

SIXTY-THIRD SESSION OF THE IPCC

27 – 30 October 2025, Lima, Peru

Decisions adopted by the Panel

Decision IPCC-LXIII-1. Adoption of the Provisional Agenda

Documents: IPCC-LXIII/Doc.1, Rev.1 and IPCC-LXIII/Doc.1, Rev.1, Add.1

The Intergovernmental Panel on Climate Change at its Sixty-third Session adopts the Provisional Agenda as contained in document IPCC-LXIII/Doc.1, Rev.1.

Decision IPCC-LXIII-2. Proposals for Expert Meetings and Workshops for the seventh assessment cycle

Document: IPCC-LXIII/Doc. 4

The Intergovernmental Panel on Climate Change at its Sixty-third Session decides to approve the proposal for an Expert Meeting on Regional Climate Information & Atlas, as contained in IPCC-LXIII/Doc.4.

Decision IPCC-LXIII-3. Admission of Observer Organizations

Document: IPCC-LXIII/Doc. 5

The Intergovernmental Panel on Climate Change at its Sixty-third Session decides:

- to take note of the conclusion of the review of IPCC observer organizations; and
- to grant the following organizations IPCC observer status, in accordance with the IPCC Policy and Process for Admitting Observer Organizations:

- 1) African Belt and Road Development Initiative (ABRDI)
- 2) American Geophysical Union (AGU)
- 3) Australian Forest Products Association (AFPA)
- 4) China Association for NGO Cooperation (CANGO)
- 5) International Maize and Wheat Improvement Center (CIMMYT)
- 6) Climate Central
- 7) Emory University (EMORY)
- 8) Euclid University (EUCLID)
- 9) Global Green Growth Institute (GGGI)
- 10) Institute for Sustainable Development (IISD)
- 11) Institute for Governance & Sustainable Development (IGSD)
- 12) International Cryosphere Climate Initiative (ICCI)
- 13) Network for Climate Action Organization - The Gambia (NCAO)
- 14) African Smart Cities Innovation Foundation (ASCIF)
- 15) Women's Environment and Development Organization (WEDO)
- 16) World Farmers' Organisation (World Farmers)
- 17) African Group of Negotiators Experts Support (AGNES)
- 18) Science for Africa Foundation (SFA Foundation)
- 19) Spark Climate Solutions, Inc.
- 20) Wise Ancestors

Decision IPCC-LXIII-4. Matters related to other IPCC activities - Cost implications of extending additional Trust Fund support for developing country and country with economy in transition participation in Panel sessions, in particular approval sessions, to increase their participation

Document: IPCC-LXIII/Doc.7

The Intergovernmental Panel on Climate Change at its Sixty-third Session took note of Document IPCC-LXIII/Doc.7 and of the views expressed at the session, and decided to defer this discussion to a future plenary session but no later than the Sixty-Fifth Session of the IPCC.

Decision IPCC-LXIII-5. IPCC Trust Fund Programme and Budget for the years 2025, 2026, 2027 and 2028

Document: IPCC-LXIII/Doc. 2, Rev.1

Based on the recommendations of the Financial Task Team (FiTT), the 63rd Session of the Intergovernmental Panel on Climate Change:

1. Appreciates the support that the Secretariat of the IPCC provides to the IPCC process;
2. Approves the revised budget for 2025, as contained in **Annex 1**;
3. Approves the proposed budget for 2026, as contained in **Annex 2**;
4. Notes the forecast budget for 2027, as contained in **Annex 3**¹;
5. Notes the indicative budget for 2028, as contained in **Annex 4**¹;
6. Welcomes with gratitude all contributions, pledges and in-kind contributions from member countries, especially from developing countries, UN bodies, intergovernmental organizations and the European Union, and encourages all members of the IPCC to maintain or increase their financial support, also through multi-year pledges, so as to ensure the financial stability of the IPCC. An updated list, as of 21 October 2025, of 2025 voluntary contributions is presented in **Annex 5**. An updated table, as of 21 October 2025, of 2025 in-kind contributions is contained in **Annex 6**;
7. Encourages member countries to make first-time contributions to the IPCC Trust Fund in order to broaden the donor base;
8. Expresses its gratitude to member countries that support the Technical Support Units (TSUs) and a number of IPCC activities, including data centres, travel support of IPCC experts, meetings and outreach activities;
9. Encourages member countries to transfer funds as soon as practical, while noting that contributions from IPCC members are due on 1 January of each calendar year, noting that when transferring funds to WMO, members should indicate that the contribution is “for the IPCC Trust Fund” to ensure proper identification of the recipient;

¹ The noting of the forecast and indicative budgets is without prejudice to the approval of future activities that will impact the budget.

10. Appreciates the efforts of the Secretariat but notes with concern the significantly reduced cash balance of the IPCC Trust Fund and the accelerating decline in the level of annual voluntary contributions to the IPCC Trust Fund, and therefore invites member countries to make their annual voluntary contributions to the IPCC Trust Fund and, if possible, to increase their annual voluntary contributions;
11. Expresses its gratitude to the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) for their cash contribution to the Trust Fund, for financing one Secretariat position each, and to WMO for hosting the Secretariat and for its continuing support for the IPCC;
12. Notes the proposal of the WMO for funding of an additional CHF 300,000 per year from the IPCC Trust Fund related to a portion of WMO administrative support services previously provided as in-kind contribution to the IPCC, notes with concern the deteriorating financial situation of the IPCC Trust Fund, and therefore decides to defer the decision on the WMO proposal to the 65th Session of the IPCC;
13. Expresses its gratitude to the United Nations Framework Convention on Climate Change (UNFCCC) for its contribution to the IPCC Trust Fund;
14. Decides to continue preparing the budget of the IPCC Trust Fund using the standard costs, bearing in mind that expenditures may be lower than the budget;
15. Requests the Secretariat to provide detailed information in the budget document presented to the Panel;
16. Requests the Secretariat to provide the Panel with interim statements of expenditure covering the first six months of a given year, as well as the projection of expenditure for the rest of the given year;
17. Recalls decisions IPCC-LVII-4, para 28; IPCC-XLVII-9, para 5; IPCC-LIV (bis)-2, para 28; IPCC-LVII-4, para 29; IPCC-LX-10, para 20; IPCC-LXII-7, para 18, regarding the Panel's recognition of the DDC funding needs, welcomes the financial and in-kind contributions provided to support the work of the DDC, and encourages member countries and observer organizations to make additional voluntary contributions directly to the DDC;
18. Recalls decision IPCC-LX-10, para 22 that notes the applicability of pertinent due diligence processes, with reference to the IPCC, WMO and United Nations, for receipt of relevant external contributions;
19. Requests the Secretariat to provide information on major activities and related costs covered by the Communications budget;
20. Recalls decision IPCC-LX-10, para 27, requesting the Secretariat to produce a strategic human resources plan, notes the progress and requests to present it for review and consideration to the 65th Session of the IPCC;
21. Requests the Financial Task Team (FiTT) to meet virtually inter-sessionally to conduct informal discussions regarding relevant FiTT decisions and matters, for consideration at the FiTT of the next plenary session;
22. Noting the delay in the scientific editing for the 6th Assessment Cycle, requests the Secretariat to optimize the utilization of funds related to scientific editing services for the 6th Assessment Cycle by focusing on the Summaries for Policymakers and Glossaries, and requests the Secretariat to ensure scientific editing and translation is completed for relevant products related to upcoming reports within one year of completion of each report;

- 23.** Recalls Decision IPCC-XLVII-4, para 2, and requests the Secretariat to provide a report at IPCC-64 on the pre-plenary briefing session organised during IPCC-61, including budgetary implications, with a view to informing the Panel's decision on holding similar pre-plenary briefings in future sessions.

