

# Task Force on Emission Inventories and Projections

## EMEP/EEA Guidebook 2016

An update of developments concerning the EMEP/EEA air pollutant emissions inventory guidebook 2016

TFEIP co-chairs: Chris Dore, Martin Adams and Kristina Saarinen

# Introduction



- The Guidebook provides national emission inventory compilers with guidance and ‘default’ emission factors for NFR sources
- Used for reporting under the LRTAP Convention and EU’s NEC Directive.
- The EMEP/EEA Guidebook undergoes a ‘major’ update every 3-4 years.
- In 2016, we approved the latest version of the updated Guidebook

# TFEIP's draft mandate: EMEP/EEA Guidebook

The functions of the Task Force will be to:

- (a) Develop further the EMEP/EEA Guidebook methodologies by supporting work that provides updated information from the literature and liaising with other projects. The Task Force will ensure regular updating of the maintenance and improvement plan for the Guidebook with a view to publishing major updates in 2016, and every following 3-4 years.

*'Revised mandate for the EMEP Task Force on Emission Inventories and Projections (TFEIP)'.  
TFEIP 2016 workshop*

# Timelines: Guidebook 2016 finalisation

- |            |   |
|------------|---|
| 2015-2016  | Preparatory projects  |
| May 2016:  | TFEIP meeting 'technically endorsed' the Guidebook  |
| June-July: | A limited number of corrections and/or additional work was performed (requested by TFEIP) |
| July-Aug:  | EEA performed language editing, formatting etc of all chapters                            |
| Sept 2016: | Formal approval of the updated Guidebook 2016 by the EMEP Steering Body                   |
| Sept 2016: | Updated EMEP/EEA Guidebook 2016 published   |

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

Or access all past versions:

<https://www.eea.europa.eu/emep-eea-guidebook>

# Main changes – scope of 2016 update

## Three complementary projects (2015-2016)

1. European Commission DG ENV funded project (*Ricardo Energy & Environment, & others*):
  - 1.A.4 small-scale combustion
  - 1.A.4 non-road mobile machinery
  - 3.B, 3.D Agriculture
  - PM inventory estimates (filterable/condensable consistency)
2. European Commission DG CLIMA funded project (*Eurocontrol*)
  - 1.A.3.a Aviation
3. EEA funded project (*TNO & Aarhus University*)
  - Non-ferrous metals chapters: 2.C.3 Aluminium production, 2.C.5 Lead production, 2.C.6 Zinc production, 2C.7.a Copper production, 2.C.7.b Nickel production, 2.C.7.c other metal production
  - 2.D.3.a Domestic solvent use

# Emission factor database (EFDB) online

<http://efdb.apps.eea.europa.eu/>

Alongside the new Guidebook 2016, EEA has published a new online viewer containing:

- default Tier 1 emission factors
  - default Tier 2 emission factors
  - Tier 2 abatement efficiencies
  - Tier 2 fuel consumption estimates (road transport sector)
- 
- Includes 7970 fields (values)
  - Main exceptions:
    - Agriculture chapter EFs not (yet) included
    - No Tier 3 factors

# Emission factor database (EFDB) online

<http://efdb.apps.eea.europa.eu/>

Topics Data and maps Indicators Publications Media About EEA The EEA is an agency of the European Union

Publications EMEP/EEA air pollutant ...

## EMEP/EEA air pollutant emission inventory guidebook - 2016

Publication — Created 27 Sep 2016 — Published 30 Sep 2016

Topics: Air pollution

**i** This is the latest published version. See older versions.

### EEA Report No 21/2016



**Technical guidance to prepare national emission inventories. The joint EMEP/EEA air pollutant emission inventory guidebook supports the reporting of emissions data under the UNECE Convention on Long-range Transboundary Air Pollution (CLRTAP) and the EU National Emission Ceilings Directive. It provides expert guidance on how to compile an atmospheric emissions inventory. The Guidebook is published by the EEA with the CLRTAP Task Force on Emission Inventories and Projections responsible for the technical content of the chapters.**

### Content

- EMEP EEA air pollutant emission inventory guidebook 2016 Introduction.pdf [1.3 MB]
- EMEP EEA Guidebook Revision Log referred to changes into published chapter [62.5 KB]
  - Emission Factor Database
  - Part A: general guidance chapters

### Publications

Menu <

Subtopics ✓

- EMEP/EEA air pollutant emission inventory guidebook - 2016
  - Emission Factor Database
  - Part A: general guidance chapters
  - Part B: sectoral guidance chapters

Emission Factor Database

Explore the Emission Factor Database data viewer

[Go to data viewer](#)

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# Emission factor database (EFDB) online

<http://efdb.apps.eea.europa.eu/>

You are here: Home / esbootstrap

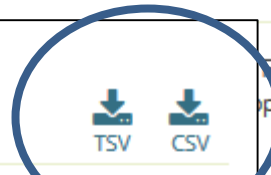
## EMEP/EEA air pollutant emission inventory guidebook 2016 - Emission factors

This viewer presents selected emission factors and abatement efficiencies included in the EMEP/EEA Guidebook 2016. Information on the emission factors included in the Guidebook are included in this viewer, users should always therefore consult the relevant chapter of the guidebook as the values provided in the chapter are considered the official data.

