



# 2019 Refinement to the 2006 IPCC Guidelines for National GHG Inventories

IPCC TFI Side-event at the COP-24

Katowice, Poland

13 December 2018

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# 2019 Refinement

Background and progress of the work on production of the 2019 Refinement to the 2006 IPCC Guidelines for National GHG Inventories

# 2019 Refinement

- The 2019 Refinement to the 2006 IPCC Guidelines is one of the major IPCC products during the 6<sup>th</sup> assessment cycle.
- It will be delivered in May 2019, which is well in advance of the first Global Stocktake in 2023.

# Timeline for the forthcoming AR6 reports

March 2018

Conference on  
Cities

October 2018



September 2019

Oceans  
and cryosphere



April 2021

The Physical  
Science Basis

October 2021

Climate Change  
Impacts,  
Adaptation and  
Vulnerability

April 2022

The IPCC  
Synthesis Report

Facilitative  
dialogue  
UNFCCC

Land Use



August 2019

Mitigation  
of  
Climate Change

July 2021

Global Stocktake  
2023  
UNFCCC

2019 Refinement

May 2019

\* Dates are subject to change

# UNFCCC and IPCC Inventory Guidelines

New Supplementary Guidance in 2013



Currently, Non Annex I Parties use these under the UNFCCC.

Non-Annex I Parties are encouraged to use GPGs.

GPG2000  
(non-LULUCF)

GPG2003  
(LULUCF)



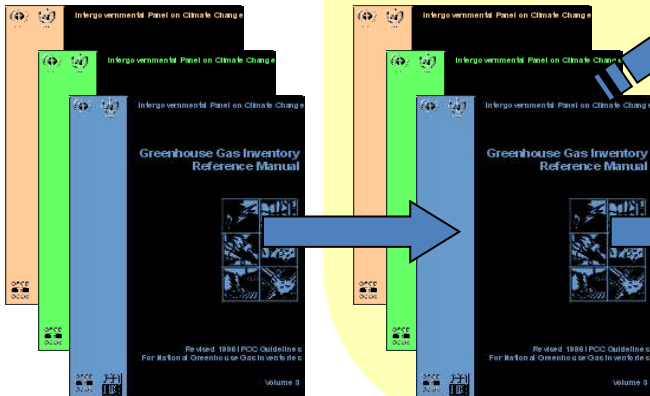
Annex I Parties must use from 2015

2006 IPCC Guidelines



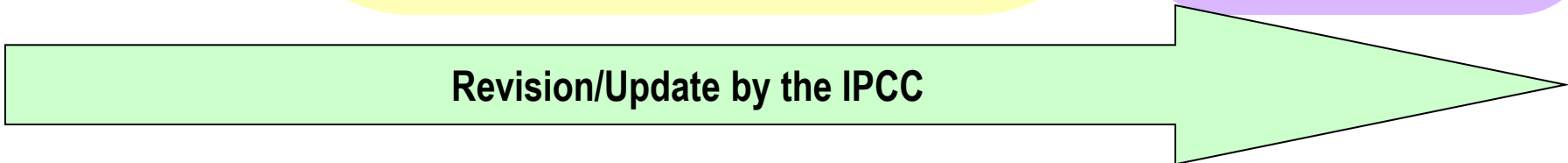
1995 IPCC Guidelines

Revised 1996 IPCC Guidelines



Actually, 2006 Guidelines are being used by more and more Non-Annex I Parties.

