

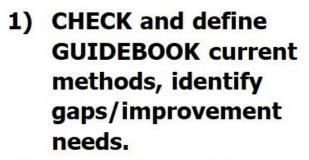






TFEIP Black Carbon WG

TFEIP 2019 Annual Meeting TFEIP Work Plan 2020-2021 **EMEP Steering Body Sept 2019**



- 2) SUPPORT inclusion of BC in a revised Gothenburg Protocol
- 3) COOPERATE with experts and international bodies





Voluntary work by 15 TFEIP Experts in checking current EFs Feb-May 2020

Classification of measurement method

Petzold et al. 2013 https://nilu.brage.unit.no/nilu-xmlui/bitstream/handle/11250/2384208/acp-13-8365-2013.pdf?sequence=3

EC elemental carbon

eBC equivalent BC

rBC refractory BC

Un unknown

Assessment for improvement needs
Teleconferences







Remaining issues (11May2020)

Some references and documentation
Support to IPCC on SLCF methodologies

Conclusions from Expert Teams' Work (1/2)

- >100 unique values, based on 26 references many old/outdated (up to 40 yrs, 1988- 2011)
- Out of unique values checked >>90% represent EC
- Unit %PM_{2.5} some %TSP/%PM, g/fuel





Conclusions from Expert Teams' Work (2/2)

Improvement needs

- Representativeness in EMEP area,
 e.g. measurements in China, Africa
- Old references, literature studies to catch up new data/fill in missing data (e.g. energy, some new data available for small combustion)
- Harmonise presentation, incl. classification EC/eBC/rBC/Un
- Clarify/improve of method







ITEMS FOR DISCUSSION 14.5.2020 TFEIP BC Session

Presentation of material in the Guidebook

A more common structure in the annexes/Footnotes in EF tables? Classification into EC/eBC/rBC/Un

Improvement

Voluntary contribution to GB improvement? (as in addition to current checks)

Prioritizing updates, common rules?

e.g. age of references, key sources where missing/old references...

Already identified sector specific improvement needs...

1A1/1A2/1B: thorough literature review

1A3: cold climate impact on BC, old vehicles, hybrid vehicles, urban/rural driving conditions navigation fuel change in the Arctic (HFO)

1A4: update of old/check for representativeness for EMEP

Funding?

Possibilities for funding of thorough literature studies/bigger projects

Support to IPCC SLCF

Voluntary contribution to provide IPCC information on:

- EMEP/EEA GB update needs (BC, Sox, Nox, NMVOC, CO, NH3, PM2.5
- Applicability of GB methods in developing countries





THANK YOU

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