations used to prepare annex 3 of the NID.

[6] The comments provided by the United Kingdom are presented verbatim.

Annex

Findings of the initial assessment of the United Kingdom'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.2.b. Non-ferrous metals	Table1	CO_2	1990	1 169.83	4 352.97	–3 183.15	kt	–73.1	–3 183.15
I.1.2.	1.A.2.g. Other	Table1	CO_2	1990	36 401.23	34 298.28	2 102.95	kt	6.1	2 102.95
I.1.3.	1.A.4.a. Commercial/institutional	Table1	CO_2	1990	30 228.44	29 139.52	1 088.91	kt	3.7	1 088.91
I.1.4.	1.D.3. CO_2 emissions from biomass	Table1	CO_2	1990	3 392.75	3 848.29	–455.54	kt	–11.8	–455.54
I.1.5.	1.A.2.c. Chemicals	Table1	CO_2	2022	3 912.23	4 472.74	–560.52	kt	–12.5	–560.52
I.1.6.	1.A.2.e. Food processing, beverages and tobacco	Table1	CO_2	2022	3 631.69	3 829.82	–198.13	kt	–5.2	–198.13
I.1.7.	1.A.2.g. Other	Table1	CO_2	2022	20 193.71	22 159.84	–1 966.13	kt	–8.9	–1 966.13
I.1.8.	1.A.4.c. Agriculture/forestry/fishing	Table1	CO_2	2022	5 659.13	6 613.17	–954.03	kt	–14.4	–954.03
I.1.9.	1.B.1.a. Coal mining and handling	Table1	CH_4	2022	27.13	17.24	9.88	kt	57.3	276.78
I.1.10.	1.D.3. CO_2 emissions from biomass	Table1	CO_2	2022	50 417.11	47 080.80	3 336.31	kt	7.1	3 336.31
I.1.11.	2.B.1. Ammonia production	Table2(I)	CH_4	1990	0.01	7.66	–7.65	kt	–99.9	–214.15
I.1.12.	2.C.1. Iron and steel production	Table2(I)	CO_2	2022	10 481.01	9 556.56	924.45	kt	9.7	924.45
I.1.13.	4.A.1. Forest land remaining forest land	Table4	Net CO_2 emissions/removals	2022	–18 632.23	–18 141.74	–490.49	kt CO_2 eq	–2.7	–490.49
I.1.14.	4.C.2. Land converted to grassland	Table4	Net CO_2 emissions/removals	2022	–2 739.36	–2 995.79	256.43	kt CO_2 eq	8.6	256.43
I.1.15.	5.C.1. Waste incineration	Table5	CO_2	1990	1 150.71	1 352.61	–201.90	kt	–14.9	–201.90
I.1.16.	5.D.1. Domestic wastewater	Table5	CH_4	1990	37.72	53.68	–15.96	kt	–29.7	–446.91
I.1.17.	5.A.1. Managed waste disposal sites	Table5	CH_4	2022	530.73	485.96	44.77	kt	9.2	1 253.44

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.a. Coal mining and handling	Table1	CO_2	1990	NA, NE, NO	Reporting of "NE" detected

