UPDATES TO THE EMEP/EEA GUIDEBOOK
Non-ferrous metals | Jeroen Kuenen

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OUTLINE

› Background

› Main changes for non-ferrous metals

› Conclusions
ABOUT THIS PROJECT

› EC funded Guidebook update which finalised in early 2016 (work of Ricardo team)
  › However, some issues remained which could not be addressed

› Use of solvents
  › Further refinement of methodologies to make these more usable
  › (How) can data from industry help to improve inventories?

› Production of non-ferrous metals
  › Specific comments received from industry during review phase
  › Updated BREF document available which can be used
ABOUT THIS PROJECT (2)

› Additional budget made available by EEA to cover these two areas and to provide means to update the Guidebook chapters as possible
  › Work started early March
  › Limited time available
  › Drafts to be produced by mid April in order to be able to discuss/endorse the chapters at this meeting
NFM - BACKGROUND

- Non-ferrous metal chapters not updated for quite a long time

- During the review of the GB chapters end of 2015 / early 2016 specific comments were received from industry associations (in particular Copper, Aluminium)
  - Descriptions in some cases outdated, need for updating to current situation
  - Some emission factors are not relevant
  - Emission factors should be updated following the updated BREF NFM
CHAPTERS CONCERNED

- All non-ferrous metal chapters in the EMEP/EEA Guidebook except storage and handling
  - 2.C.3 Aluminium production
  - 2.C.5 Lead production
  - 2.C.6 Zinc production
  - 2.C.7.a Copper production
  - 2.C.7.b Nickel production
  - 2.C.7.c Other metal production
WORK DONE – GENERAL

- The process descriptions were reviewed against the information in the new BREF and updated where relevant
- Taking into account that some processes may be outdated for the EU, but not for the pan-European countries

- Wherever references were made to BREF 2001, these were updated to BREF draft 2014 (draft adopted and now pending publication, so reference to be updated probably to BREF 2016)
- This applies both to descriptions and emission factors
- EFs have become lower but in some cases also higher – sometimes significantly different from the 2001 BREF EFs, e.g. due to different abatement assumptions
SPECIFIC UPDATES

- Heavy metal EFs from ESPREME (Theloke et al. 2008) reviewed
  - EFs with “BAT technology” removed, since these were in many cases found to be significantly higher than the Tier 1 EF

- For lead & zinc production, now specific Tier 2 tables for:
  - Primary and secondary production
  - Average EU technology (from BREF) for EU countries; and
  - Unabated EFs + abatement efficiencies for PM & HMs (from previous Guidebook) for other countries

- In abatement tables, some outdated old information was removed and some new abatement efficiencies were added from literature (BREF, US EPA)
SPECIFIC UPDATES (2)

- BAT associated emission factors (from verification sections) reviewed and updated using limit values from BAT conclusions (Annex of new BREF)

- Other metal production: new EFs based on precious metal production (from BREF) since origin of old EFs could not be found
CONCLUSIONS

› New Guidebook chapters reflect the information from the latest BREF document
  › However, the Guidebook only provides a short summary and main emission factors, with references to the BREF document for more detailed information

› Other updates to the chapters were made along, such as removal of outdated information and the restructuring of some of the methodologies
THANK YOU FOR YOUR ATTENTION