

TFEIP 2025

WASTE

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AGENDA

- Introduction
- 2027 IPCC Methodology Report on Short Live Climate Forcers (SLCFs)
 - Introduction to the redaction process (*Céline Guéguen*)
 - 5B – Biological treatment (*Adriana SANABRIA GOMEZ*)
 - 5C – Waste incineration and Open burning (*Richard Claxton*)
 - Other sectors (*Céline*)

Coffey Break

- EMEP/EEA Guidebook Update
 - Description of the update process (*Chris Dore*)
 - Waste priority improvements list (*Céline*)
 - Discussion and validation of the priority list (***all participants***)
- On-going discussion regarding GHG emissions from Landfills (*Chris*)



2027 IPCC REPORT ON SLCF – WORK PLAN (1/3)

- **2019 : IPCC approved the Task Force on National GHG Inventories (TFI) to produce a methodology report on SLCFs** (at the 49th Session in Kyoto)
- **IPCC TFI carried out preparatory work during the AR6 cycle**
 - **Expert meeting 1 and 2 (October 2021):**
 - Plenary meetings : presentations of the EMEP/EEA methodology (*Kristina Saarinen*), the US EPA inventory of SLCFs, UNEP Atmospheric Brown Clouds Inventory Manual, the SLCF inventory in China, EDGAR (Monica Crippa), GAINS (*Zbigniew Klimont*)
 - Sectoral Breakout Groups : Energy, IPPU, AFOLU and **Waste**
 - **Expert meeting 3 (April 2022) :**
 - Plenary meetings : presentation of national methodologies – Norway (Julien Jabot), China, Indonesia, Chile, South Africa ; SLCFs in WG I and WG III AR6
 - Thematic Breakout Groups : SLCFs species (definition and relevance), General inventory issues, Data gaps
- **2024 : IPCC agreed to the outline of the Report** (at the 61th Session in Sofia - Decision IPCC-LXI-7) – Scope, Coverage and Draft table of content



2027 IPCC REPORT ON SLCF – WORK PLAN (2/3)

	Date	Action	Comments	
Selection of Authors	27 Jul-2 Aug 24	IPCC-61	IPCC Plenary approves ToR, ToC, Workplan and Guidance to authors	
	9 Aug- 13 Sep 24	Call for Nomination of Authors and Review Editors	IPCC invites nominations from governments and international organizations	
	Jan 2025	Selection of CLAs, Lead Authors and Review Editors	Selection by TFB considering expertise and geographical and gender balance	
Here we are	24-26 Mar 2025	1st Lead Author Meeting	LAM1 to develop zero order draft (ZOD)	ZOD
	13-17 Oct 2025	2nd Lead Author Meeting	To develop first order draft (FOD) for review	FOD
REVIEW of the FOD	29 Dec- 20 Feb 26 (8 weeks)	Expert Review	8 weeks review by experts	
	1st half 2026	Science Meeting	A small meeting of CLAs and some LAs to discuss specific issues that require intensive discussion to reinforce the writing process	
	30 Mar - 3 Apr 26	3rd Lead Author Meeting	To consider comments and produce second order draft (SOD) for review	SOD
Literature cut-off date	24 Aug 2026	Literature cut-off date (one week before SOD Review)	Peer-reviewed papers accepted by the cut-off date will be considered. Non-peer-reviewed documents which are made publicly available by the cut-off date.	
REVIEW of the SOD	31 Aug-26 Oct 26 (8 weeks)	Government & Expert Review	8 weeks review by governments and experts	
	7-10 Dec 2026	4th Lead Author Meeting	To consider comments and produce final draft (FD)	FD
	29 Mar-24 May 27	Government Review	Distribute to governments for their consideration prior to approval (at least 4 weeks prior to the Panel)	
	Jun/Jul 2027	Adoption/acceptance by IPCC	Final draft submitted to IPCC Panel for adoption/acceptance	
	Jun/Jul 2027	Publication	Electronic means	



2027 IPCC REPORT ON SLCF – AUTHORS (I/I)

- **The complete process lasts almost 8 years between the idea to the publication**
- **Composition of the team**
 - 10 Coordinating Lead authors (2 on Waste)
 - 102 Lead authors (16 on Volume 5.Waste)
 - 10 Review Editor (2 on Waste)
 - 6 Technical Support Unit -TSU (1 on Waste)
- **IPCC Code of conduct, confidentiality of the discussions and Independence**
- **Possible contributions to the process :**
 - Coordinating Lead authors, Lead Authors, Review editor (*too late except special cases*)
 - Expert reviewer of the FOD (29 Dec-20 Feb 26) or SOD (31 Aug-26 Oct 26)
 - Literature provider – **Cut-off date: 24 AUG 2026**



2027 IPCC REPORT ON SLCF - CONTENT(1/4)

➤ **Scope :**

- Anthropogenic
- National
- Annual
- Reported in mass unit for each individual emitted species

➤ **Coverage :**

- All IPCC sectors... “with categories where the Science is assessed to be robust enough to provide guidance for a Tier I”
- NO_x, CO, NMVOC, SO₂, NH₃, BC and OC... “as well as primary particulate matter relevant for radiative forcing as appropriate” (guidance : focus on PM_{2,5} and possibly PM_{1,0} as PM₁ is the main climate forcer but a much larger amount of data is available on PM_{2,5})
- Total NMVOC is considered... “speciation should be considered [...], as appropriate”
- CH₄ and halogenated species will NOT be covered (as already addressed in existing IPCC GLs)