REVISED 2025 BUDGET FOR ADOPTION BY IPCC-LXIII

	Activity	Purpose	DC/EIT support	Other Expenditure	Sub-total
A	Governing Bodies				
1	IPCC-62 5 days	Agreement AR7 & MR CDR outlines Programme and budget	480,000 120 journeys	350,000	830,000
2	IPCC-63 4 days	AR7 workplan & MR CDR outline Programme and budget	480,000 120 journeys	280,000	760,000
3	Bureau 5 days	1 session 1 session (contingency)	248,000 62 journeys	150,000	398,000
4	TFB	1 session	40,000 10 journeys	6,800	46,800
5	UNFCCC and other UN meetings		80,000 20 journeys	0	80,000
	SUB-TOTAL				2,114,800
B	Lead Authors, Scoping, Expert Meetings and Workshops				
1	WG I AR7 LAM 1	1 meeting	360,000 90 journeys	61,200	421,200
2	WG II AR7 LAM 1	1 meeting	520,000 130 journeys	88,400	608,400
3	WG III AR7 LAM 1	1 meeting	420,000 105 journeys	71,400	491,400
4	SR Cities LAM 1 and LAM 2	2 meetings	400,000 100 journeys	68,000	468,000
5	Chair - Workshop - Engaging Diverse Knowledge Systems	1 meeting (moved to 2026)	0 25 journeys	0	0
6	Chair - Workshop - Methods of Assessment	1 meeting (moved to 2026)	0 25 journeys	0	0
7	TG-Data	1 meeting	48,000 12 journeys	8,160	56,160
8	GAT - Expert Meeting - Gender, Diversity, Equity, and Inclusivity (GDEI)	1 meeting	80,000 20 journeys	13,600	93,600
9	Chair - Expert Meeting - Science of Communicating Science	1 meeting (moved to 2026)	0 20 journeys	0	0
10	EFDB Editorial Board & Data Meeting	1 meeting	0 21 journeys	0	0
11	Software and EFDB Users Feedback	1 meeting	84,000 21 journeys	14,280	98,280
12	TFI - SLCF Methodology Report LAM 1	1 meeting	212,000 53 journeys	36,040	248,040
13	TFI - SLCF Methodology Report - LAM 2	1CLA/LA Meeting	320,000 80 journeys	54,400	374,400
14	TFI - Science Meeting - CDR Methodology Report	1 meeting (moved to 2026)	0 15 journeys	0	0
15	TFI - Expert Meeting	1 meeting (contingency)	0 40 journeys	0	0
	SUB-TOTAL				2,859,480
C	Other Expenditure				
1	2006 GL software	Maintenance/development			50,000
2	EFDB maintenance	Update/management			66,800
3	Publications/Translations	IPCC publications			100,000
4	Communication I	AR7 material/travel/events			434,400
5	Communication II*	AR7 outreach events			53,960
6	TG-Data	DDC activities			270,236
7	Gender Action Team	Training - Diversity, Equity & Inclusivity			150,000
8	Science Editors	Technical editing services (moved to 2026)			0
9	Strategic HR Plan	Consultancy			100,000
10	Distribution	IPCC publications			20,000
11	IT Infrastructure	Web hosting/cloudflare/upgrades			13,128
12	TFI website	Redevelopment			60,000
13	External Audit	Fee			20,000
14	Advisory Services	Conflict of Interest			15,000
15	Co-Chairs	Support			200,000
16	WG III TSU (Malaysia)	Support			904,508
	SUB-TOTAL				2,458,032
D	Secretariat				
1	Secretariat	Staff costs/misc expenses			2,865,339
2	Resource Mobilization	Travel costs			15,800
	SUB-TOTAL				2,881,139
	TOTAL				10,313,451

All activities subject to Panel approval in IPCC-63

* Regional/local events

Note: Entries in 'red' reflect adjustments, movements to/from another year or new budget lines.

PROPOSED 2026 BUDGET FOR ADOPTION BY IPCC-LXIII

	Activity	Purpose	DC/EIT support	Other Expenditure	Sub-total
A	Governing Bodies				
1	IPCC-64 4 days	Standard plenary business	480,000 120 journeys	280,000	760,000
2	IPCC-65 4 days	Standard plenary business Programme and budget	480,000 120 journeys	280,000	760,000
3	Bureau 4 days	2 sessions	248,000 62 journeys	120,000	368,000
4	TFB	1 session	40,000 10 journeys	6,800	46,800
5	UNFCCC and other UN meetings		80,000 20 journeys	0	80,000
	SUB-TOTAL				2,014,800
B	Lead Authors, Scoping, Expert Meetings and Workshops				
1	WG I AR7 LAM 2 and LAM 3	2 meetings	780,000 195 journeys	132,600	912,600
2	WG II AR7 LAM 2	1 meeting	520,000 130 journeys	88,400	608,400
3	WG III AR7 LAM 2	1 meeting	420,000 105 journeys	71,400	491,400
4	SR Cities LAM 3 and LAM 4	2 meetings	440,000 110 journeys	74,800	514,800
5	WG I - Expert Meeting on Regional Climate Info & Atlas	1 meeting	120,000 30 journeys	20,400	140,400
6	WG II - Expert Meeting on Adaptation Indices	1 meeting	120,000 30 journeys	20,400	140,400
7	TG-Data	1 meeting	48,000 12 journeys	8,160	56,160
8	SR Cities SPM Drafting Meeting I	CLA, Drafting Authors, Co-Chairs	60,000 15 journeys	10,200	70,200
9	Chair - Workshop - Engaging Diverse Knowledge Systems	1 meeting (moved from 2025)	100,000 25 journeys	17,000	117,000
10	Chair - Workshop - Methods of Assessment	1 meeting (moved from 2025)	100,000 25 journeys	17,000	117,000
11	Chair - Expert Meeting - Science of Communicating Science	1 meeting (moved from 2025)	80,000 20 journeys	13,600	93,600
12	EFDB Editorial Board & Data Meeting	1 meeting	36,000 9 journeys	6,120	42,120
13	TFI - CDR Methodology Report LAM 1	1 meeting	280,000 70 journeys	47,600	327,600
14	TFI - CDR Methodology Report LAM 2	1 CLA/LA Meeting	280,000 70 journeys	47,600	327,600
15	TFI - SLCF Methodology Report LAM 3	1 CLA/LA Meeting (CDR LAM 3 moved to 2027)	344,000 86 journeys	58,480	402,480
16	TFI - Science Meeting - SLCF Methodology Report	1 meeting	60,000 15 journeys	10,200	70,200
17	TFI - Science Meeting - CDR Methodology Report	1 meeting (moved from 2025)	60,000 15 journeys	10,200	70,200
18	Software and EFDB Users Feedback	1 meeting	84,000 21 journeys	14,280	98,280
19	TFI - Expert Meeting	1 meeting (contingency)	160,000 40 journeys	27,200	187,200
	SUB-TOTAL				4,787,640
C	Other Expenditure				
1	2006 GL software	Maintenance/development			50,000
2	EFDB maintenance	Update/management			66,800
3	Publications/Translations	IPCC publications			100,000
4	Communication I	AR7 material/travel/events			472,800
5	Communication II*	AR7 outreach events			53,960
6	TG-Data	DDC activities (contingency)			0
7	Science Editors	Technical editing services (5 languages)			147,890
8	Distribution	IPCC publications			20,000
9	IT Infrastructure	Web hosting/cloudflare/upgrades			13,128
10	External Audit	Fee			20,000
11	Advisory Services	Conflict of Interest			15,000
12	Co-Chairs	Support			200,000
	SUB-TOTAL				1,159,578
D	Secretariat				
1	Secretariat	Staff costs/misc expenses			2,865,339
2	Resource Mobilization	Travel costs			15,800
	SUB-TOTAL				2,881,139
	TOTAL				10,843,157

All activities subject to Panel approval in IPCC-63

* Regional/local events

Note: Entries in 'red' reflect adjustments, movements to/from another year or new budget lines.

