

## TFEIP Meeting Minutes

### Monday 11<sup>th</sup> May

The meeting was opened by Ian Marnane (EEA) who welcomed participants.

Chris Dore (TFEIP Co-chair) presented the TFEIP workplan and highlighted that a priority topic for the meeting is discussing the Guidebook update.

#### International News

The European Commission presented recent work, including the assessment of the NECD. The CLRTAP Secretariat spoke about work within the Air Convention, and noted the importance of the work of the TFEIP.

Pavel Shermanau presented an update on the IPCC work on short lived climate forcers. He noted the opportunities and benefits of collaboration, and offered TFEIP experts to work directly with the IPCC lead authors.

#### Inventory systems

The session explored different types on inventory platforms. Presentations were given from France, UK, Ireland, Germany and Turkey.

#### Projections Expert Panel (& Part A Chapters)

- Chris Dore provided an overview of the work completed so far on the general guidance chapters of the Guidebook and Kieran Lee presented work completed in the UK exploring uncertainties.
- Katrin Kaltenecker (IIASA) gave a presentation on progress on the development of the 5<sup>th</sup> Clean Air Outlook.
- There was a presentation from INERIS on evaluation work of the impact of low carbon strategies on air pollutant emissions and resulting concentrations.

Melanie Hobson presented work on updating the projections chapter of the Guidebook and invited members of the TFEIP to contribute to this work and, particularly preparing worked examples for the projections chapter. Attendees were encouraged to share feedback and comments on the draft projections chapter with the co-chairs.

### Tuesday 12<sup>th</sup> May

#### Transport Expert Panel

The proposed Guidebook updates were presented in detail. All presentations will be published on the meeting webpage.

Road transport

Traianos Karageorgiou presented the latest COPERT updates which include:

- Revision of consumption of LDVs
- Revised emission factors of PHEVs and HEVs
- Revised emission factors of CNG cars
- Battery electric trucks
- Revised EFs for L category vehicles
- Software improvements and bug corrections

NRMM

The data sources for emission factors will be reviewed.

A comment was made about the importance of improving the content of the GB chapter for countries that do not have detailed activity data, specifically to help them use methodologies that are more accurate than Tier 1.

### Navigation

Improvements for the navigation chapters were presented. Some of the main changes will include a new ship categorisation and specified activity profiles. Alternative fuels and missing pollutants were also discussed.

Inconsistencies between international cross boundary emissions are currently under review.

There was a discussion about the use of AIS data and consistency with fuel sold and fuel used. Some Parties do not use AIS data, whilst others calculate fuel used from AIS data.

### Aviation

Proposed updates were presented, including a section addressing non regulated and emerging aircraft exhaust pollutants and replacing the assumption that all PM from aircraft is PM10 with an assumption that it is all PM2.5.

### EEA

Siiri Latvala provided an overview of activities at the EEA and highlighted the new reporting platform as well as an upcoming conference on emission monitoring from space which will be held jointly with the European space agency.

### Combustion and Industry Expert Panel

The expert panel acknowledged the significant contributions of the late Carlo Trozzi to the TFEIP.

The Combustion and Industry Panel highlighted the large number of update items on the Guidebook update list and the current lack of resources.

There was a suggestion to include a notation key NR 'not relevant' for sources with emissions below the point of quantification instead of using 'NE' which suggests emissions are missing. This will be considered in more detail in due course (see below).

Erik Honig gave a presentation on PM ventilation emissions from cracks, holes and doors in factories.

Allesandro Marongiu gave a presentation on emission estimates from wood-fired pizza ovens.

Kristina Juhrich provided an overview of items on the guidebook improvement list.

The inclusion of BC in point source reporting was discussed, but this will be considered in due course (see below).

Kristina Juhrich invited those interested in becoming a new Combustion and Industry co-chair to contact her. Participants were also encouraged to explore options for contributing to the Combustion and Industry Guidebook work. Resourcing for this remains a significant challenge.

### Wednesday 13<sup>th</sup> May

#### User Engagement

Jeroen Kuenen invited others to join the work of the user engagement expert panel and highlighted the links to the modelling community.

Marc Guevera gave presentations on processing the Spanish national inventory to adapt it to modelling requirements and the validation of emissions against satellite-based estimates as part of an ongoing ESA project.

