IPCC Expert Meeting on SLCF 28 May 2018 Existing methodology developed by other organizations

EMEP/EEA EMISSION INVENTORY GUIDEBOOK BLACK CARBON

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EMEP/EEA EMISSION INVENTORY GUIDEBOOK

- **CLRTAP** UNECE Convention on Long-Range Transboundary Air Pollution
- **EEA** European Environment Agency
- **EMEP** European Monitoring and Evaluation Programme
- **NECD** EU National Emissions Ceilings Directive
- **TFEIP** Task Force on Emission Inventories and Projections (EMEP)





EMEP/EEA EMISSION INVENTORY GUIDEBOOK

https://www.eea.europa.eu/publications/emep-eea-guidebook-2016

- Technical guidance, default emission factors to national air pollutant emission inventories under **UNECE CLRTAP & EU NECD**
- Formerly EMEP CORINAIR Guidebook
- Published by the EEA
- TFEIP responsible for the technical content of the chapters
- Updated every 3-4 years to reflect the latest scientific findings and knowledge

EMEP/EEA air pollutant emission inventory guidebook 2016

Technical guidance to prepare national emission inventories









EMEP/EEA EMISSION INVENTORY GUIDEBOOK

- Published 1996-2016
 Versions 2016, 2013, 2009, 2007, 2006, 2002, 2001, 1999, 1996
- Users are recommended to refer to the latest version, currently September 2016, with amendments up to 2017 Next version 2019
- List of updates to previous versions on a log file on the website
- Translation into Russian summer 2018
- TFEIP Expert Panels Combustion and Industry

Transport

Agriculture and Nature

Projections



EMEP/EEA GB METHODS FOR AIR POLLUTANTS

Main pollutants (SO_x NO_x NMVOC NH₃,CO) Heavy metals, POP compounds

- Methodologies for all sources
- Inventories obligatory since the base year (main pollutants 1980's, heavy metals and POPs since 1990)

PM_{2.5} (and PM₁₀ and TSP)

- Methodologies for all sources
- Information provided if the EFs represent the total primary particles or filterable PM fraction
- Inventories obligatory (from 2000)

BC

- Emission factors (EF) based on $PM_{2.5}$ or PM_{10} emissions $Emission_{BC} = EF_{PM2.5}*Activity data *Speciation factor$
- Where possible info on EC/BC (BC often derived from EC ⇒ EC=BC)
- Sources: Biomass burning, Wildfires, Mobile sources, Industry, Waste incineration
- Inventories voluntary



TFEIP & BC

Guidebook scope: UNECE/EEA countries

Many EFs from international literature

Does not cover several sources relevant in

developing countries (e.g. cooking)

BC guidance:

Wish to avoid overlaps with the IPCC guidelines, prefer using resources to align between the IPCC and EMEP/EEA guidance

TFEIP priorities:

Resources are limited and the focus is currently on other pollutants than BC -> improvements to BC likely limited in the next several years

Wish to continue good earlier cooperation in referencing between the IPCC 2006 GLs and the EMEP/EEA GB – ideally with closer contacts between the TFI and the TFEIP



BC INVENTORIES UNDER CLRTAP

The EMEP/EEA Guidebook supported countries to make voluntary inventories on BC

2015 by 28 Parties 2017 by 37 Parties out of 51 Parties to CLRTAP