FORECAST 2027 BUDGET TO BE NOTED BY IPCC-LXIII

	Activity	Purpose	DC/EIT support	Other Expenditure	Sub-total
A	Governing Bodies				
1	IPCC-66 5 days	Approval Session - SR Cities	480,000 120 journeys	350,000	830,000
2	IPCC-67 8 days	Back-to-back Approval Sessions - MR SLCF & MR CDR, Programme and budget	480,000 120 journeys	560,000	1,040,000
3	Bureau 4 days	2 sessions	248,000 62 journeys	120,000	368,000
4	TFB	1 session	40,000 10 journeys	6,800	46,800
5	UNFCCC and other UN meetings		80,000 20 journeys	0	80,000
	SUB-TOTAL				2,364,800
B	Lead Authors, Scoping, Expert Meetings and Workshops				
1	WG I AR7 LAM 4	1 meeting (contingency)	420,000 105 journeys	71,400	491,400
2	WG II AR7 LAM 3 and LAM 4	2 meetings (contingency)	1,040,000 260 journeys	176,800	1,216,800
3	WG III AR7 LAM 3 and LAM 4	2 meetings (contingency)	928,000 232 journeys	157,760	1,085,760
4	TG-Data	1 meeting	48,000 12 journeys	8,160	56,160
5	WG I AR7 SPM Drafting Meeting I	CLA, Drafting Authors, Co-Chairs (contingency)	120,000 30 journeys	20,400	140,400
6	WG II AR7 SPM Drafting Meeting I	CLA, Drafting Authors, Co-Chairs (contingency)	120,000 30 journeys	20,400	140,400
7	WG III AR7 SPM Drafting Meeting I	CLA, Drafting Authors, Co-Chairs (contingency)	120,000 30 journeys	20,400	140,400
8	SR Cities SPM Drafting Meeting II	CLA, Drafting Authors, Co-Chairs (back-to-back P-66)	60,000 15 journeys	0	60,000
9	SYR AR7 Scoping Meeting	1 meeting (contingency)	160,000 40 journeys	27,200	187,200
10	EFDB Editorial Board & Data Meeting	1 meeting	36,000 9 journeys	6,120	42,120
11	TFI - SLCF Methodology Report LAM 4	1 CLA/LA Meeting	344,000 86 journeys	58,480	402,480
12	TFI - SLCF Methodology Report Preparatory Meeting	1 CLA/LA Meeting (back-to-back P-67)	60,000 15 journeys	0	60,000
13	TFI - CDR Methodology Report LAM 3	1 CLA/LA Meeting (moved from 2026)	308,000 77 journeys	52,360	360,360
14	TFI - CDR Methodology Report LAM 4	1 CLA/LA Meeting	308,000 77 journeys	52,360	360,360
15	TFI - CDR Methodology Report Preparatory Meeting	1 CLA/LA Meeting (back-to-back P-67)	60,000 15 journeys	0	60,000
16	Software and EFDB Users Feedback	1 meeting	84,000 21 journeys	14,280	98,280
17	TFI - Expert Meeting	1 meeting (contingency)	160,000 40 journeys	27,200	187,200
	SUB-TOTAL				5,089,320
C	Other Expenditure				
1	2006 GL software	Maintenance/development			50,000
2	EFDB maintenance	Update/management			66,800
3	Publications/Translations	IPCC publications			300,000
4	Communication I	IPCC material/travel/events			635,800
5	Communication II*	AR7 outreach events			53,960
6	TG-Data	DDC activities (contingency)			0
7	Science Editors	Technical editing services (5 languages)			75,600
8	Distribution	IPCC publications			100,000
9	IT Infrastructure	Web hosting/cloudflare/upgrades			13,128
10	External Audit	Fee			20,000
11	Advisory Services	Conflict of Interest			15,000
12	Co-Chairs	Support			200,000
	SUB-TOTAL				1,530,288
D	Secretariat				
1	Secretariat	Staff costs/misc expenses			2,865,339
2	Resource Mobilization	Travel costs			15,800
	SUB-TOTAL				2,881,139
	TOTAL				11,865,547

All activities subject to Panel approval in IPCC-65

* Regional/local events

Note: Entries in 'red' reflect adjustments, movements to/from another year or new budget lines.

INDICATIVE 2028 BUDGET TO BE NOTED BY IPCC-LXIII

	Activity	Purpose	DC/EIT support	Other Expenditure	Sub-total
A	Governing Bodies				
1	IPCC-68 5 days	Approval Session - AR7 WG I (contingency)	480,000 120 journeys	350,000	830,000
2	IPCC-69 5 days	Approval Session - AR7 WG II (contingency)	480,000 120 journeys	350,000	830,000
3	IPCC-70 5 days	Approval Session - AR7 WG III (contingency) Programme and budget	480,000 120 journeys	350,000	830,000
4	Bureau 6 days	3 sessions 93 journeys	372,000	180,000	552,000
5	TFB	1 session 10 journeys	40,000	6,800	46,800
6	UNFCCC and other UN meetings		80,000 20 journeys	0	80,000
	SUB-TOTAL				3,168,800
B	Lead Authors, Scoping, Expert Meetings and Workshops				
1	TG-Data	1 meeting 12 journeys	48,000	8,160	56,160
2	WG I AR7 SPM Drafting Meeting II	CLA, Drafting Authors, Co-Chairs (back-to-back P-68) (contingency)	120,000 30 journeys	0	120,000
3	WG II AR7 SPM Drafting Meeting II	CLA, Drafting Authors, Co-Chairs (back-to-back P-69) (contingency)	120,000 30 journeys	0	120,000
4	WG III AR7 SPM Drafting Meeting II	CLA, Drafting Authors, Co-Chairs (back-to-back P-70) (contingency)	120,000 30 journeys	0	120,000
5	SYR AR7 CWT 1	1 meeting (contingency) 40 journeys	160,000	27,200	187,200
6	SYR AR7 CWT 2	1 meeting (contingency) 40 journeys	160,000	27,200	187,200
7	SYR AR7 CWT 3	1 meeting (contingency) 40 journeys	160,000	27,200	187,200
8	EFDB Editorial Board & Data Meeting	1 meeting 9 journeys	36,000	6,120	42,120
9	Software and EFDB Users Feedback	1 meeting 21 journeys	84,000	14,280	98,280
10	TFI - Expert Meeting	1 meeting (contingency) 40 journeys	160,000	27,200	187,200
	SUB-TOTAL				1,305,360
C	Other Expenditure				
1	2006 GL software	Maintenance/development			50,000
2	EFDB maintenance	Update/management			66,800
3	Publications/Translations	IPCC publications			500,000
4	Communication I	AR7 material/travel/events			569,800
5	Communication II*	AR7 outreach events			53,960
6	TG-Data	DDC activities (contingency)			0
7	Science Editors	Technical editing services (5 languages)			295,200
8	Distribution	IPCC publications			100,000
9	IT Infrastructure	Web hosting/cloudflare/upgrades			13,128
10	External Audit	Fee			20,000
11	Advisory Services	Conflict of Interest			15,000
12	Co-Chairs	Support			200,000
	SUB-TOTAL				1,883,888
D	Secretariat				
1	Secretariat	Staff costs/misc expenses			2,865,339
2	Resource Mobilization	Travel costs			15,800
	SUB-TOTAL				2,881,139
	TOTAL				9,239,187

All activities subject to Panel approval in IPCC-67

* Regional/local events

Intergovernmental Panel on Climate Change
List of Member Countries and Organizations that made a contribution in 2025
(as of 21 October 2025)

Date Contribution Received	Contribution (Government or Other)	Amount of Contribution (CHF)
31-Dec-24	Cambodia (2024) ¹	213
11-Feb-25	Sweden	107,000
14-Feb-25	Peru	5,141
14-Feb-25	Trinidad and Tobago	9,150
14-Feb-25	UNFCCC	231,593
6-Mar-25	New Zealand	33,070
24-Mar-25	Canada (2024)	98,173
3-Apr-25	Trottier Family Foundation (DDC)	21,582
8-May-25	Pakistan	2,294
20-May-25	Korea, Rep. of	87,100
22-May-25	Canada	113,013
12-Jun-25	Norway	244,052
20-Jun-25	Australia (WGIII TSU, Malaysia)	96,219
30-Jun-25	WMO	125,000
16-Jul-25	Finland	27,897
16-Jul-25	Spain	185,981
29-Jul-25	Liechtenstein	50,000
6-Aug-25	United Kingdom	124,176
15-Aug-25	France	282,456
5-Sep-25	Japan	243,000
12-Sep-25	China	16,040
15-Sep-25	Sweden (WGIII TSU, Malaysia)	47,000
2-Oct-25	Denmark	627,065
2-Oct-25	New Zealand (WGIII TSU, Malaysia)	9,219
15-Oct-25	Azerbaijan	6,440
16-Oct-25	Luxembourg	27,919
21-Oct-25	Norway (WGIII TSU, Malaysia)	54,305
Total Contributions		2,875,098

¹ Received on 31 December 2024 but recorded in January 2025.

**List of In-kind Contributions/Activities
(as of 21 October 2025)**

(In the following cases no financial support was provided by the IPCC Trust Fund for hosting/meeting facilities/travel/salary/services)

