Chapter 8.2 - Improvements

Improvements since last Submission

- 1.A.3.c: broad revision of activity data for use of solid fuels and biomass in historic steam locomotives

Improvements planned for future submissions

Possible improvement issues that have been identified so far and will be checked in the future are given below:

Over-all inventory / all source categories

- To prioritise improvements on the basis of the results of the uncertainty analysis, it is planned to determine uncertainty analysis at source category level.

Individual source categories

stationary fuel combustion:

- evaluation of measurement data on POPs and heavy metal in large combustion plants (1.A.1.a)
- revision of SO_2 emission factors (1.A.1.b)
- further improvements of PAH Emission factors for small combustion plants

mobile fuel combustion:

- implementation of abrasive emissions from tyres, brakes and road surface into TREMOD (1.A.3.b vi + vii)
- validation and revision of approach for abrasive emissions from railways; possible implementation into TREMOD (1.A.3.c)

fugitive emissions:

- emission factors from natural gas transmission and distribution will be updated according to results of measurement programms (1.B.2.b)

industrial processes:

- collection of AD for titanium dioxide production and calculation of these emissions
- Update of some EF for Cement industry

Investigated Review Findings

NECD 2020

Aspect	Sector	Finding Sumamry	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	NECD 2020	Implemented	Official Comment for IIR
General	LPS	Improve consistency with the latest ePRTR reporting.						DE-LPS-GEN-2020-0002	Yes	
QA/QC	LPS	Improve coordinates given, check for collisions						DE-LPS-GEN-2020-0004	Yes	
QA/QC	LPS	Make sure each point source reported has unique key build from attributes						DE-LPS-GEN-2020-0003	No	Germany checked this issue and does not see any reason to change the data. It is unclear, why LPS name, GNFR and stack height should function as a key alternative, in particular because the table already provides the ePRTR ID as an unique and valid key.
Aspect	**Sector**	**Finding Sumamry**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**NECD 2020**	**Implemented**	**Official Comment for IIR**
Transparency	2C7a	Improve Transparency for Cd and Pb emissions from copper production						DE-2C7a-2020-0001	Yes	
Transparency	3I	Improve the transparency of the calculations used for NO emissions from storage of digestate from energy crops.						DE-3I-2020-0001	Yes	
Transparency	LPS	Reallocate livestock emissions from GNFR L_AgriOther to K_AgriLivestock						DE-LPS-K-2020-0001	Yes	
Aspect	**Sector**	**Finding Sumamry**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**NECD 2020**	**Implemented**	**Official Comment for IIR**
Consistency	1A4cii	IEF Cd trend since 2007 erratic				DE-1A4cii-2018-0001	DE-1A4cii-2018-0001 (ID reused)	DE-1A4cii-2018-0001 (ID reused)	No	All issues regarding the inconsistency of activity data from the National Energy Balance (NEB) can only be resolved as soon as the ongoing internal revision process launched by the provider of the NEB has been finished.
Consistency	1A4ciii	Large increase in AD from 2015 to 2016				DE-1A4ciii-2018-0001	DE-1A4ciii-2018-0001 (ID reused)	DE-1A4ciii-2018-0001 (ID reused)	No	All issues regarding the inconsistency of activity data from the National Energy Balance (NEB) can only be resolved as soon as the ongoing internal revision process launched by the provider of the NEB has been finished.
Aspect	**Sector**	**Finding Sumamry**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**NECD 2020**	**Implemented**	**Official Comment for IIR**

Aspect	Sector	Finding Sumamry	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	NECD 2020	Implemented	Official Comment for IIR
Completeness	2B6	Include the NOx emissions in the next submission.			DE-2B6-2017-0001	DE-2B6-2018-0001	DE-2B6-2017-0001 (ID reused)	DE-2B6-2017-0001 (ID reused)	No	Germany will look into possible implementations for this in the future. Not reported 2018.
Completeness	2C1	Potential under-estimate of emissions of HCB				DE-2C1-2018-0001	DE-2C1-2018-0001 (ID reused)	DE-2C1-2018-0001 (ID reused)	Yes	Data acquisition for the resolution of this issue will be implemented in the framework of a research project updating several emission factors. The effort is scheduled to start in 2021 and will take about 3 years. Until then, the default emission factor from the EMEP/EEA Guidebook is used.
Completeness	2D3a	Emissions of Hg not estimated					DE-2D3a-2019-0001	DE-2D3a-2019-0001 (ID reused)	No	
Completeness	2D3g	Report PAHs from 2D3g Chemical Products				DE-2D3g-2018-0001	DE-2D3g-2018-0001 (ID reused)	DE-2D3g-2018-0001 (ID reused)	No	A project is planned to collect AD and EF for this emission source with the goal to calculate PAHs emissions. Results will be available in 2021 at the earliest, so emission reporting could not be done before submission 2022.
Completeness	5D2	NMVOC emissions missing although default EFs exist					DE-5D2-2019-0001	DE-5D2-2019-0001 (ID reused)	Yes	Industrial wastewater NMVOC emissions were implemented and are part of the 2021 reporting.
Completeness	GRID	Add gridded emissions of Cd, Pb, Hg, PCDD/F, PAHs, HCB, PCBs to reporting						DE-GRID-GEN-2020-0001	Yes	
Completeness	LPS	Add missing pollutants PAHs, PCBs, PM2.5						DE-LPS-GEN-2020-0001	No	Since these pollutants are not in the ePRTR dataset, Germany cannot report them.
Aspect	**Sector**	**Finding Sumamry**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**NECD 2020**	**Implemented**	**Official Comment for IIR**
Accuracy	2D3a	Rationale for not estimating emissions in category 2D3a and notation key selection				DE-2D3a-2018-0001	DE-2D3a-2018-0001 (ID reused)	DE-2D3a-2018-0001 (ID reused)	No	Germany is in the process of evaluating data to calculate emissions of Hg from the use of fluorescent tubes.
Accuracy	LPS	Check emission data for facility “Heyne & Penke Verpackungen GmbH”						DE-LPS-E-2020-0001	Yes	

