



**Update log: changes & corrections made to chapters of the
[EMEP EEA air pollutant emission inventory guidebook 2009](#)**

18-Mar-13

Date	NFR	Chapter title	Table no.	Type	Description of change
June 2010	1.A.1	Energy industries	3-20	Correction	Reference for Pb in Table 3-20 amended from "US EPA 2000, chapter 3.1" to "US EPA 1998, chapter 1.4.
Dec 2010	1.A.3.a	Aviation	Page 9	Correction	The smoke number limit corrected according to ICAO Annex 16 to $[83.6 * (\text{Foo})^{-0.274}]$, instead of the earlier incorrect formula $[83 (\text{Foo}) - 0.274]$,
June 2010	1.A.3.b	Exhaust emissions from road transport	3-62	Update	Motorcycles. Table updated with new values.
June 2010	1.A.3.b	Exhaust emissions from road transport	3-63	Update	Motorcycles. Table updated with new values.
June 2010	1.A.3.b	Exhaust emissions from road transport		Revision	Section 4 Data Quality. Revised and updated with new information
May 2012	1.A.3.b	Exhaust emissions from road transport		Update	Additional information (and updated emission factors where applicable) added on legislation classes for rechargeable vehicles, biofuels, CO2 emitted due to lubricant oils, CO2 emitted from exhaust aftertreatment systems, heavy metals, LPG/CNG-fuelled vehicles, and EURO V and VI HDV emission factors.
July 2012	1.A.3.b.v	Gasoline evaporation	Pages 15-16	Update	Two text boxes added in fuel evaporation chapter clarifying what are the temperatures used and where information on fuel qualities can be found.
June 2010	1.A.3.d	Navigation (International navigation, national navigation, national fishing and military (shipping))	All	Revision	Major revision to chapter. New methods and default emission factors provided for Tier 1, 2 and 3 methodologies. Text and emission factor tables substantially revised on the basis of new data
Dec 2010	1.A.3.d	Navigation (International navigation, national navigation, national fishing and military (shipping))	References	Update	Link to pdf report added for Trozzi 2010 reference.
Dec 2010	1.A.3.d	Navigation (International navigation, national navigation, national fishing and military (shipping))	3-9 and 3-10	Correction	The NOx emission factors for high-speed diesel in 2005 had incorrectly been exchanged between MD and RO for 'manoeuvring & hotelling' for main engine
Dec 2010	1.A.3.d	Navigation (International navigation, national navigation, national fishing and military (shipping))	3-1 and 3-2	Correction	Footnote references added to table. Footnote 1 corrected from SOx to S.

Date	NFR	Chapter title	Table no.	Type	Description of change
March 2011	1.A.3.d	Navigation (International navigation, national navigation, national fishing and military (shipping))	Page 12	Correction	Incorrect unit given in formula description for tier 1 methodology, term 'Ei' now defined as kg instead of tonnes
June 2010	1.A.4	Non-road mobile sources and machinery	3-10 to 3-14	Update	The five tables 3-10 - 3-14: N ₂ O g/kWh changed to 0.035 instead of 0.35. The new factor is based on the assessment of emission factors made by IFEU and NERI for diesel engines used in road transport.
June 2010	1.A.4	Non-road mobile sources and machinery		Correction	Corrected text below Table 3-19: NH ₃ = 0.002 g/kWh goes into the equation
June 2010	1.A.4	Non-road mobile sources and machinery	3-19	Correction	Headings in Table 3-1: Changed "Gasoline: 2-stroke" to "Gasoline: 4-stroke". Changed "Gasoline: 4-stroke" to "Gasoline: 2-stroke"
June 2010	1.B.2.a.i, 1.B.2.b	Oil – Exploration, production, transport. Natural gas		Revision	Text and information on pipelines(crude oil distribution) added to this chapter from 1.B.2.a.v
June 2010	1.B.2.a.iv	Refining/storage	3-2 to 3-5	Update	Concawe 2007 reference updated to Concawe 2009
June 2010	1.B.2.a.iv	Refining/storage	3-2	Update	EFs and uncertainty ranges for PAHs (Benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene updated in line with Concawe 2009 reference
June 2010	1.B.2.a.iv	Refining/storage		Correction	Epperson (2007) reference corrected to Lev-On et al (2007)
June 2010	1.B.2.a.v	Distribution of oil products	3-6	Update	Table 3-6 NMVOC EF changed to 4 (from the original 6 value), Upper and lower EF ranges updated
June 2010	1.B.2.a.v	Distribution of oil products	3-7	Update	Table 3-7 the NMVOC EF changed to 7 from the original 12). Upper and lower EF ranges updated
June 2010	1.B.2.a.v	Distribution of oil products	3-2 to 3-11	Update	Concawe 2007 reference updated to Concawe 2009
June 2010	1.B.2.a.v	Distribution of oil products		Revision	Text and information on pipelines(crude oil distribution) removed from this chapter to 1.B.2.a.i
Sept 2011	1.B.2.a.vi	Geothermal energy extraction		Renamed	NFR in chapter name changed to 1.B.3 from previous 1.B.2.a.vi Geothermal energy extraction for consistency with NFR09 nomenclature
March 2013	2.B.4	Chemical industry	3-17	Correction	Table 3-17 'Tier 2 emission factors for source category 2.B.4 Calcium carbide production' - technology description corrected from 'CaC ₂ production without the use of furnace gas (e.g. lime kiln)' to 'CaC ₂ production with the use of furnace gas (e.g. lime kiln)'. Abatement technology changed from 'various dedusting' to 'venturi scrubber'
Sept 2011	3.A	Paint application	3-9	Correction	Default EF for NMVOC changed from 960 g/kg to 800 g/kg based upon maximum solvent content of paint given in the original reference
June 2010	4.B	Animal husbandry and manure management	B-18 to B-21, and B-24 to B-33	Correction	Earlier incorrect EF units for PM _{2.5} and PM ₁₀ EF changed from (NH ₃ -N per year as proportion of TAN) to (kg per AAP per yr).