ID#	Sector, category or gas	CRT	Gas	Inventory year	Notation key	Finding type
I.2.2.	1.B.1.a. Coal mining and handling	Table1	CO_2	2023	NA, NE, NO	Reporting of “NE” detected
I.2.3.	2.E.2. TFT flat panel display	Table2(I)	HFCs	1990	NE, NO	Reporting of “NE” detected
I.2.4.	2.E.2. TFT flat panel display	Table2(I)	PFCs	1990	NE, NO	Reporting of “NE” detected
I.2.5.	2.E.2. TFT flat panel display	Table2(I)	SF_6	1990	NE	Reporting of “NE” detected
I.2.6.	2.E.2. TFT flat panel display	Table2(I)	NF_3	1990	NE	Reporting of “NE” detected
I.2.7.	2.E.2. TFT flat panel display	Table2(I)	Total GHG emissions	1990	NE, NO	Reporting of “NE” detected
I.2.8.	2.E.3. Photovoltaics	Table2(I)	HFCs	1990	NE, NO	Reporting of “NE” detected
I.2.9.	2.E.3. Photovoltaics	Table2(I)	PFCs	1990	NE, NO	Reporting of “NE” detected
I.2.10.	2.E.3. Photovoltaics	Table2(I)	SF_6	1990	NE	Reporting of “NE” detected
I.2.11.	2.E.3. Photovoltaics	Table2(I)	NF_3	1990	NE	Reporting of “NE” detected
I.2.12.	2.E.3. Photovoltaics	Table2(I)	Total GHG emissions	1990	NE, NO	Reporting of “NE” detected
I.2.13.	2.E.4. Heat transfer fluid	Table2(I)	PFCs	1990	NE, NO	Reporting of “NE” detected
I.2.14.	2.E.4. Heat transfer fluid	Table2(I)	Total GHG emissions	1990	NE, NO	Reporting of “NE” detected
I.2.15.	2.H. Other	Table2(I)	CO_2	1990	IE, NE, NO	Reporting of “NE” detected
I.2.16.	2.H. Other	Table2(I)	Total GHG emissions	1990	IE, NE, NO	Reporting of “NE” detected
I.2.17.	2.E.2. TFT flat panel display	Table2(I)	HFCs	2023	NE, NO	Reporting of “NE” detected
I.2.18.	2.E.2. TFT flat panel display	Table2(I)	PFCs	2023	NE, NO	Reporting of “NE” detected
I.2.19.	2.E.2. TFT flat panel display	Table2(I)	SF_6	2023	NE	Reporting of “NE” detected
I.2.20.	2.E.2. TFT flat panel display	Table2(I)	NF_3	2023	NE	Reporting of “NE” detected
I.2.21.	2.E.2. TFT flat panel display	Table2(I)	Total GHG emissions	2023	NE, NO	Reporting of “NE” detected
I.2.22.	2.E.3. Photovoltaics	Table2(I)	HFCs	2023	NE, NO	Reporting of “NE” detected
I.2.23.	2.E.3. Photovoltaics	Table2(I)	PFCs	2023	NE, NO	Reporting of “NE” detected
I.2.24.	2.E.3. Photovoltaics	Table2(I)	SF_6	2023	NE	Reporting of “NE” detected
I.2.25.	2.E.3. Photovoltaics	Table2(I)	NF_3	2023	NE	Reporting of “NE” detected
I.2.26.	2.E.3. Photovoltaics	Table2(I)	Total GHG emissions	2023	NE, NO	Reporting of “NE” detected
I.2.27.	2.E.4. Heat transfer fluid	Table2(I)	PFCs	2023	NE, NO	Reporting of “NE” detected
I.2.28.	2.E.4. Heat transfer fluid	Table2(I)	Total GHG emissions	2023	NE, NO	Reporting of “NE” detected
I.2.29.	2.H. Other	Table2(I)	CO_2	2023	IE, NE, NO	Reporting of “NE” detected
I.2.30.	2.H. Other	Table2(I)	Total GHG emissions	2023	IE, NE, NO	Reporting of “NE” detected
I.2.31.	2.E.2. TFT flat panel display	Table2(II)	HFC-23	1990	NE	Reporting of “NE” detected
I.2.32.	2.E.2. TFT flat panel display	Table2(II)	Unspecified mix of HFCs	1990	NE	Reporting of “NE” detected
I.2.33.	2.E.2. TFT flat panel display	Table2(II)	CF_4	1990	NE	Reporting of “NE” detected
I.2.34.	2.E.2. TFT flat panel display	Table2(II)	SF_6	1990	NE	Reporting of “NE” detected
I.2.35.	2.E.2. TFT flat panel display	Table2(II)	NF_3	1990	NE	Reporting of “NE” detected
I.2.36.	2.E.3. Photovoltaics	Table2(II)	HFC-23	1990	NE	Reporting of “NE” detected
I.2.37.	2.E.3. Photovoltaics	Table2(II)	Unspecified mix of HFCs	1990	NE	Reporting of “NE” detected
I.2.38.	2.E.3. Photovoltaics	Table2(II)	CF_4	1990	NE	Reporting of “NE” detected

