

## 2.C.5 - Lead Production

### Short description

Within this NFR sub-category, SO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, TSP, As, Cd, Hg, Pb, PCDD/F and PCB emissions from the production of lead are reported.

| Method | AD | EF    | Key Category           |
|--------|----|-------|------------------------|
| T1     | AS | D, CS | <i>no key category</i> |

### Method

#### Activity data

The yearly production figures were taken from the annual statistical report of the German association for non-ferrous metals [\[Lit. 1\]](#).

#### Emission factors

The emission factors are either default values according to the 2016 EMEP/EEA air pollutant emission inventory guidebook [\[Lit. 2\]](#) or determined in several research projects. For heavy metals (HM), the applied emission factors are derived from [\[Lit. 3\]](#).

Table 1: Tier1 emission factors applied for entire time series

| Pollutant         | EF       | Unit |
|-------------------|----------|------|
| SO <sub>2</sub> , | 2.050    | kg/t |
| PM <sub>2.5</sub> | 0.0175   | kg/t |
| PM <sub>10</sub>  | 0.02125  | kg/t |
| TSP               | 0.025    | kg/t |
| As                | 0.041179 | g/t  |
| Cd                | 0.019767 | g/t  |
| Hg                | 0.324515 | g/t  |
| Pb                | 4.506295 | g/t  |
| PCDD/F            | 0.34     | µg/t |

#### Uncertainties

### Recalculations

With activity data and emission factors remaining unrevised, no recalculations have been carried out compared to last year's submission.



For pollutant-specific information on recalculated emission estimates for Base Year and 2018, please see the pollutant specific recalculation tables following [chapter 8.1 - Recalculations](#).

## Planned improvements

No category-specific improvements are planned.

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## Bibliography

**Lit. 1:** German association for non-ferrous metals (WirtschaftsVereinigung Metalle): Annual statistical report: <https://www.wvmetalle.de>

**Lit. 2:** EMEP/EEA, 2016: EMEP/EEA air pollutant emission inventory guidebook 2016, Copenhagen, 2016.

**Lit. 3:** Ökopol, IER, IZT, IfG: Bereitstellung einer qualitätsgesicherten Datengrundlage für die Emissionsberichterstattung zur Umsetzung von internationalen Luftreinhalte- und Klimaschutzvereinbarungen für ausgewählte Industriebranchen Teilvorhaben 2: NE-Metallindustrie, Kalkindustrie, Gießereien.