Revision/Update by the IPCC



# 26<sup>th</sup> Meeting of the TFI Bureau

At its 26<sup>th</sup> meeting in August 2014 in Ottawa, the TFI Bureau (TFB) concluded:

- ✓ 2006 IPCC Guidelines provide a technically sound methodological basis of national greenhouse gas inventory, and therefore fundamental revision is not necessary
- ✓ However, to maintain their scientific validity, certain refinements may be required, taking into account scientific and other technical advances that have matured sufficiently since 2006

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# 43<sup>rd</sup> Session of the IPCC

- IPCC-43 (April 2016, Nairobi) approved the TFI's proposal on Refinement of 2006 IPCC Guidelines, and decided to consider the outline of the Methodology Report(s) at the IPCC-44 in October 2016 and to consider the draft Methodology Report(s) at a Plenary session of the IPCC in May 2019.
- IPCC-43 also approved the proposal to hold a scoping meeting before the IPCC-44 in 2016 for the preparation of the Methodology Report(s) in order to consider the scope and format of the report(s).

# Scoping Meeting

- Scoping meeting for a Methodology Report(s) to refine the 2006 IPCC Guidelines was held on 29-31 August 2016 in Minsk, Belarus. It was attended by 94 experts selected by TFB from 198 nominees.
- It aimed to consider the scope and format of the Methodology Report(s), and to prepare draft terms of reference, draft table of contents and draft work plan for the Methodology Report(s).
- Meeting report is available at TFI's website <http://www.ipcc-nggip.iges.or.jp/>



# 44<sup>th</sup> Session of the IPCC

- At its 44<sup>th</sup> Session in October 2016 in Bangkok, IPCC decided to prepare a Methodology Report to refine the 2006 IPCC Guidelines with the following format and title (Decision IPCC/XLIV-5):
  - The format should be **one single Methodology Report** comprising an Overview Chapter and five volumes following the format of the 2006 IPCC Guidelines
  - The title of the Methodology Report should be “**2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories**” (*2019 Refinement*)
- During its 44<sup>th</sup> Session, the Panel approved the outline of the 2019 Refinement.

# Coverage and Structure

- **Coverage:** All IPCC inventory sectors are covered but refinements are included for only those categories where the science is considered to have sufficiently advanced since 2006 or where new or additional guidance is required.
- **Structure:** Same as that of the 2006 IPCC Guidelines so as to make it easier for inventory compilers to use the *2019 Refinement* with the 2006 IPCC Guidelines:
  - Overview Chapter
  - Volume 1: General Guidance and Reporting (GGR)
  - Volume 2: Energy
  - Volume 3: Industrial Processes and Product Use (IPPU)
  - Volume 4: Agriculture, Forestry and Other Land Use (AFOLU)
  - Volume 5: Waste