ID#	Sector, category or gas	CRT	Gas	Inventory year	Notation key	Finding type
I.2.39.	2.E.3. Photovoltaics	Table2(II)	SF_6	1990	NE	Reporting of "NE" detected
I.2.40.	2.E.3. Photovoltaics	Table2(II)	NF_3	1990	NE	Reporting of "NE" detected
I.2.41.	2.E.4. Heat transfer fluid	Table2(II)	Unspecified mix of PFCs	1990	NE	Reporting of "NE" detected
I.2.42.	2.E.2. TFT flat panel display	Table2(II)	HFC-23	2023	NE	Reporting of "NE" detected
I.2.43.	2.E.2. TFT flat panel display	Table2(II)	Unspecified mix of HFCs	2023	NE	Reporting of "NE" detected
I.2.44.	2.E.2. TFT flat panel display	Table2(II)	CF_4	2023	NE	Reporting of "NE" detected
I.2.45.	2.E.2. TFT flat panel display	Table2(II)	SF_6	2023	NE	Reporting of "NE" detected
I.2.46.	2.E.2. TFT flat panel display	Table2(II)	NF_3	2023	NE	Reporting of "NE" detected
I.2.47.	2.E.3. Photovoltaics	Table2(II)	HFC-23	2023	NE	Reporting of "NE" detected
I.2.48.	2.E.3. Photovoltaics	Table2(II)	Unspecified mix of HFCs	2023	NE	Reporting of "NE" detected
I.2.49.	2.E.3. Photovoltaics	Table2(II)	CF_4	2023	NE	Reporting of "NE" detected
I.2.50.	2.E.3. Photovoltaics	Table2(II)	SF_6	2023	NE	Reporting of "NE" detected
I.2.51.	2.E.3. Photovoltaics	Table2(II)	NF_3	2023	NE	Reporting of "NE" detected
I.2.52.	2.E.4. Heat transfer fluid	Table2(II)	Unspecified mix of PFCs	2023	NE	Reporting of "NE" detected
I.2.53.	4.H. Other (please specify)	Table4	Net CO_2 emissions/removals	1990	IE, NE	Reporting of "NE" detected
I.2.54.	4.H. Other (please specify)	Table4	CH_4	1990	IE, NE	Reporting of "NE" detected
I.2.55.	4.H. Other (please specify)	Table4	Net CO_2 emissions/removals	2023	IE, NE	Reporting of "NE" detected
I.2.56.	4.H. Other (please specify)	Table4	CH_4	2023	IE, NE	Reporting of "NE" detected
I.2.57.	5.F.1. Long-term storage of carbon in waste disposal sites	Table5	CO_2	1990	NE	Reporting of "NE" detected
I.2.58.	5.F.1. Long-term storage of carbon in waste disposal sites	Table5	Total GHG emissions	1990	NE	Reporting of "NE" detected
I.2.59.	5.F.2. Annual change in total carbon storage	Table5	CO_2	1990	NE	Reporting of "NE" detected
I.2.60.	5.F.2. Annual change in total carbon storage	Table5	Total GHG emissions	1990	NE	Reporting of "NE" detected
I.2.61.	5.F.3. Annual change in total carbon storage in HWP waste	Table5	CO_2	1990	NE	Reporting of "NE" detected
I.2.62.	5.F.3. Annual change in total carbon storage in HWP waste	Table5	Total GHG emissions	1990	NE	Reporting of "NE" detected
I.2.63.	5.F.1. Long-term storage of carbon in waste disposal sites	Table5	CO_2	2023	NE	Reporting of "NE" detected
I.2.64.	5.F.1. Long-term storage of carbon in waste disposal sites	Table5	Total GHG emissions	2023	NE	Reporting of "NE" detected
I.2.65.	5.F.2. Annual change in total carbon storage	Table5	CO_2	2023	NE	Reporting of "NE" detected
I.2.66.	5.F.2. Annual change in total carbon storage	Table5	Total GHG emissions	2023	NE	Reporting of "NE" detected