Government/Institution	Activity	Type
China	Technical Support Unit – WG I (AR7)	Hosting
France	Technical Support Unit – WG I (AR7)	Hosting
Netherlands	Technical Support Unit – WG II (AR7)	Hosting
Singapore	Technical Support Unit – WG II (AR7)	Hosting
Malaysia	Technical Support Unit – WG III (AR7)	Hosting
United States of America	Technical Support Unit – WG III (AR7)	Hosting
Japan	Technical Support Unit – TFI (AR7)	Hosting
Pakistan	Technical Support Unit – TFI (AR7)	Hosting
Germany	Technical Support Unit – WG III	Hosting
Luxembourg	Technical Support Unit – WG III	Hosting
Germany	IPCC Data Distribution Centre	Hosting
Spain	IPCC Data Distribution Centre	Hosting
United Kingdom	IPCC Data Distribution Centre	Hosting
United States of America	IPCC Data Distribution Centre	Hosting
WMO	IPCC Secretariat Office Facilities	Hosting
United Kingdom	Office of the IPCC Chair	Hosting
China	62 nd Session of the IPCC, Hangzhou, China (24-28 February 2025)	Meeting facilities
Japan	LAM 1 – SR Cities, Osaka, Japan (10-14 March 2025)	Meeting facilities
Spain	TFI – LAM 1 – SLCF Methodology Report, and 38 th Session of the Task Force Bureau, Bilbao, Spain (24-26 March 2025)	Meeting facilities
Norway	TFI – LAM 1 – SLCF Methodology Report, and 38 th Session of the Task Force Bureau, Bilbao, Spain (24-26 March 2025)	DC/EIT travel
WMO	69 th Session of the IPCC Bureau, Geneva, Switzerland (30 June - 2 July 2025)	Meeting facilities
Kenya	LAM 2 – SR Cities, Mombasa, Kenya (21-25 July 2025)	Meeting facilities
Canada	GAT – Expert Meeting – GDEI, Geneva, Switzerland (23-25 September 2025)	Co-Hosting
WMO	GAT – Expert Meeting – GDEI, Geneva, Switzerland (23-25 September 2025)	Meeting facilities
Türkiye	TFI – LAM 2 – SLCF Methodology Report, Istanbul, Türkiye (6-9 October 2025)	Meeting facilities
Norway	TFI – LAM 2 – SLCF Methodology Report, Istanbul, Türkiye (6-9 October 2025)	DC/EIT travel
Peru	63 rd Session of the IPCC, Lima, Peru (27-30 October 2025)	Meeting facilities

Germany	4 Chapter Scientists for the AR7 Working Groups and the SR Cities	Salary and travel
WMO	Post of Secretary of the IPCC	Salary
UNEP	Post of Deputy Secretary of the IPCC	Salary
China	Secondment of a JPO to the IPCC Secretariat	Salary
WMO	In-Kind Administrative Support Services	Services

Decision IPCC-LXIII-6. Scoping of the Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture Utilization and Storage – Outline of the Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture Utilization and Storage – Work plan for the Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture Utilization and Storage including schedule and budget.

Document: IPCC-LXIII/Doc.8. Rev.1

The Intergovernmental Panel on Climate Change at its Sixty-third Session decides:

- (1) To prepare a Methodology Report with the title “2027 IPCC Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture, Utilization, and Storage for National Greenhouse Gas Inventories (Additional guidance)”;
- (2) To agree on the Terms of Reference for the production of the Methodology Report as contained in Annex 1, the Table of Contents as contained in Annex 2, the Instructions to Experts and Authors as contained in Annex 3, and the Workplan as contained in Annex 4, each annex as attached in this document;
- (3) That the budget for production of the Methodology Report is as contained in Decision IPCC-LXIII-5 on the IPCC Trust Fund Programme and Budget;
- (4) To hold an Expert Meeting on alkalinity enhancement and direct ocean capture co-organised by the TFI and the three IPCC Working Groups;
- (5) To update and add as needed to “2027 IPCC Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture, Utilization, and Storage for National Greenhouse Gas Inventories (Additional guidance)” during the eighth assessment cycle.

2027 IPCC Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture, Utilization, and Storage for National Greenhouse Gas Inventories (Additional guidance)

The reference for the National Greenhouse Gas Inventories includes the following three methodological reports:

- *2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines)*
 - *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (Wetlands Supplement)*
 - *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2019 Refinement)*.
-

Background

1. At the 60th Session (IPCC-60) held in January 2024 (Istanbul, Türkiye) the IPCC decided that the Task Force on National Greenhouse Gas Inventories (TFI) will hold an Expert Meeting on Carbon Dioxide Removal Technologies, Carbon Capture Utilization and Storage and provide a Methodology Report on these by the end of 2027 (Decision IPCC-LX- 9).
2. IPCC TFI held the Expert Meeting in July 2024 (Vienna, Austria) and the Scoping Meeting in October 2024 (Copenhagen, Denmark). These meetings considered Carbon Dioxide Removal (CDR) methods mentioned in the AR6 WGIII Report as a starting point for discussion and noted that several CDR activities have been already covered by the existing IPCC Guidelines.
3. The Scoping Meeting produced the draft Table of Contents of the new Methodology Report, which is outlined in Annex 2.

Scope

4. The IPCC Guidelines already cover issues related to Afforestation/Reforestation, Soil carbon sequestration in croplands and grasslands, Peatlands and coastal wetland restoration, Agroforestry, Improved Forest Management, Biochar amendments, Carbon Capture and Storage from process gases.
5. The aim of the new Methodology Report is to provide an updated and sound scientific basis for supporting the preparation and continuous improvement of national greenhouse gas inventories in relation to estimation and reporting of carbon dioxide removal technologies, carbon capture, utilization and storage. In order to achieve the overall aim, the new Methodology report will:
 - provide new methodological guidance for carbon dioxide removal technologies, carbon capture, utilization, and storage only where currently there are gaps in the existing guidelines or where new removal technologies have emerged that could provide scientifically sound and empirically robust methods, activity data, removal factors and other parameters;
 - provide, where needed, additional guidance and information of the existing guidance in the *2006 IPCC Guidelines* in relation to carbon dioxide removal technologies, carbon capture, utilization and storage.
6. This work will not revise the *2006 IPCC Guidelines*, but will provide new and additional guidance for the *2006 IPCC Guidelines* where gaps or out-of-date science have been identified. The Methodology Report will not replace the *2006 IPCC Guidelines*, but will be used in conjunction with the *2006 IPCC Guidelines*.
7. National inventories should include greenhouse gas emissions and removals taking place within national territory and offshore areas over which the country has jurisdiction (*2006 IPCC Guidelines, Volume I, Chapter 8.2.1*).

Approach

8. The result of this work will be an IPCC Methodology Report “*2027 IPCC Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture, Utilization, and Storage for National Greenhouse Gas Inventories (Additional guidance)*”.
9. The authors will follow Annex 3 “Instructions to Experts and Authors” to ensure a consistent and coherent approach across all the volumes or chapters, including the use of common terminology.
10. Annex 4 provides the timetable for this task. Literature will be considered up to a cut-off date at the start of the Government/Expert Review.

2027 IPCC Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture, Utilization, and Storage for National Greenhouse Gas Inventories (Additional guidance)

Introductory Note

2027 IPCC Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture, Utilization, and Storage for National Greenhouse Gas Inventories (Additional guidance) will be a single Methodology Report comprising an Overview Chapter and six following the format of the *2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines)*.

Overview Chapter

Volume 1: General Guidance and Reporting

Volume 2: Energy

Volume 3: Industrial Processes and Product Use

Volume 4: Agriculture, Forestry and Other Land Use

Volume 5: Waste

Volume 6: Carbon Dioxide Capture, Removal, Transport, Utilization and Storage

The structure of the Methodology Report is the same as that of the *2006 IPCC Guidelines* so as to make it easier for inventory compilers to use this Methodology Report with the *2006 IPCC Guidelines*.

For those Chapters where additional or new guidance is expected, a description is provided below. Also, authors should develop modifications for Chapters, if deemed necessary to ensure consistency with the additional or new guidance made in the other Chapters.

In addition, authors should develop new Worksheets, where necessary.

Overview Chapter

Glossary

Volume 1: General Guidance and Reporting

Chapter 1 of the 2019 Refinement to the 2006 IPCC Guidelines - Introduction

- Additional guidance to ensure consistency between the new or additional guidance with the *2006 IPCC Guidelines*

Chapter 4 of the 2019 Refinement to the 2006 IPCC Guidelines - Methodological Choice and Identification of Key Categories

- Additional guidance to ensure consistency between the new or additional guidance with the *2006 IPCC Guidelines* based on the new/additional guidance

Chapter 8 of the 2019 Refinement to the 2006 IPCC Guidelines - Reporting Guidance and Tables

- Additional guidance in relation to categorization sources/sinks. Provide reporting tables, clarifying that the CO₂ emissions are adjusted by CO₂ capture (negative quantities) to derive net CO₂, explanations to reporting tables

Volume 2: Energy

Chapters 2 and 3 of the 2006 IPCC Guidelines - Stationary Combustion and Mobile Combustion

- Placeholder: Depending on the decisions made in relation to CCU, there might be a need for additional guidance in these chapters.

Chapter 4 of the 2019 Refinement to the 2006 IPCC Guidelines - Fugitive Emissions

- Clarification in relation to the emissions from transport, injection and sequestering of CO₂ in relation to enhanced oil, gas, and coal-bed methane recovery
- Placeholder: Depending on the decisions made in relation to CCU, there might be a need for additional guidance in this chapter

Volume 3: Industrial Processes and Product Use

Chapter 3 of the 2019 Refinement of the 2006 IPCC Guidelines - Chemical Industry

- Guidance in relation to the production of products containing or derived from captured CO₂.