# Aim of 2019 Refinement

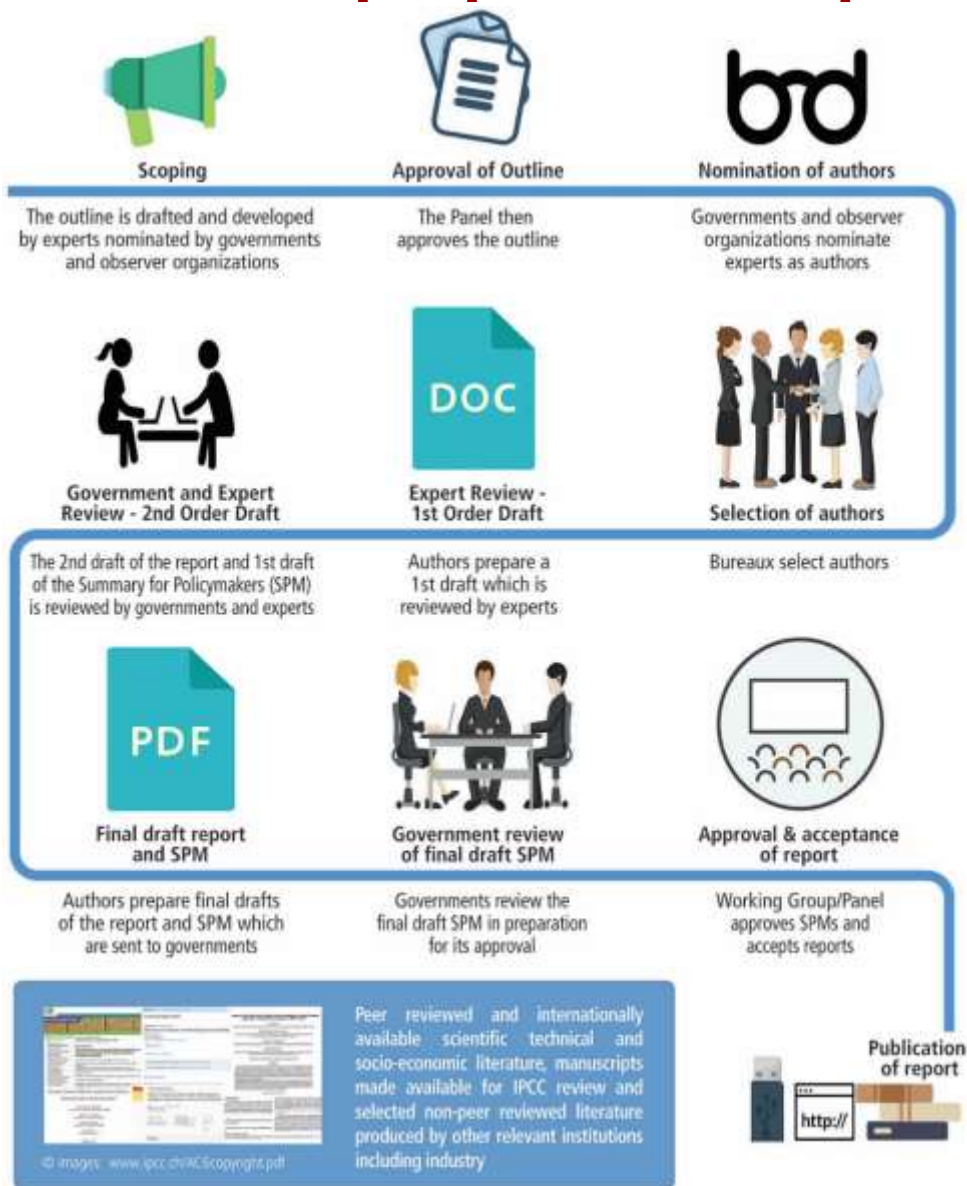
- The overall aim of the refinement of the 2006 IPCC Guidelines is to provide an updated and sound scientific basis for supporting the preparation and continuous improvement of national greenhouse gas inventories.
- The refinement work **will not revise** the 2006 IPCC Guidelines, but **will update, supplement and/or elaborate** the 2006 IPCC Guidelines where gaps or out-of-date science have been identified.
- The *2019 Refinement* will not replace the 2006 IPCC Guidelines, but will be used in conjunction with the 2006 IPCC Guidelines.

# Official IPCC Procedures

**The 2019 Refinement is being produced through the official rigorous procedures to which the official reviews are essential:**

- Expert Review of the First Order Draft (FOD)
- Government and Expert Review of the Second Order Draft (SOD)
- Government Review of the Final Draft (FD)

# How the IPCC prepares its reports? (1)



# How the IPCC prepares its reports? (2)



**Approval of Outline** - by the Panel  
**1st Order Draft (FOD)** - reviewed by experts



**Nomination of Authors** – by governments and observer organizations

**2nd Order Draft** - 2nd Draft of the Report and the 1st draft of the Summary for Policymakers are reviewed by governments and experts



**Selection of Authors** - by Bureaux



**Final draft report and SPM** - Reviewed by governments



**Approval and Acceptance of Report**

**Publication of Report**

# How the IPCC prepares its reports? (3)



## Scoping

The outline is drafted and developed by experts nominated by governments and observer organizations



## Approval of Outline

The Panel then approves the outline



## Nomination of authors

Governments and observer organizations nominate experts as authors



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Peer reviewed and internationally available scientific technical and socio-economic literature, manuscripts made available for IPCC review and selected non-peer reviewed literature produced by other relevant institutions including industry