ID#	Sector, category or gas	CRT	Gas	Inventory year	Notation key	Finding type
I.2.67.	5.F.3. Annual change in total carbon storage in HWP waste	Table5	CO_2	2023	NE	Reporting of "NE" detected
I.2.68.	5.F.3. Annual change in total carbon storage in HWP waste	Table5	Total GHG emissions	2023	NE	Reporting of "NE" detected
I.2.69.	Unspecified mix of HFCs and PFCs	Table10s6	–	1990	NA, NO	Gas or sector not reported
I.2.70.	Unspecified mix of HFCs and PFCs	Table10s6	–	2023	NA, NO	Gas or sector not reported
I.2.71.	6. Other	Table10s6	–	1990	NA	Gas or sector not reported
I.2.72.	6. Other	Table10s6	–	2023	NA	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 in latest submission (2025)	Notation key in previous submission (2024)
I.3.1.	1.A.5.a. Stationary	Table1	CO_2	1990	IE	IE, NO
I.3.2.	1.A.5.a. Stationary	Table1	CH_4	1990	IE	IE, NO
I.3.3.	1.A.5.a. Stationary	Table1	N_2O	1990	IE	IE, NO
I.3.4.	1.A.5.a. Stationary	Table1	Total GHG emissions	1990	IE	IE, NO
I.3.5.	1.D.2. Multilateral operations	Table1	CO_2	1990	IE	NE
I.3.6.	1.D.2. Multilateral operations	Table1	CH_4	1990	IE	NE
I.3.7.	1.D.2. Multilateral operations	Table1	N_2O	1990	IE	NE
I.3.8.	1.D.2. Multilateral operations	Table1	Total GHG emissions	1990	IE	NE
I.3.9.	1.A.5.a. Stationary	Table1	CO_2	2022	IE	IE, NO
I.3.10.	1.A.5.a. Stationary	Table1	CH_4	2022	IE	IE, NO
I.3.11.	1.A.5.a. Stationary	Table1	N_2O	2022	IE	IE, NO
I.3.12.	1.A.5.a. Stationary	Table1	Total GHG emissions	2022	IE	IE, NO
I.3.13.	1.D.2. Multilateral operations	Table1	CO_2	2022	IE	NE
I.3.14.	1.D.2. Multilateral operations	Table1	CH_4	2022	IE	NE
I.3.15.	1.D.2. Multilateral operations	Table1	N_2O	2022	IE	NE
I.3.16.	1.D.2. Multilateral operations	Table1	Total GHG emissions	2022	IE	NE
I.3.17.	2.C.7. Other	Table2(I)	CO_2	1990	IE	NO
I.3.18.	2.C.7. Other	Table2(I)	CH_4	1990	IE	NO
I.3.19.	2.F.1. Refrigeration and air conditioning	Table2(I)	HFCs	1990	NO	0.05
I.3.20.	2.F.1. Refrigeration and air conditioning	Table2(I)	Total GHG emissions	1990	NO	0.05
I.3.21.	2.H. Other	Table2(I)	CO_2	1990	IE, NE, NO	NA, NE, NO
I.3.22.	2.H. Other	Table2(I)	Total GHG emissions	1990	IE, NE, NO	NA, NE, NO

ID#	Category	CRT	Gas	Inventory year	Notation key in latest submission (2025)	Notation key in previous submission (2024)
I.3.23.	2.C.7. Other	Table2(I)	CO_2	2022	IE	NO
I.3.24.	2.C.7. Other	Table2(I)	CH_4	2022	IE	NO
I.3.25.	2.H. Other	Table2(I)	CO_2	2022	IE, NE, NO	NA, NE, NO
I.3.26.	2.H. Other	Table2(I)	Total GHG emissions	2022	IE, NE, NO	NA, NE, NO
I.3.27.	2.F.1. Refrigeration and air conditioning	Table2(II)	HFC-134a	1990	NO	0.04
I.3.28.	5.B.2. Anaerobic digestion at biogas facilities	Table5	CH_4	1990	NA, NO	0.00
I.3.29.	5.B.2. Anaerobic digestion at biogas facilities	Table5	Total GHG emissions	1990	NA, NO	0.12

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)	Liquid fuels (excluding international bunkers)	Energy consumption	–11.9
I.4.2.	Table1.A(c)	Solid fuels (excluding international bunkers)	Energy consumption	84.4
I.4.3.	Table1.A(c)	Solid fuels (excluding international bunkers)	CO_2 emissions	84.4
I.4.4.	Table1.A(c)	Other fossil fuels	Energy consumption	–72.6
I.4.5.	Table1.A(c)	Other fossil fuels	CO_2 emissions	–11.1
I.4.6.	Table1.A(c)	Peat	Energy consumption	–99.0

