

## Technical Assessment of the 2006 IPCC Guidelines. Cross-sectoral Issues

**Scoping Meeting** 

29-31 August 2016, Minsk, Belarus Pavel Shermanau, IPCC TFI TSU





### Background

In 2014 IPCC Expert Meeting on Systematic Assessment of TFI Products (25-27 August 2014, Ottawa, Canada) assessed the TFI products and considered possible enhancements, improvements and additions to existing guidance, as well as ways to enhance utility of the TFI products such as EFDB and Inventory Software

The results of this meeting was considered by the 26<sup>th</sup> Meeting of the IPCC TFI Bureau *(28-29 August 2014, Ottawa, Canada)* 





### **Background**

#### The 26<sup>th</sup> meeting of the IPCC TFB concluded:

- The 2006 IPCC Guidelines provide a technically sound methodological basis of national greenhouse gas inventory, and therefore fundamental revision is unnecessary
- To keep the validity of the 2006 IPCC Guidelines, certain refinements may be required, taking into account scientific and other technical advances that have matured sufficiently since 2006
- More in-depth technical assessments should be undertaken





#### Aims of the Technical Assessment

- o To assess where science and data availability have developed sufficiently since the 2006 IPCC Guidelines to support the refinement or development of methodological advice for specific categories and gases, with a view to identifying any specific areas or issues to be prioritized
- To conduct technical assessment on cross-sectoral issues, such as those covered in Volume 1, including improvement of user-friendliness of other inventory tools with a view to contributing to capacity development programmes





#### Scope

- Technical assessment on all the four sectors:
  - Availability of science and data
  - Need and feasibility of methodological development/refinement
- This assessment takes into account:
  - Existing guidance in the 2006 IPCC Guidelines and the 2013
     Wetlands Supplement
  - Associated facilities such as IPCC Inventory Software and the Emission Factor Database
- Focus is placed on specific source/sink categories and gases selected according to significance and prioritization criteria



### Significance & prioritization criteria

- Significance of the source/sink and the gas within the sector on a global scale.
  - Only for a limited number of particular countries NO
  - New information would likely lead to a definite improvement
- Availability of relevant new scientific results
- Sufficient data availability and maturity of scientific advances since 2006 to provide a basis for methodological development or refinement, including:
  - Ability to develop new or updated default emission/removal factors
  - Feasibility of obtaining the necessary data to implement the methods
- Emergence of "new" sources or gases

#### **Approach**

## Combination of an on-line questionnaire survey and expert meetings

- On-line questionnaire survey (conducted in early 2015)
- Expert Meetings (2015 & 2016) on:
  - Energy, IPPU, Waste Sectors
  - AFOLU Sector
  - Specified issues from the 2015 expert meetings
  - Cross-sectoral Issues





### On-line questionnaire survey

- Conducted from 30 January to 27 February 2015
- Sent to all the experts:
  - Who were nominated by governments and international organizations
  - Who have contributed to TFI work
- 243 experts have submitted their views

	Number of respondents	Number of comments
Energy Sector	76	206
IPPU Sector	42	128
AFOLU Sector	137	380
Waste Sector	43	112
Other Sector	5	6
Cross-Sectoral	58	155
TOTAL	243	987

### On-line questionnaire survey

Category	
(Select from dropdown list)	
Gas	
(Select from dropdown list)	
Type of refinement or	
development	
(Select from dropdown list)	
Comment	What refinements or developments are suggested?
	How do they meet the criteria set out?
	References that may be used for refinements





### High priority issues

- TSU analyzed comments and provisionally identified "high priority issues" for a further consideration at the expert meetings based on prioritization criteria:
  - Applicability of refinement to a wide range of countries
  - Sufficient scientific basis for improvement
  - Ease of implementation of refined guidance
  - Impact (leading to great decrease in uncertainty)
  - Frequency of the comment
- Some issues have been additionally identified as significant by TFB and also by experts during the meetings