Susana Lopez-Aparicio gave a presentation on the latest proxies for spatial distribution for the agricultural sector.

Jeroen Kuenen set out some specific questions on how to interpret Guidebook information & how to report gridded emissions and invited participants to provide feedback.

A paper on guidance for emission inventory users was presented and Jeroen Kuenen invited participants to provide feedback on the document.

### CEIP

Sabine Schindlbacher gave an update on emission reporting and CEIP activities.

### Satellite Measurements, Research Needs

Hannes Witt presented a draft paper on the use of satellite measurements in emissions inventories. He invited contributions from the TFEIP community, with the aim of completion ahead of the 2027 TFEIP meeting.

Chris Dore presented a draft paper on the research needs of the TFEIP. He invited contributions from the TFEIP community, with the aim of completion ahead of the 2027 TFEIP meeting.

### Future work, meeting minutes, conclusion and decisions

Organisation of future work, and decisions were discussed and agreed.

The draft meeting minutes, conclusions, and decisions were reviewed and updated in line with comments from the attendees (with non-consequential editorial amendments to be made after the meeting).

The co-chairs thanked the EEA for hosting the meeting, and noted that the TFEIP is seeking a host for TFEIP 2027.

The meeting was then closed.

## Key Conclusions & Decisions

### Black Carbon, Organic Carbon, and IPCC Guidance on Emissions of SLCFs

The TFEIP agreed to form an **ad hoc group** on BC to undertake several tasks:

- Develop a plan for improving the quality of BC emissions inventories. To be completed by **30<sup>th</sup> June**.
- [Formulate a reply to whether it is/isn't sensible to include BC in LPS reporting. To be completed by 30<sup>th</sup> June.](#)
- Work with CEIP and MSC-W to prepare a paper on the main sources of uncertainty for OC. This will be finalised by **~September**.
- Work with the Lead Authors of the IPCC guidance on SLCFs, with the aim of maximising methodological consistency and efficiencies in updating the EMEP/EEA Guidebook (across all pollutants).

### CH<sub>4</sub>

The TFEIP agreed to form an **ad hoc group** to work with CEIP to prepare a short paper on potential scenarios for CH<sub>4</sub> data collection. This will be finished by **30<sup>th</sup> June**.

### Reporting Guidelines and IIR Template

TFEIP will form an **ad hoc group** to work with and CEIP on reviewing and updating the IIR template, and update the Reporting Guidelines if necessary (if BC is added to LPS reporting, and the definition of the “NR” notation key is revised). This will be finished by **30<sup>th</sup> June**.

### Projections for 2040, 2050

[The TFEIP concluded that sufficient information is available to Parties to allow them to compile projections for 2040 and 2050, which represent underlying emission trends and the impacts of policies and measures.](#)

### Shipping/National Navigation

[It was concluded that emissions from national navigation/shipping can be determined on the basis of fuel used rather than fuel sold – as long as consistency with the national energy balance tables is respected. Further investigation into how Parties currently determine activity for navigation/shipping will be undertaken and this will advise future recommendations.](#)

### Use of Satellite Data in Emission Inventories

Hannes Witt will continue to co-ordinate this work, and the TFEIP asked for contributions, with the aim of having a finalised report for approval at **TFEIP 2027**.

### Research Needs of the TFEIP

TFEIP Management team (Co-Chairs, Secretariat, and Expert Panel Leaders) will progress this report, with the aim of presenting a version for approval at **TFEIP 2027**. Contributions from the wider TFEIP community are welcomed.

### Combustion & Industry Expert Panel Co-Chair

The TFEIP asked for volunteers to take up the role of Combustion & Industry Expert Panel Co-Chair.

### Guidebook updates:

- Work will continue on updating chapters of the Guidebook, co-ordinated by the expert panel leaders. The TFEIP will hold an on-line meeting(s) in **November** to review and approve “finalised” chapters.
- Other chapters will be developed and circulated ahead of **TFEIP 2027**, with the aim of approving the updated Guidebook as a whole.

The updated Guidebook will include a dedication to the memory of Carlo Trozzi.

### **User Engagement Reports**

The User Engagement expert panel will continue to progress reports on pollutant speciation, and time profiles. Contributions to this work are welcomed. The aim is to finalise these reports ahead of **TFEIP 2027**.