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.2.a. Iron and steel	Table1	CO_2	1999	2000	4 429.87	2 253.64	–2 176.23	kt	–2 176.23	–49.1	–4.8
I.5.2.	1.A.2.b. Non-ferrous metals	Table1	CO_2	1990	1991	1 169.83	1 742.76	572.94	kt	572.94	49.0	3.8
I.5.3.	1.A.3.a. Domestic aviation	Table1	CO_2	2019	2020	1 698.51	719.38	–979.13	kt	–979.13	–57.6	–4.2
I.5.4.	1.A.3.b. Road transportation	Table1	CO_2	2019	2020	110 280.09	91 922.84	–18 357.25	kt	–18 357.25	–16.6	–4.5
I.5.5.	1.A.3.c. Railways	Table1	CO_2	2019	2020	1 845.23	1 436.18	–409.06	kt	–409.06	–22.2	–4.5
I.5.6.	1.A.3.d. Domestic navigation	Table1	CO_2	1993	1994	7 573.40	8 580.91	1 007.51	kt	1 007.51	13.3	3.1
I.5.7.	1.A.3.e. Other transportation	Table1	CO_2	2019	2020	1 376.50	830.40	–546.09	kt	–546.09	–39.7	–4.3
I.5.8.	1.A.4.b. Residential	Table1	CH_4	1994	1995	60.43	47.99	–12.44	kt	–348.35	–20.6	–3.1
I.5.9.	1.A.5.b. Mobile	Table1	CO_2	1990	1991	5 293.44	4 301.40	–992.04	kt	–992.04	–18.7	–3.3
I.5.10.	1.B.1.a. Coal mining and handling	Table1	CH_4	1993	1994	828.28	549.91	–278.37	kt	–7 794.45	–33.6	–4.7

ID#	*Category*	*CRT*	*Gas*	*Year 1*	*Year 2*	*Value 1*	*Value 2*	*Difference*	*Unit*	*Difference (CO_2 eq)*	*Difference (%)*	*Z-score*
I.5.11.	1.B.2.a. Oil	Table1	CO_2	1996	1997	1 283.30	462.07	–821.23	kt	–821.23	–64.0	–4.1
I.5.12.	1.B.2.b. Natural gas	Table1	CH_4	1996	1997	352.38	304.18	–48.20	kt	–1 349.51	–13.7	–4.4
I.5.13.	1.B.2.c. Venting and flaring	Table1	CO_2	1993	1994	4 627.80	5 816.14	1 188.34	kt	1 188.34	25.7	3.0
I.5.14.	1.D.1.a. Aviation	Table1	CO_2	2019	2020	35 716.11	15 060.22	–20 655.89	kt	–20 655.89	–57.8	–4.5
I.5.15.	1.D.1.b. Navigation	Table1	CO_2	2007	2008	9 866.85	13 364.73	3 497.88	kt	3 497.88	35.5	3.6
I.5.16.	2.A.2. Lime production	Table2(I)	CO_2	2008	2009	1 407.88	992.28	–415.60	kt	–415.60	–29.5	–3.4
I.5.17.	2.B.2. Nitric acid production	Table2(I)	N_2O	1998	1999	10.41	15.33	4.92	kt	1 303.85	47.3	3.3
I.5.18.	2.B.3. Adipic acid production	Table2(I)	N_2O	1998	1999	38.75	1.95	–36.80	kt	–9 753.01	–95.0	–3.5
I.5.19.	2.B.9. Fluorochemical production	Table2(I)	HFCs	1998	1999	12 820.75	5 133.12	–7 687.63	kt CO_2 eq	–7 687.63	–60.0	–4.1
I.5.20.	2.B.9. Fluorochemical production	Table2(I)	PFCs	2017	2018	290.58	45.85	–244.73	kt CO_2 eq	–244.73	–84.2	–4.0
I.5.21.	2.C.3. Aluminium production	Table2(I)	CO_2	2011	2012	329.50	91.64	–237.87	kt	–237.87	–72.2	–4.1
I.5.22.	2.C.3. Aluminium production	Table2(I)	PFCs	1991	1992	1 148.14	513.16	–634.98	kt CO_2 eq	–634.98	–55.3	–4.8
I.5.23.	2.C.4. Magnesium production	Table2(I)	SF_6	1999	2000	0.03	0.04	0.02	kt	379.30	59.0	3.4
I.5.24.	2.G.2. SF_6 and PFCs from other product use	Table2(I)	SF_6	1992	1993	0.01	0.00	–0.01	kt	–215.31	–78.5	–3.7
I.5.25.	2.B.9. Fluorochemical production	Table2(II)	HFC-23	1998	1999	1 029.28	408.88	–620.40	t	–7 692.96	–60.3	–4.1
I.5.26.	2.B.9. Fluorochemical production	Table2(II)	C_3F_8	2017	2018	26.35	4.16	–22.19	t	–197.53	–84.2	–4.1
I.5.27.	2.B.9.a. By-product emissions	Table2(II)	HFC-23	1998	1999	1 029.28	408.88	–620.40	t	–7 692.96	–60.3	–4.1
I.5.28.	2.B.9.b. Fugitive emissions	Table2(II)	C_3F_8	2017	2018	26.35	4.16	–22.19	t	–197.53	–84.2	–4.1
I.5.29.	2.C.3. Aluminium production	Table2(II)	CF_4	1991	1992	143.27	64.75	–78.51	t	–520.54	–54.8	–4.8
I.5.30.	2.C.4. Magnesium production	Table2(II)	SF_6	1999	2000	27.36	43.50	16.14	t	379.30	59.0	3.4
I.5.31.	2.G.2. SF_6 and PFCs from other product use	Table2(II)	SF_6	1992	1993	11.67	2.51	–9.16	t	–215.31	–78.5	–3.7
I.5.32.	3.A.2. Sheep	Table3	CH_4	2000	2001	208.42	184.28	–24.14	kt	–675.80	–11.6	–3.5
I.5.33.	4.C.1. Grassland remaining grassland	Table4	Net CO_2 emissions/removals	1998	1999	2 395.61	2 922.02	526.41	kt CO_2 eq	526.41	22.0	5.3
I.5.34.	4.C.2. Land converted to grassland	Table4	Net CO_2 emissions/removals	1999	2000	–3 942.73	–3 211.50	731.23	kt CO_2 eq	731.23	–18.5	3.5
I.5.35.	4.E.2. Land converted to settlements	Table4	Net CO_2 emissions/removals	2015	2016	1 714.22	2 142.66	428.44	kt CO_2 eq	428.44	25.0	3.4
I.5.36.	5.C.1. Waste incineration	Table5	CO_2	1996	1997	875.29	438.98	–436.31	kt	–436.31	–49.8	–4.8
I.5.37.	5.D.1. Domestic wastewater	Table5	CH_4	2000	2001	45.05	28.82	–16.23	kt	–454.56	–36.0	–5.0
I.5.38.	5.D.2. Industrial wastewater	Table5	CH_4	2005	2006	31.05	42.00	10.95	kt	306.61	35.3	3.2