#### Possible ways to address issues

- Possible options to address the issues:
  - Production of Methodology Report
  - Holding an expert meeting and publishing a meeting report or a technical bulletin
  - Utilizing the Emission Factor Database (EFDB)
  - Utilizing the Frequently-Asked-Questions (FAQs) website
  - Other
- Important difference whether or not to undergo official rigorous IPCC Publication Procedures
  - Methodology Report: Yes, therefore it takes time but more legitimate
  - Others: No, therefore it can be produced quicker but less legitimate

### **Expert Meetings**

#### 2015:

1. Expert Meeting on Energy, IPPU, Waste Sectors

(29 June – 1 July 2015, Geneva, Switzerland)

2. Expert Meeting on AFOLU Sector

(13 – 16 July 2015, Sao Paulo, Brazil)

#### 2016:

3. Expert Meeting to follow up on specified issues from the 2015 expert meetings

(25 – 26 April 2016, Wollongong, Australia)

4. Expert Meeting on Cross-sectoral Issues

(27 – 29 April 2016, Wollongong, Australia)





### **Expert Meetings**

The expert meetings considered all high priority issues and suggested the possible options to address them (Methodology Report, FAQ, EFDB, expert meeting/meeting paper)

The issues which required refinement via *Methodology Report* should be considered at the Scoping Meeting





### IPCC-43 (April 2016)

- Approved the TFI's proposal on Refinement of 2006 IPCC Guidelines, including production of a Methodology Report(s) (IPCC/XLIII-8)
- Decided to hold the Scoping meeting on Methodology Report before IPCC-44 (October, 2016)
- Decided to consider the outline of the Methodology Report on GHG Inventories at IPCC-44 (October, 2016)

### Scoping meeting

 One of the main goals of the Scoping Meeting is to produce the Table of Contents (TOC) based on the Annotated list of issues!!

 The issues identified for a Methodology Report follow the structure of the 2006 IPCC Guidelines:

Volume 1. General Guidance and Reporting

Volume 2. Energy

Volume 3. IPPU

Volume 4. AFOLU

Volume 5. Waste





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#### **Cross-Sectoral Issues**

The Wollongong cross-sectoral expert meeting has identified 8 issues related to the Volume 1. General Guidance and Reporting of the 2006 IPCC Guidelines which can be solved by a Methodology Report (a subject to the Scoping Meeting)

✓ Please, refer to the file on the EDG - Annotated list of issues Cross-sectoral (General Guidance and Reporting)





#### Introduction. Data Collection

#### Issue #1

Chapter 1. Introduction.

Clarification of the concept of "anthropogenic emissions and removals" (AFOLU)

#### Issue #2

Chapter 2. Approaches to Data Collection.

Development of additional guidance to develop country-specific emission factors and design new surveys for activity data collection

#### Issue #3

Chapter 2. Approaches to Data Collection.

Development of guidance on the integration of GHG emissions reported from industrial facilities into national GHG inventories and development of guidance on use of models (including review and integration of outcome of 2010 Sydney meeting and 2011 Wellington meeting)



### Uncertainty. Key Categories

#### Issue #4

Chapter 3. Uncertainty.

Refinement of guidance on uncertainty based on the latest scientific knowledge and simplification of guidance by providing more default values, calculation examples and best practices (not major changes to the existing guidance)

#### Issue #5

Chapter 4: Methodological Choice and Identification of Key Categories (and other Volumes)

Additional guidance on key category analysis to address treatment of disaggregation of categories, trend analysis, equations for trend analysis and the need for consistent definition of significant subcategories across the different volumes of the IPCC Guidelines





#### Time Series Consistency. Verification. Precursors

#### Issue #6

Chapter 5. Time series consistency.

Review and refinement of guidance on time series consistency (including discussion on the applicability of default EFs over time)

#### Issue #7

Chapter 6. QA/QC and Verification. Section 6.10.2. Comparisons with atmospheric measurements

Development or improvement of guidance on the verification using other estimation results like FAOSTAT emissions database and GHG concentration in atmosphere by satellite observation (remote sensing data)

#### Issue #8

Chapter 7. Precursors and Indirect emissions.

Clearer guidance for the calculation of indirect CO2 emissions



# To be continued (other Meetings/Sectoral issues)



