

Ricardo Energy & Environment

EMEP/EEA Guidebook: 2016 update Dr Mark Broomfield 17 May 2016

EMEP/EEA Guidebook 2016 update: Scope



- Task 1— Small-scale Combustion: Updated emission factors and improved methodologies
 - Update to reflect current technologies and fuel types
- Task 2 Particulate Matter inventory estimates
 - Task 2.1 Condensable vs filterable PM
 - Task 2.2 Non-road mobile machinery
- Task 3 Emission inventory estimates from agriculture
 - Task 3.1 Restructuring and developing new methods (NOx)
 - Task 3.2 Ammonia emissions from fertiliser use
 - Task 3.3 Ammonia emissions from standing crops
 - Task 3.4 Ammonia emissions from biogas
- Task 4 SO_x / SO₂ and Black Carbon
 - > Task 4.1 SO₂ and SO₃ in SO_x emissions; reduced sulphur
 - Task 4.2 Black carbon/Elemental carbon/Organic carbon
- Technical analysis leading to draft chapters published November/December 2015
- ConsultationDecember 2015/January 2016
- Finalise chapters February/March 2016

EMEP/EEA Guidebook 2016 update: Consultation



- Draft chapters posted on TFEIP website
- 8 week consultation period:
 - > 29 consultee responses
 - > 831 comments
- All chapters updated in the light of consultee comments

Comm	EMEP chapter	COMMENTS	Action
137	3.B	The references for the data in Table A3.7 are very old. I think in	Some updates have been made.
		many cases the presented Efs have changed during the last years.	
		There is a need to update this table.	
138	3.B	What is the source of this table (it looks like Table 3.10)? Values	The rows for NO and N2 deleted but it is the only place for
		are not correct. I think this is the 1. time "leachate" is mentioned	the TAN lost as effluent.
		in this chapter. It is unclear what to do with the leachate value.	
139	3.B	This Table needs an extra chapter ("Activity data" is definitely the	New heading added.
		wrong chapter)	
140	3.B	This Guidebook covers not only "gaseous emissions" (PM)	OK, 'gaseous' deleted.
1	1.A.1 Energy	Whole paragraph to be removed. What has been done in the 2015	Agree, text can be removed
	industries	is not relevant for the Guidebook text itself, and the second	
		sentence is already included just above.	
2	1.A.1 Energy	What is the difference between biofuels and biomass? Is biomass	Agree. Although biofuels is commonly used to describe
	industries	not part of biofuels?	biomass use in transport, biomass can cover biofuels so
			simplest to remove biofuels.
4	1.A.1 Energy	Replace with a sentence in the beginning somewhere: For	This has been implemented for 1.A.1, 1.A.2 and 1.A.4
	industries	guidance on GHG emissions of CO2, CH4 and N2O, we refer to the	
		IPCC Guidelines including a full reference.	
5	1.A.1 Energy	I think it should be repeated with each of the tables (or at least	Information repeated on p18
	industrias	compulars in chanter 21 that BC factors shown hare are actually	

EMEP/EEA Guidebook 2016 update: Outcome



- 56 chapters updated
- Substantial changes in:
 - > 1.A.4 Non-road mobile machinery
 - > 1.A.4 Small combustion
 - > 3.B Manure management
 - > 3.D Crop production and agricultural soil
 - 5.B.2 Biological treatment of waste anaerobic digestion at biogas facilities: New chapter
 - > 1.A.3.a Aviation (separate contract)
- New guidance and data evaluation:
 - > Filterable/condensable/total particles
 - ➤ Black carbon/Elemental carbon/Organic carbon
- SO_x / SO₂ / sulphur
 - > Requirements of international protocols and instruments
 - Data available
 - > Potential significance of differences in metrics
 - Recommendations

5.B	3.2 Biological treat	ment of waste – anaerobic digestion at biogus
Category		Title Biological treatment of waste – anaerobic digestion at
NFR:	5.B.2	biogas facilities
SNAP:	091006	Biogas production
ISIC:		
Version	Guidebook 2016	



Dr Mark Broomfield
Ricardo Energy & Environment
Chadwick House
Birchwood Park
Warrington WA3 6AE

Tel. +44 1235 753493 Web ee.ricardo.com

Email <u>mark.broomfield@ricardo.com</u>