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

ID#	*Category*	*CRT*	*Gas*	*Unit*	*IEF reported*	*Comparison*
I.6.1.	1.B.1.a.i.1. Mining activities	Table1.B.1	CH_4	kg/TJ	97.061	Above range
I.6.2.	2.B.8.c. Ethylene dichloride and vinyl chloride monomer	Table2(I).A-H	CO_2	t/t	0.011	Below range
I.6.3.	2.F.1.c. Industrial refrigeration – HFC-32	Table2(II).B-Hs2	Disposal loss factor	%	38.500	Below range
I.6.4.	2.F.1.c. Industrial refrigeration – HFC-125	Table2(II).B-Hs2	Disposal loss factor	%	22.151	Below range
I.6.5.	2.F.1.c. Industrial refrigeration – HFC-134a	Table2(II).B-Hs2	Disposal loss factor	%	23.669	Below range
I.6.6.	2.F.1.c. Industrial refrigeration – HFC-143a	Table2(II).B-Hs2	Disposal loss factor	%	20.000	Below range
I.6.7.	4(II).B.1. Cropland remaining cropland – total organic soils	Table4(II)	CH_4 per area	kg CH_4/ha	18 639.013	Above range
I.6.8.	4(II).D.2.a. Lands converted to peat extraction – total organic soils	Table4(II)	CH_4 per area	kg CH_4/ha	67.688	Above range
I.6.9.	5.D.1. Domestic wastewater	Table5.D	CH_4	kg/kg DC	0.279	Above range

Table I.7
Identification of new key categories

ID#	*New key category*	*Gas*	*Criteria*	*Inventory year*
I.7.1.	1.A.2. Fuel combustion – manufacturing industries and construction – other fossil fuels	CO_2	Trend	2023
I.7.2.	1.A.3.a. Domestic aviation	CO_2	Level	2023
I.7.3.	1.A.3.c. Railways	CO_2	Trend	2023
I.7.4.	3.D.2. Indirect N_2O emissions from managed soils	N_2O	Trend	2023
I.7.5.	5.B. Biological treatment of solid waste	CH_4	Level	2023