Results 1 - 10 of 7970

NFR	Sector	Table	Type	Technology	Fuel	Abatement	Region	Pollutant	Value
1.A.1.a	Public electricity and heat production	Table_3-7	Tier 1 emission factor	NA	Biomass		NA	HCB	5
1.A.1.a	Public electricity and heat production	Table_3-7	Tier 1 emission factor	NA	Biomass		NA	Benzo(k)fluoranthene	0.0155
1.A.1.a	Public electricity and heat production	Table_3-7	Tier 1 emission factor	NA	Biomass		NA	Zn	181
1.A.1.a	Public electricity and heat production	Table_3-7	Tier 1 emission factor	NA	Biomass		NA	Cd	1.76

Direct data download



For Reporting (NFR) source category code. Not all appearing in this viewer and the published chapter,

- NFR - Sector <
- Fuel <
- Pollutant <
- Type <

Search filters



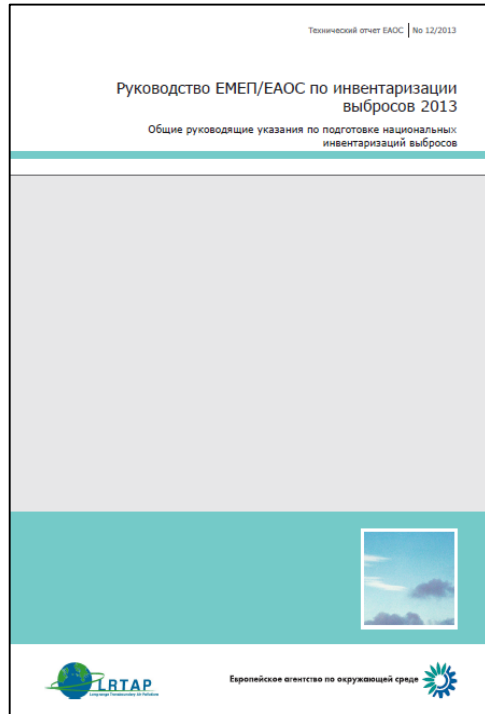
# Emission factor database (EFDB) online

<http://efdb.apps.eea.europa.eu/>

In case of discrepancies between values appearing in the viewer and the published chapter, the values provided in the chapter are considered as the official data.

Feedback is most welcome (questions/errors/problems etc)  
email to: [guidebook@eea.europa.eu](mailto:guidebook@eea.europa.eu)

# Translation into Russian of the Guidebook



A translation of the Guidebook is planned for around autumn 2017  
– work to be funded by EEA under its EU European Neighbourhood Policy (ENP) grant

# EMEP/EEA Guidebook: 2017 status

Several corrections & minor additions have already been made since publication:

- 1.A.2 Combustion in manufacturing industries and construction (PAH EF unit correction; EF reference for source 1.A.2.g.viii added)
- 2.H.2 Food and beverage industry (Table 3.5 now inserted)
- 3.D Crop production and agricultural soil (EF NH<sub>3</sub> from sewage sludge corrected)
- 1.A.3.a Aviation (annex corrected, corrected EFs)
- 1.A.3.b.i-iv Road transport (updated/corrected EFs)

The Guidebook revision log (available online) documents all changes made since publication.

# EMEP/EEA Guidebook: 2017 status

Two 'priority' chapters are tabled for TFEIP endorsement at this meeting, following recent work that reflects updated scientific knowledge and/or method development:

- i. Residential combustion
- ii. Road transport

Potential future updates across coming year(s)

- i. BREF/BAT conclusions adopted recently – various sectors
- ii. General guidance (incl. uncertainties, QA/QC)
- iii. New information from Concawe on refinery emissions (1A1, 1B2 chapters etc)
- iv. Agriculture – calculation support spreadsheet (2017), further changes to 3B, 3D, biogas?

# Guidebook 2016: Acknowledgments

## **Technical coordinators**

### **Stationary combustion:**

- Robert Stewart, Robert Whiting.

### **Mobile combustion and non-road mobile machinery:**

- Laurent Box, Laura Carbo, Chris Dore, Robin Deransy, Nuria Torres Meana, John Norris, Leonidas Ntziachristos, Mark Whiteley, Morten Winther.

### **Industrial processes, solvent and product use:**

- Peter Coenen, Stijn Dellaert, Patrik Fauser, Kevin Hausmann, Tatjana Kampffmeyer, Robert Kludt, Jeroen Kuenen, Antoon Visschedijk.

### **Agriculture:**

- Rikke Albrektsen, Barbara Amon, Chris Dore, Nick Hutchings, Beatriz Sanchez Jiménez, J. Webb, Jeremy Wiltshire, Sebastian Wulf.

### **Waste:**

- Jose Manuel Ramirez Garcia.

### **General guidance/cross-cutting:**

- Nadine Allemand, Mark Broomfield, Richard Claxton, Sabino Del Vento, Melanie Hobson.

# **Guidebook 2016: Acknowledgments**

**TFEIP co-chairs and expert panel leaders**

**All TFEIP/Eionet members who provided comments and supported the review of the draft chapters**

# Thank you