Chapter 9 of the 2006 IPCC Guidelines - Consumption and Use of CO₂ containing products

- Placeholder: Depending on the decisions made in relation to CCU (in Volume 6), there might be a need for additional guidance on emissions arising from the consumption and use of CO₂ containing products

Chapter 10 of the 2006 IPCC Guidelines - Carbonation of cement and lime-based structures

- Covering all life stages. Excluding enforced carbonation (covered in Volume 6)

Volume 4: Agriculture, Forestry and Other Land Use

Chapters 2, 4, 5, 6, 7, 8 and 9 of the 2019 Refinement to the 2006 IPCC Guidelines - Generic Methodologies Applicable to Multiple Land-Use Categories; Forest Land; Cropland; Grassland; Wetlands; Settlements; Other Land

- Enhancing soil carbon sinks in croplands and grasslands for CDR: Add reference stocks and default factors for soil organic carbon estimates.
- Enhancing soil carbon sinks on managed land for CDR: Add guidance on enhanced weathering into soil inorganic carbon pool and relationship to soil organic carbon pool; add guidance for biochar application in soils.

Chapter 4 of the 2019 Refinement to the 2006 IPCC Guidelines - Cropland [Rice Cultivation]

- Enhancement of soil carbon for biochar amendments: Add default factors to estimate impact of biochar amendments on methane emissions from rice cultivation, and provide additional guidance.

Chapter 11 of the 2019 Refinement to the 2006 IPCC Guidelines - N₂O Emissions from Managed Soils, and CO₂ Emissions from Lime and Urea Application

- Enhancement of soil carbon for biochar amendments: Add default factors to estimate impact of biochar amendments on soil N₂O emissions from N inputs in managed soils, and provide additional guidance.

Chapters 2, 3, 4 of the Wetlands Supplement

- Enhancement of carbon stocks in organic soils for CDR: new guidance on carbon export from organic soils.

Chapter 4 of the Wetlands Supplement - Coastal Wetlands

- Enhancement of carbon sinks for CDR: Additional factors in relation to mangroves, tidal marshes and seagrass in coastal waters.
- New guidance on other coastal wetlands types not in previous IPCC Guidelines.

Chapter 12 of the 2019 Refinement to the 2006 IPCC Guidelines – HWP and other durable biomass products

- Additional guidance in relation to other durable biomass products for CDR: Develop factors for other durable products (e.g., biochar products) and guidance for higher tier methods, and transfers from other pools.

Volume 5: Waste

Chapter 5 of the 2006 IPCC Guidelines - Incineration and Open Burning of Waste

- Placeholder: Depending on the decisions made in relation to CCU (in volume 6), there might be a need for additional guidance on emissions arising from incineration of CO₂ containing products

Volume 6 Carbon Dioxide Capture, Removal, Transport, Utilization, and Storage

Chapter 1. Introduction

The basic concepts and terms and definitions.

Chapter 2. Carbon Dioxide Capture from combustion and process gases

Chapter 3. Direct Air Capture

Chapter 4. Carbon Dioxide Utilization

- Possible ways of CO₂ utilization
- Tracking of captured/removed CO₂, national carbon dioxide balance matrix (CO₂ captured/removed vs. use and life time).

Chapter 5. Carbon Dioxide Transport

- Additional guidance in relation to all sub-categories (CO₂ transport (ship/rail/pipeline/truck) and cross-border transfers)

Chapter 6. Carbon Dioxide Injection and Geological Storage

- Additional guidance in relation to all sub-categories (injection, storage, other)
- Mineralisation (subsurface)

Chapter 7. CO₂ removal through direct capture of CO₂ from water already processed by inland and coastal facilities

2027 IPCC Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture, Utilization, and Storage for National Greenhouse Gas Inventories (Additional guidance)

1. Work on a Methodology Report will be guided by the IPCC procedures for the Preparation, Review, Acceptance, Adoption, Approval and Publication of the IPCC Reports (Appendix A to the Principles Governing the IPCC Work²). This document is consistent with the IPCC procedures and applies to all experts engaged in the production of a new Methodology Report.
2. In this document the term “experts” covers Co-Chairs, members of the TFI Bureau (TFB), technical support unit (TSU) Staff, Coordinating Lead Authors (CLAs), Lead Authors (LAs), and Review Editors (REs) as well as Contributing Authors (CAs) and Expert Reviewers.
3. These notes are intended as guidance to experts contributing to a new Methodology Report. They are intended to ensure a consistent and coherent approach across all the volumes or chapters and to promote common terms used.

Confidentiality

4. Authors meetings are closed meetings. Any discussions are confidential except for any published report of the meeting. This is to ensure that experts participating in the meetings can express themselves and discuss issues freely and openly.
5. The IPCC considers the drafts of a new Methodology Report, prior to acceptance, to be pre-decisional, provided in confidence to reviewers, and not for public distribution, quotation or citation.
6. The TSU will keep drafts of a new Methodology Report sent for the IPCC review, any comments received on them and the responses by authors. All written expert and government review comments will be made available to reviewers on request. These will be made available on the IPCC website as soon as possible after the acceptance by the Panel and the finalisation of the report.

Conflict of Interest

7. It is important that all experts involved in the IPCC activities avoid any conflict of interest or the direct and substantial appearance of a conflict of interest. It is recognised that many experts in Emission Inventories are employed by, or funded by, parties with some interest in the outcome (e.g. most inventory compilers are funded by national governments or industry). It is therefore important to be open and transparent about financial and other interests.
8. The IPCC implements a Conflict of Interest (COI) Policy³ that applies to all individuals directly involved in the preparation of IPCC reports, including senior IPCC leadership (IPCC Chair and Vice-Chairs), other Bureau and Task Force Bureau members, authors with responsibilities for report content (CLAs, LAs), Review Editors and staff of the TSU. The overall purpose of this policy is to protect the legitimacy, integrity, trust, and credibility of the IPCC and of those directly involved in the preparation of reports, and its activities.
9. Before an individual is appointed as a CLA, LA and RE for a new Methodology Report, the TFB will request the individual to complete a Conflict of Interest Disclosure Form (“the COI Form”) contained in Annex B to the COI Policy which will be submitted to the TSU. The TFB will then evaluate the form to determine whether the individual has a conflict of interest that cannot be resolved.

² <https://www.ipcc.ch/site/assets/uploads/2018/09/ipcc-principles-appendix-a-final.pdf>

³ <https://www.ipcc.ch/site/assets/uploads/2018/09/ipcc-conflict-of-interest-2016.pdf>

10. All CLAs, LAs and REs will inform the TSU annually of any changes in the information provided in their previously submitted COI Form. The TFB will evaluate the revised information.
11. All COI Forms and any records of the deliberations of the COI Expert Advisory Group, deliberations and/or decisions of the COI Committee in relation to conflict of interest issues in respect of specific individuals and any information disclosed by individuals for the purposes of the COI Policy will be transferred to the Secretariat after they have been reviewed and will be securely archived by the Secretariat and retained for a period of five years after the end of the assessment cycle during which the relevant individual contributed, after which the information will be destroyed. Subject to requirement to notify the existence of a conflict of interest to others, the information referred to above will be considered confidential and will not be used for any purpose other than consideration of conflict of interest issues under these Implementation Procedures without the express consent of the individual providing the information.

Responsibilities of authors and other experts

12. The role of authors is to impartially assess ALL the available literature and to describe the best methodologies available. Experts should be impartial. Authors should review all literature available up to a cut-off date to be decided by the TFB as part of the agreed work plan.
13. After drafting the report authors will be asked to consider all comments received on the drafts and to adjust and revise the text accordingly. They should document their responses. If they do not accept a comment this should be explained. Review Editors should check whether the accepted changes were fully incorporated in the revised text.
14. Responsibilities and duties of authors and other experts are currently explained in more detail in the IPCC procedures for the Preparation, Review, Acceptance, Adoption, Approval and Publication of the IPCC Reports (Appendix A to the Principles Governing the IPCC Work).

Literature

15. The use of literature should be open and transparent. In the drafting process, emphasis is to be placed on the assurance of the quality of all cited literature. Priority should be given to peer-reviewed scientific, technical and socio-economic literature if available.
16. It is recognized that other sources provide crucial information for IPCC Reports. These sources may include reports from governments, industry, and research institutions, international and other organizations, or conference proceedings. Use of this literature brings with it an extra responsibility for the author teams to ensure the quality and validity of cited sources and information as well as providing an electronic copy. In general, newspapers and magazines are not valid sources of scientific information. Blogs, social networking sites, and broadcast media are not acceptable sources of information for IPCC Reports. Personal communications of scientific results are also not acceptable sources.
17. For any sources written in a language other than English, an executive summary or abstract in English is required.
18. All sources will be integrated into a reference section of an IPCC Report.
19. For more details of the procedure on the use and referencing of literature in IPCC Reports, see Annex 2 to the IPCC procedures for the Preparation, Review, Acceptance, Adoption, Approval and Publication of the IPCC Reports (Appendix A to the Principles Governing the IPCC Work).