2027 IPCC REPORT ON SLCF – CONTENT (2/4)

➤ Coverage :

- H2 is to be considered as an Appendix “ Basis for future methodological developments” (given current science gaps and limitation)
- Anthropogenic refers to emissions from human activities and from managed lands
- Geographical and temporal coverage is national and annual level... “and authors should also consider guidance on spatial and temporal disaggregation”

➤ Key elements :

- One volume for each inventory sector : Energy, IPPU, AFOLU and **Waste**
- One cross-cutting chapter : guidance on SLCF species and definitions, approaches to data collection; uncertainties; methodological choice and identification of key categories; time series consistency; quality assurance/quality control (QA/QC) and verification; and reporting guidance and tables
- Each sectoral volumes will include tiered methodological approaches; decision trees, methods and emission factors, guidance on uncertainty assessment and QA/QC and reporting and documentation guidance



2027 IPCC REPORT ON SLCF – CONTENT (3/4)

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- H2 is to be considered as an Appendix “ Basis for future methodological developments” (given current science gaps and limitation)
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2027 IPCC REPORT ON SLCF – CONTENT (4/4)

- **Table of Contents matches the structure of the 2006 IPCC Guidelines.**
- Table of content of the **Volume 5.Waste :**
 - Introduction
 - Solid Waste Disposal
 - Biological Treatment of Solid Waste (Adriana is the Lead)
 - Incineration and Open Burning of Waste (Richard is the Lead)
 - Wastewater Treatment and Discharge
 - Other



2027 IPCC REPORT ON SLCF – LITERATURE (1/1)

➤ Literature :

- Peer-reviewed literature should be prioritised
- Other sources can be used such as report from governments, industry and research institution, international organisations or conference proceedings
- It is author's responsibilities to ensure the quality and validity of these “other sources”
- If a source is not in English a executive summary or abstract in English must be provided

Invalid sources : newspapers and magazines, blogs, social networks and **personal communication of scientific results**



2027 IPCC REPORT ON SLCF – WASTE BOG (I/I)

➤ **Composition : 20 experts from 17 countries**

- 2 Coordination Lead Authors
- 16 Lead Authors
- 2 Review Editors
- 14 /20 have previous experience with IPCC

➤ **Outcomes of the 1st Lead Authors Meeting (LAM) – Waste GOP**

- Detailed chapter outlines
- Allocation of authors to the 5 chapters and sub-chapters : 4 (+1) on Solid waste disposal ; 3 (+1) on Biological treatment; 5 (+3) on Incineration and Open burning; 4 (+2) on Wastewater treatment and Discharge ; 1 (+1) on Other ; (*Some authors are allocated on more than 1 chapter*)
- Identification of gaps in available expertise (=> digestion)
- Detailed internal work plan
- Discussion on available literature and data



2027 IPCC REPORT ON SLCF – 4.A, 4.B, 4.E (I/I)

➤ **Common questions raised in each sub-chapters :**

- Is it necessary/useful/confusing to respect the IPCC GHG GB outlines or the reporting categories ?
E.g. solid waste disposal
 - Where to allocate sources that are not included in the IPCC GHG GB ? E.g. cars and building fires
 - What level of details for the Tier I ? E.g. composting and digestion
 - How to estimate regional EFs, take Climate into consideration ?
 - How to manage cross-cutting discussions ? E.g. development of technology-based approach (//Energy ; Efficiency of abatement technologies (//Energy//IPPU); Composting (//Agriculture)
- ## ➤ **EMEP/EEA GB**
- The development of the SLCFs MR could be an opportunity to improve the EMEP/EEA GB
 - ...but also a “risk” to evolve toward new methodologies, inclusion of new sources or other allocations decisions
 - EMEP/EEA will have to evolve consistently with the IPCC SLCFs MR



2027 IPCC REPORT ON SLCF – BIOLOGICAL TREATMENTS (I/I)

THE FLOOR IS TO ADRIANA



2027 IPCC REPORT ON SLCF – INCINERATION & OPEN BURNING (1/1)

THE FLOOR IS TO RICHARD



COFFEY BREAK

COFFEY BREAK UNTIL 11:00 AM



EMEP/EEA GB UPDATE – DESCRIPTION OF THE PROCESS

THE FLOOR IS TO CHRIS



EMEP/EEA GB UPDATE – WASTE IMPROVEMENTS LIST

- **Objective** : create a finalised/updated improvement list as an output that is “approved” by the TFEIP
- **Outcomes** of the Improvements list for waste (automated rating):
 - 2 “High priority” : 5C, 5C2
 - 4 “Medium priority” : 5E ; 5C2 ; 5C ; 5D
 - 3 “Low priority” : 5C ; 5B
 - 6 “Nice to have” : 5A ; 5D ; 5E

“EMEP-EEA Guidebook 2023 Review - Appendix A - Compiled Improvements.xlsx”

Available at <https://www.tfeip-secretariat.org/warsaw2025>



EMEP/EEA GB -

- If you identify any additional improvements, please send me a message :

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