## Final draft report and SPM

Authors prepare final drafts of the report and SPM which are sent to governments



## Government review of final draft SPM

Governments review the final draft SPM in preparation for its approval



## Approval & acceptance of report

Working Group/Panel approves SPMs and accepts reports



## Publication of report



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# Authors and Review Editors

- The IPCC invited governments and organizations to nominate experts (31 October–9 December 2016)
- 328 nominations received, 190 experts selected by TFB considering required expertise, geographical representation, gender balance and inclusion of experts with and without previous experience with IPCC

	CLAs	LAs	REs	Total
Volume 1	2	16	2	20
Volume 2	2	14	2	18
Volume 3	2	27	2	31
Volume 4	4	93	4	101
Volume 5	2	16	2	20
<b>Total</b>	<b>12</b>	<b>166</b>	<b>12</b>	<b>190</b>



# First Lead Author Meeting

- Held on 7–14 June 2017 in Bilbao, Spain
  - discussed and agreed on allocation of work
  - discussed and developed a detailed work plan
  - started to develop the Zero Order Draft (ZOD)

# Second Lead Author Meeting

- Held on 25–28 September 2017 in Victoria Falls, Zimbabwe
  - developed a detailed work plan for preparation of the First Order Draft (FOD) for Expert Review
  - started to develop the FOD
- Discussed and agreed on a number of issues
  - **Mapping tables** summarizing what has been refined in each Volume

# Third Lead Author Meeting

- Held on 10–13 April 2018 in Cairns, Australia
  - worked on addressing the comments (**4955**) from Expert Review of the FOD
  - developed a detailed work plan for preparation of the Second Order Draft (SOD) for Government and Expert Review
  - started to develop the SOD
- Discussed and agreed on a number of issues (e.g., ensuring consistency in guidance, numbering of tables, figures, equations and boxes)

# Fourth Lead Author Meeting

- Held on 22–26 October 2018 in Rome, Italy
  - worked on addressing the comments (**4106**) from Government and Expert Review of the SOD
  - developed a detailed work plan for preparation of the Final Draft (FD) for Government Review
  - Started to develop the FD
- Discussed and agreed on a number of issues (e.g., changes to mapping table, format to express uncertainties)

# Final Draft

- Authors are preparing the Final Draft (FD) for Government Review taking into account comments from Government and Expert Review of the Second Order Draft (SOD).
- Components: Overview chapter, Individual chapters, Worksheets, Spreadsheets, Reporting tables, Annexes, Appendices and Glossary.

# Government Review

- From **28 January to 24 March 2019**  
(8 weeks)
- Authors will consider all the comments and prepare the amended FD for consideration at the **49<sup>th</sup> Session of the IPCC** to be held on **8-12 May 2019** in Kyoto, Japan

# Confidentiality

- Draft reports, prior to acceptance, are considered to be pre-decisional, provided in confidence to reviewers, and not for public distribution, quotation or citation.
- Expert and government review comments, and authors' responses to those comments will be made available on the IPCC website as soon as possible after the acceptance by the Panel and the finalization of the report.

# Work Plan / Milestones

LAM1	7 - 14 June 2017
LAM2	25 - 28 Sep 2017
FOD Expert Review	4 Dec 2017 - 11 Feb 2018 (10 weeks)
LAM3	Week of 10 - 13 Apr 2018
SOD Government/Expert Review	2 Jul - 9 Sep 2018 (10 weeks)
LAM4	22 - 26 Oct 2018
<b>Final Draft Government Review</b>	<b>28 Jan - 24 Mar 2019 (8 weeks)</b>
<b>IPCC Panel Adoption/Acceptance</b>	<b>8-12 May 2019 (Kyoto, Japan)</b>

Literature cut-off date: 25 June 2018





# Thank you

<http://www.ipcc-nggip.iges.or.jp/index.html>

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