Principles of the new Methodology Report

20. Guidance in the new Methodology Report should be understandable and easy to implement. Lead authors should make efforts to balance the need to produce a comprehensive self-contained report with reasonable limits to the length and detail of the guidance. In particular:
- ✓ The guidance should follow a cookbook approach by providing clear step by step instructions. It should not try to be a textbook. Detailed background information on emission processes, scientific studies, etc. is generally referenced rather than included.
 - ✓ Lead authors must consider relevant scientific developments and national methods used by countries in their inventories.
 - ✓ Authors should bear in mind that the target audience is a diverse group of readers who are primarily concerned with the elaboration of national inventories. For this reason, the emphasis should be on ensuring clear communication of practical and understandable guidance.
21. This work aims to cover all IPCC inventory sectors with categories where the science is considered to be robust enough to provide guidance for a Tier 1 methodological approach and have a relative⁴ contribution to the global/regional emissions of the species, using the significance and prioritization criteria as shown below.

Significance and prioritization criteria

- Significance of the category and the species within the sector on a global/regional scale. Categories significant only for a limited number of particular countries, currently or in the foreseeable future, may not meet this criterion.
- Sufficient data availability and maturity of scientific advances to provide a basis for methodological development, including:
 - Ability to develop default emission and removal factors and parameters
 - Feasibility of obtaining the necessary data to implement the methods

22. The general structure, approach and definitions used in the *2006 IPCC Guidelines*, such as tiered approach and decision trees will be followed. Annexes may be used where necessary to contain additional data to support the methodologies, although large numbers of annexes will probably not be necessary. Appendices are not ruled out where scientific knowledge is insufficient for countries to agree full methodologies, but please avoid as far as possible work on areas that have to be relegated to an appendix. Appendices should be sub-titled by “Basis for future methodological development”.
23. The general structure should include the following elements: Methodological issues (Choice of method, Choice of emission factors, Choice of activity data), Completeness, Developing a consistent time series and Recalculations, Uncertainty assessment, Quality Assurance/Quality Control (QA/QC) and Reporting and Documentation, Worksheets.
24. Only Chapters identified in the draft Table of Contents are to be additional or new guidance should be provided, as proposed. However, authors should develop modifications for those Chapters, if deemed necessary to ensure consistency with additional or new guidance made in the other Chapters.

⁴ i.e. not insignificant

Definitions

25. The following terms will be used throughout the new Methodology Report, and it is essential that all Lead Authors have a common understanding of their meaning and relevance.
26. Tier A - Tier refers to a description of the overall complexity of a methodology and its data requirements. Higher tier methods are generally more complex and data-intensive than lower tier methods. The guidance for each category should contain at least a Tier 1 method, and in many cases there will be a Tier 2 and Tier 3. The general expectation is that Tier 2 and Tier 3 methods will both be consistent with good practice guidance for key categories, although in some cases Tier 3 will be preferred.
27. Tier 1 approaches are simple methods that can be applied by all countries in all circumstances. Default values for the emission and removal factors and any other parameters needed must be supplied (see below for documentation needed).
28. Tier 2 methods should in principle follow the same methodological approach as Tier 1 but allow for higher resolution country specific emission and removal factors and activity data. In some categories, this may not be the case. These methods should better replicate the parameters affecting the emissions. Country specific emission and removal factors are needed and possibly more parameters will also be needed.
29. Tier 3 methods give flexibility either for country specific methods including modelling or direct measurement approaches, or for a higher level of disaggregation, or both. This is a more complex method, often involving a model. This will replicate many features of nation emissions and require specific parameters for each country.
30. Default information is data that is appropriate for use where there is no better detailed, country specific information. If appropriate, authors may specify regional default data. Users of the guidelines should be encouraged to try to find better country specific data. Default data are appropriate for Tier 1 methods and the guidelines should contain all the default values needed. Emission and removal factors for higher tiers need not be specified because it is a function of higher tier methods to find data reflecting national circumstances. Default information is included primarily to provide users with a starting point from which they can develop their own national assumptions and data. Indeed, national assumptions and data are always preferred because the default assumptions and data may not always be appropriate for specific national contexts. In general, therefore, default assumptions and data should be used only when national assumptions and data are not available.
31. Decision Trees. A decision tree is a graphical tool to assist countries in selecting from the IPCC methods.
32. Key categories are inventory categories which individually, or as a group of categories (for which a common method, emission and removal factors and activity data are applied) are prioritised within the national inventory system because their estimates have a significant influence on a country's total inventory in terms of the absolute level, the trend, or the level of uncertainty in emissions. Key category analysis should be performed species by species. The appropriate threshold to define key categories should be considered by authors.
33. Sector refers to the sectors of the guidelines, these are divided into categories and subcategories.
 - ✓ Sector 1
 - ✓ Category 1.A
 - ✓ Sub-category 1st order 1.A.1
 - ✓ Sub-category 2nd order 1.A.1.a
 - ✓ Sub-category 3rd order, 1.A.1.a.i
34. Worksheets. These will be printed versions of spreadsheet tables, that, when filled in, enable the user to perform the emission estimation. They should contain all the calculations and written text with any formulae. Additional worksheets may be required to compile the results of the worksheets into the reporting tables.

35. Reporting Tables are tables that present the calculated emission inventory and sufficient detail of other data used to prepare the inventories for others to understand the emission estimates.
36. Usage:
- ✓ “Good Practice” is defined in the 2019 Refinement as follows: “a key concept for inventory compilers to follow in preparing national greenhouse gas inventories. The key concept does not change in the 2019 Refinement. The term “good practice” has been defined, since 2000 when this concept was introduced, as “a set of procedures intended to ensure that greenhouse gas inventories are accurate in the sense that they are systematically neither over- nor underestimates so far as can be judged, and that uncertainties are reduced so far as practicable”. This definition has gained general acceptance amongst countries as the basis for inventory development and its centrality has been retained for the 2019 Refinement. Certain terms in the definition have been updated based on feedback from the statistics community, such that this definition can be also understood as “a set of procedures intended to ensure that greenhouse gas inventories are accurate in the sense that they are systematically neither over- nor underestimates so far as can be judged, and that they are precise so far as practicable” in the context of refinement of Chapter 3 of Volume 1”. The concept mentioned above should be applied to all species dealt with in this report.
 - ✓ Good Practice covers choice of estimation methods appropriate to national circumstances, quality assurance and quality control at the national level, quantification of uncertainties and data archiving and reporting to promote transparency.
 - ✓ “Shall” should not be used. Either say “Good Practice is...” or say what needs to be done or what should be done. These all indicate what needs to be done to comply with Good Practice.
 - ✓ “Be encouraged to” indicates a step or activity that will lead to higher quality inventory but are not required for ensuring consistency with the IPCC Guidelines.
 - ✓ “Recommend” should not be used. In the GPG2000, the word “recommend” was avoided and “Suggested” was used instead.
 - ✓ “Inventory agency” is the body responsible for actually compiling the inventory, perhaps from contributions from a number of other bodies while “inventory compiler” is the person actually compiling the inventory,

Reporting Tables and worksheets

37. Worksheets reflect the application of tier 1 methods only, due to the varied implementation of higher tier methods by countries. Lead authors should stress the importance of documentation and archiving of particular types of information of relevance to each category, although advice may be given of what needs to be reported for transparency at higher Tiers.

Emission and Removal factors and methods

38. Authors should provide default emission or removal factors and parameters. In doing this work, they should draw on the widest possible range of available literature, scientific articles and country reports. Methods and default emission factors for carbon dioxide removal should be based upon sufficient data such as observational validation data for relevant elements of the process. Where default values for emission and removal factors or ancillary parameters cannot be provided for a robust methodology set to be a Tier 1 method, authors may decide to add the methodology as a higher tier method rather than Tier 1 setting the good practice for inventory compiler to use their own data.
39. All data reported in the guidance as IPCC default values shall be justified by authors by providing TSU with all background data used, and the source of those data, as well as all information on the method applied to derive the default values from the background data, as needed to replicate the calculation, in a timely manner

as drafts are being developed. Background data should be compiled in the attached form (Appendix 1) to facilitate the upload in the Emission Factor Database (EFDB). Lead authors should be familiar with the draft cross-cutting guidance on data collection in Volume 1 and the guidance on cross-cutting issues in this note on terms, data types, data demands of methods and stratification requirements. Default data should also meet the EFDB evaluation criteria – robustness, documentation, and applicability⁵.

40. Authors should develop guidance to provide additional information on rationale, references and background information on parameters used for estimating of default values where such information is available (similar to Annexes in Chapter 10, Volume 4, of the 2019 Refinement), with a view to enhancing the transparency and applicability of default values presented in the new Methodology Report.
41. Single IPCC default emission and removal factors might not be ideal for any one country, but they can be recommended provided that regional factors are unavailable, and the defaults are representative of typical conditions as far as can be determined. It may be necessary or appropriate to provide a range of default emission and removal factors along with clear guidance about how countries should select from within the range. Lead authors may also provide multiple default emission and removal factors, disaggregated by region, technology (including abatement and removal technologies), or another relevant classification scheme.
42. It is important to provide more default emission and removal factors that reflect the unique conditions of developing countries. In general, default emission and removal factors for Tier 1 should represent emissions without category-specific mitigation measures, as well as relevant abatement technologies for which data are available.
43. Users of the guidelines should be encouraged to develop and use country specific data. Emission and removal factors for higher tiers need not be specified in the Methodology Report. Default information is included primarily to provide users with a starting point from which they can develop their own national assumptions and data. Indeed, national assumptions and data are always preferred because the default assumptions and data may not always be appropriate for specific national contexts.
44. The basic principle concerning national methods will continue to apply – countries are encouraged to use national data or methods so long as they are consistent with the IPCC Guidelines.
45. National GHG inventories estimate carbon capture utilization and storage as congruent with the *2006 IPCC Guidelines*
46. Authors should provide guidance to ensure consistency in treatment by the exporting and the importing country on reporting of national total net emission when imported biomass is used in BECCS, biochar and other biomass products as well as for imported captured CO₂ stocks and derived products taking into consideration avoidance of double counting and completeness across inventories of importing and exporting country, including when transiting.
47. Authors should exclude natural background when estimating GHG emissions/removals that are not carbon stock changes in C pools listed in Table 1.1 (Volume 4, AFOLU) and in the HWP pool.
48. Methods and emission factors for CO₂ removal through direct capture of CO₂ from water already processed by inland and coastal facilities and enhanced weathering should consider downstream storage of inorganic carbon.
49. For methods on CO₂ removal through direct capture of CO₂ from water already processed by inland and coastal facilities and enhanced weathering, authors should provide EF that estimate the consequential removal of CO₂ from the atmosphere
50. Examples of coastal wetland systems that have not yet been considered in previous IPCC Guidelines are Tidal flats; tidal marsh-coastal sabkhas, seaweeds (macro-algae), subtidal sediments, and clarify definitions with consideration of Ramsar classes.

⁵ EFDB evaluation criteria: https://www.ipcc-nggip.iges.or.jp/EFDB/documents/EFDB_criteria.pdf

51. Coastal and inland wetlands guidance may consider management for CDR including restoration and other activities.
52. Enhanced weathering may include adding rock, mine tailings and other alkaline materials to land.
53. Consider including carbonate lime additions in soils in the additional guidance on enhanced weathering for soil inorganic carbon.

Boxes

54. Consistent with the 2006 IPCC Guidelines, the new Methodology Report may contain Boxes, which should not be used to provide methodological guidance, but for information purposes or providing examples.

Decision trees

55. Consistent with the format and structure of the *2006 IPCC Guidelines*, the new Methodology Report may contain a decision tree for some sub-categories to assist countries in selecting from the IPCC methods. These decision trees link the choice of IPCC methods to national circumstances via specific questions about data availability and status as a key category⁶.
56. To ensure consistency in decision tree logic and format across categories, lead authors should adhere to the following requirements:
 - ✓ The decision trees should be based on a series of questions with clear yes/no answers, and two subsequent branches along yes/no paths.
 - ✓ The decision trees should start with assessing data availability for the highest tier method, and then direct countries step-wise towards lower tier methods if activity data, emission and removal factors or other parameters are not available.
 - ✓ The decision tree should indicate the lowest tier method that is judged to be appropriate for estimating emissions from a key category.
 - ✓ If data are not available for the method referred to in c, the 'No' response should direct the reader to the question "Is this a key category?" If the answer to this is 'Yes', the decision tree should recommend that the country collect the necessary data to implement a higher tier method. If the answer is 'No', then the decision tree can recommend a lower tier method. There is no need to deal with the case for a key category where a country does not have the resources to gather additional data needed to implement higher Tier methods. This is dealt with in Volume 1 of the 2006 IPCC Guidelines.
 - ✓ The branches of the decision trees should end in 'out-boxes' that correspond to specific tiers identified in the guidance for that category and are labelled by Tier. Lead authors may also recommend out-boxes for hybrid tiers.
 - ✓ Lead authors may develop separate decision trees for different sub-categories. Alternatively, they may include decision tree options for selecting different tiers for different sub-categories. This second option is appropriate if it is advantageous to recommend a higher tier method only for significant sub-categories rather than for the entire category. Decision trees that use the 'significance' criterion must include the "25-30% rule"⁷, as reassessed by authors.
57. Additional Formatting Guidelines (see example):
 - ✓ Decision trees should be drafted in separate files. The TSU will integrate these files into the main text at a later date.

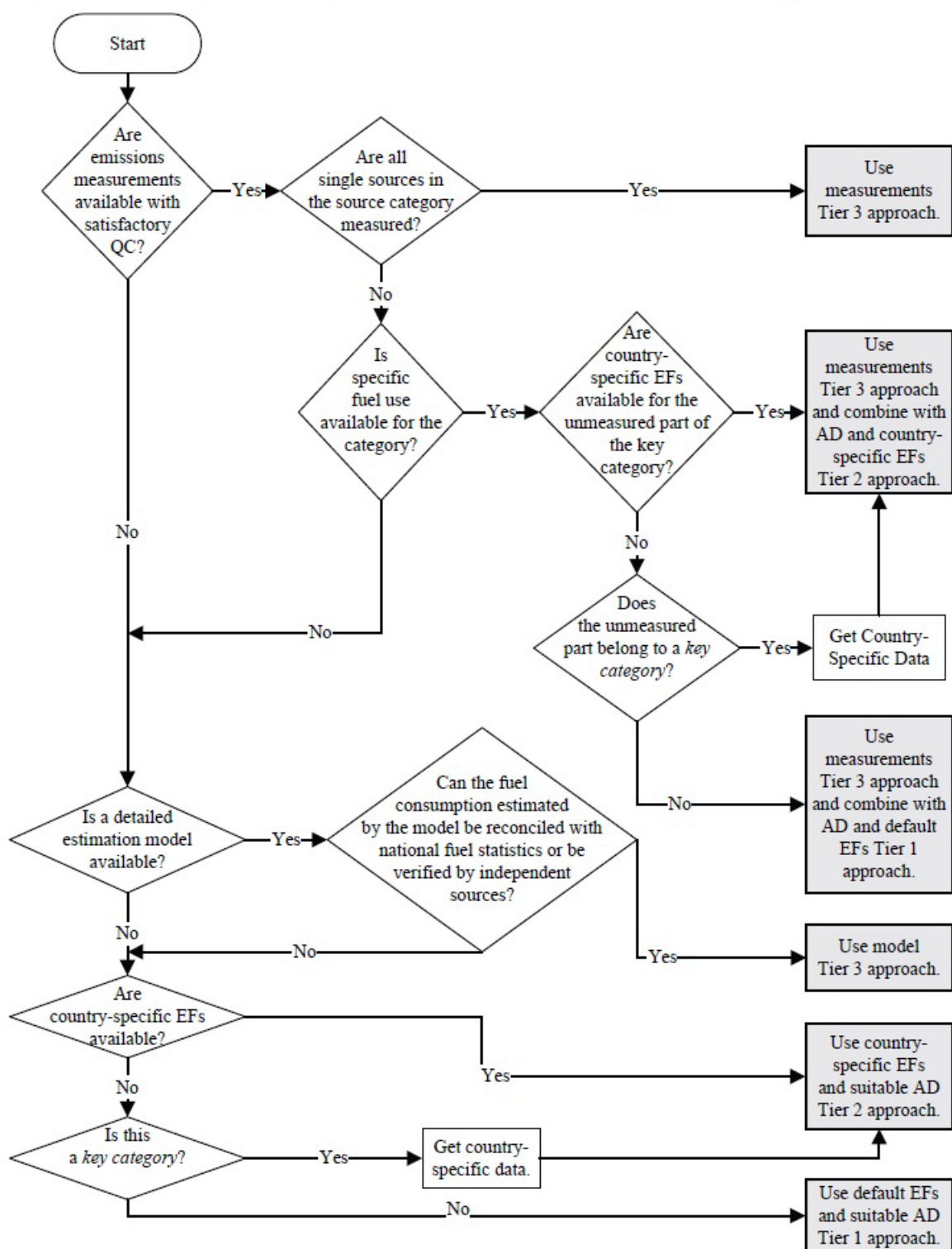
⁶ The most appropriate choice of estimation method (or tier) may also depend on national circumstances, including the availability of resources and advice on this will be given in the cross-cutting volume.

⁷ As defined in the 2019 Refinement (i.e., a significant sub-category is one that makes up more than 25-30% of emissions from a category).

- ✓ Decision trees should NOT ask the question: "Does this source occur in the country?" This is because decision trees will only be used for sources which occur.
- ✓ There should be a "START" box.
- ✓ "Diamonds" should be used for questions/decisions.
- ✓ "Squares" should be used for all other information.
- ✓ The out-boxes should be individually numbered.
- ✓ The text font should be Times New Roman 10pt.
- ✓ Text should be centered within the boxes.

Example. Decision tree for estimating emissions from fuel combustion

Figure 1.2 Generalised decision tree for estimating emissions from fuel combustion



Note: See Volume 1 Chapter 4, "Methodological Choice and Key Categories" (noting section 4.1.2 on limited resources) for discussion of *key categories* and use of decision trees.

Units

58. SI units shall be used throughout: in text, equations, worksheets and tables. Emissions have to be expressed in mass units and units have to be used consistently within each sector. When similar activity data is used for different sectors same units need to be used (CLAs have to take care about such harmonisation). Conversion factors have to be provided (for example to estimate N₂O from N₂). Where input data available may not be in SI units conversions should be provided.
59. Standard abbreviations for units and chemical compounds are given in Appendix 2.

Appendix 1. Emission and Removal Factors and Parameters Documentation

This form should be used to document all emission and removal factors and parameters used in the new Methodology Report. This gives the minimum information that should be considered by the authors.

Author (the author is the CLA/LA/CA who writes the relevant section and proposes the data)	
IPCC Category	
Name of Emission and Removal Factor / Parameters	
Activity	
Species:	
Value:	
Unit:	
Uncertainty (as +/- % or 2.5 and 97.5 percentiles)	
Applicability (fill in as necessary, if data not generally applicable. Describe appropriate Technologies, Practices, Abatement Technologies, Region, and/or Regional Conditions)	
Source of data (chose one)	Measurement - Scientific Literature Other Measurement National Inventory Report Calculated Based on fuel quality Expert Judgement (attach the elicitation protocol)
Method of derivation of the value (e.g., arithmetic mean, weighted mean, adjustment of a literature data by expert judgment etc.	
Reference	
URL	
Abstract in English (if the abstract is in another language)	

Appendix 2 Units and Abbreviations

Abbreviations of, and how to spell, Species

CH ₄	Methane
N ₂ O	Nitrous oxide ⁸
CO ₂	Carbon dioxide
CO	Carbon monoxide
NO _x	Nitrogen oxides
NMVOCs	Non-methane volatile organic compounds
NH ₃	Ammonia
CFCs	Chlorofluorocarbons
HFCs	Hydrofluorocarbons
PFCs	Perfluorocarbons
SF ₆	Sulphur hexafluoride
CCl ₄	Carbon tetrachloride
C ₂ F ₆	Hexafluoroethane
CF ₄	Tetrafluoromethane
S	Sulphur
SO ₂	Sulphur Dioxide
BC	Black Carbon
OC	Organic Carbon
PM _x	Particulate Matter (x – microns)
H ₂	Hydrogen
EC	Elemental Carbon

Units and abbreviations

cubic metre	m ³
hectare	Ha
gram	g
gigagram	Gg
tonne	T
gigatonne	Gt

⁸ In the IUPAC N₂O is officially named “Dinitrogen Oxide”. However, “nitrous oxide” is widely used and understood in the emission inventory community and by the UNFCCC and so, to avoid confusion, will be used.

joule	J
degree Celsius	°C
calorie	Cal
year	Yr
capita	Cap
gallon	Gal
dry matter	Dm
atmosphere	atm

Prefixes and multiplication factors

Multiplication Factor	Abbreviation	Prefix	Symbol
1 000 000 000 000 000	10 ¹⁵	peta	P
1 000 000 000 000	10 ¹²	tera	T
1 000 000 000	10 ⁹	giga	G
1 000 000	10 ⁶	mega	M
1 000	10 ³	kilo	k
100	10 ²	hecto	h
10	10 ¹	deca	da
0.1	10 ⁻¹	deci	d
0.01	10 ⁻²	centi	c
0.001	10 ⁻³	milli	m
0.000 001	10 ⁻⁶	micro	μ

Standard equivalents

1 tonne of oil equivalent (toe)	1 x 10 ¹⁰ calories
10 ³ toe	41.868 TJ
1 short ton	0.9072 tonne
1 tonne	1.1023 short tons
1 tonne	1 megagram
1 kilotonne	1 gigagram
1 megatonne	1 teragram
1 gigatonne	1 petagram
1 kilogram	2.2046 lbs
1 hectare	104 m ²
1 calorie ^{IT}	4.1868 joule
1 atmosphere	101.325 kPa

2027 IPCC Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture, Utilization, and Storage for National Greenhouse Gas Inventories (Additional guidance)

Date	Action	Comments
October 2024	Scoping Meeting	Prepare ToR, ToC, Workplan and Guidance to authors
October 2024	TFB36 Meeting	Adoption of Outcomes of the Scoping Meeting and Submission to IPCC
2 nd half 2025	IPCC-63	IPCC Plenary approves ToR, ToC, Workplan and Guidance to authors
2 nd half 2025	Call for Nomination of Authors and Review Editors	IPCC invites nominations from governments and international organizations
2 nd half 2025	Establishment of the Steering Committee	TFB select members to join TFI Co-Chairs in the Steering Group <i>(to ensure consistency across all the volumes and continuity with the earlier IPCC inventory reports)</i>
1 st half of 2026	Selection of Coordinating Lead Authors, Lead Authors and Review Editors	Selection by TFB considering expertise and geographical and gender balance
1 st half of 2026	1 st Lead Author Meetings	LAM1 to develop zero order draft (ZOD)
2 nd half of 2026	Science Meeting	A small meeting of CLAs and some LAs to discuss specific issues that require intensive discussion to reinforce the writing process
2 nd half 2026	2 nd Lead Author Meeting	To develop first order draft (FOD) for review
2 nd half 2026 (7 weeks)	Expert Review	7 weeks review by experts
1 st half 2027	3 rd Lead Author Meeting	To consider comments and produce second order draft (SOD) for review
2 nd half 2027	Literature cut-off date (one week before SOD Review)	Peer-reviewed papers accepted by the cut-off date (even if not yet published) will be considered. Non-peer-reviewed documents which are made publicly available by the cut-off date.
Mid 2027 (7 weeks)	Government & Expert Review	7 weeks review by governments and experts
2 nd half 2027	4 th Lead Author Meeting	To consider comments and produce final draft (FD)
2 nd half 2027 (7 weeks)	Government Review	Distribute to governments for their consideration prior to approval (at least 4 weeks prior to the Panel)

2 nd half 2027	Adoption/acceptance by IPCC	Final draft submitted to IPCC Panel for adoption/acceptance
2 nd half 2027	Publication	Electronic means

Decision IPCC-LXIII-7 - Workplan for the Seventh Assessment Report

Document: IPCC-LXIII/Doc. 10

The Intergovernmental Panel on Climate Change, at its Sixty-Third Session, recalling the Decision IPCC-LXII-8 on Scoping of the IPCC Seventh Assessment Report (AR7) and noting the progress made in the development of the Working Groups' contributions to the Seventh Assessment Report, decides:

(1) To invite Working Groups to continue their work as indicated by the 2026 budget, as contained in the Decision IPCC-LXIII-5, by convening their second lead author meetings, as well as the third Working Group I lead author meeting in 2026.

(2) To defer further consideration of the workplan for the preparation of the Working Group contributions to the IPCC Seventh Assessment Report to future sessions.

Decision IPCC-LXIII-8. Approval of the Draft Report of the Sixty-first Session of the IPCC

Document: IPCC-LXIII/Doc. 3

The Intergovernmental Panel on Climate Change at its Sixty-third Session decides to defer the approval of the draft report of the Sixty-first Session of the IPCC to the Sixty-fourth Session of the IPCC.

Decision IPCC-LXIII-9. Approval of the Draft Report of the Sixty-second Session of the IPCC

Document: IPCC-LXIII/Doc. 9

The Intergovernmental Panel on Climate Change at its Sixty-third Session decides to defer the approval of the draft report of the Sixty-second Session of the IPCC to the Sixty-fourth Session of the IPCC.