NECD 2019

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Transparency	1A1	Presents its NH_3 EF for stationary combustion in the next submission of its IIR, justify the use of these and compare these against the values in 2016 EMEP/EEA Guidebook.			DE-1A1-2017-0001	DE-1A1-2018-0001	DE-1A1-2017-0001 (ID reused)	No	A comparison with default values is not possible
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**
Consistency	1A4bii	Significant fluctuations in fuel consumption over the time series					DE-1A4bii-2019-0001	No	
Consistency	1A4cii	IEF Cd trend since 2007 erratic				DE-1A4cii-2018-0001	DE-1A4cii-2018-0001 (ID reused)	No	All issues regarding the inconsistency of activity data from the National Energy Balance (NEB) can only be resolved as soon as the ongoing internal revision process launched by the provider of the NEB has been finished.
Consistency	1A4ciii	Large increase in AD from 2015 to 2016				DE-1A4ciii-2018-0001	DE-1A4ciii-2018-0001 (ID reused)	No	All issues regarding the inconsistency of activity data from the National Energy Balance (NEB) can only be resolved as soon as the ongoing internal revision process launched by the provider of the NEB has been finished.
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**
Comparability	1A4ai	Implied EFs PAHs and PCDD/F are outliers compared to other member states					DE-1A4ai-2019-0001	No	An improvement of PAH Emission factors is planned. Currently a measurement Project is running.
Completeness	1A2a	NE reported for Cadmium although a default EF is available					DE-1A2a-2019-0001	Yes	
Completeness	1A2b	NE reported for some pollutants although default EFs are available					DE-1A2b-2019-0002	Yes	
Completeness	1A2b	NA is reported for HCB 1990					DE-1A2b-2019-0001	No	

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Completeness	1A3b	PCB emissions missing for all years although default emission factors are available					DE-1A3b-2019-0001	Yes	emissions calculated based on default EF
Completeness	1A3c	Update notation key from NE to NA					DE-1A3c-2019-0001	Yes	
Completeness	2B3	Include the NO_x emissions in the next submission preferably using a country specific method to account for the specific technologies and abatement equipment applied.			DE-2B3-2017-0001	DE-2B3-2018-0001	DE-2B3-2017-0001 (ID reused)	Yes	
Completeness	2B6	Include the NO_x emissions in the next submission.			DE-2B6-2017-0001	DE-2B6-2018-0001	DE-2B6-2017-0001 (ID reused)	No	Germany will look into possible implementations for this in the future. Not reported 2018.
Completeness	2C1	Potential under-estimate of emissions of HCB				DE-2C1-2018-0001	DE-2C1-2018-0001 (ID reused)	Yes	Data acquisition for the resolution of this issue will be implemented in the framework of a research project updating several emission factors. The effort is scheduled to start in 2021 and will take about 3 years. Until then, the default emission factor from the EMEP/EEA Guidebook is used.
Completeness	2D3a	Emissions of Hg not estimated					DE-2D3a-2019-0001	No	
Completeness	2D3g	Report PAHs from 2.D.3.g Chemical Products				DE-2D3g-2018-0001	DE-2D3g-2018-0001 (ID reused)	No	A project is planned to collect AD and EF for this emission source with the goal to calculate PAHs emissions. Results will be available in 2021 at the earliest, so emission reporting could not be done before submission 2022.

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Completeness	5A	Include NMVOC and $PM_{2.5}$ emissions from 5.A in its next submission.			DE-5A-2017-0001	DE-5A-2018-0001	DE-5A-2017-0001 (ID reused)	Yes	Implemented in 2020 reporting. Although only the reporting of NMVOC and PM2.5 emissions was requested, Germany decided to additionally report PM10 and TSP.
Completeness	5C2	Emission are not estimated for PCDD/F, Pb and Cd although default EFs are available					DE-5C2-2019-0001	Yes	Default-EF used, emissions reported.
Completeness	5D2	NMVOC emissions missing although default EFs exist					DE-5D2-2019-0001	No	Ongoing process
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**
Accuracy	1A1a	Include the revised estimate of activity data and emissions for biogas in its next submission.			DE-1A1a-2017-0003	DE-1A1a-2018-0001	DE-1A1a-2017-0003 (ID reused)	Yes	Implemented in 2020 submission
Accuracy	2D3a	Rationale for not estimating emissions in category 2D3a and notation key selection				DE-2D3a-2018-0001	DE-2D3a-2018-0001 (ID reused)	No	Germany is in the process of evaluating data to calculate emissions of Hg from the use of fluorescent tubes.
Accuracy	3B	Tier 1 method used for key category					DE-3B-2019-0001	Yes	Implemented in 2020 reporting

NECD 2018

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Transparency	1A1	Presents its NH3 EF for stationary combustion in the next submission of its IIR, justify the use of these and compare these against the values in 2016 EMEP/EEA Guidebook.			DE-1A1-2017-0001	DE-1A1-2018-0001	DE-1A1-2017-0001 (ID reused)	No	A comparison with default values is not possible
Transparency	1A1b	Include the country specific EFs for combustion in refineries in the relating chapter of its IIR to improve transparency.		§ 55	DE-1A1b-2017-0001	DE-1A1b-2018-0001		No	Emission factors are under revision. New emission factors will be included in the IIR following completion of the running refinery project.

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Transparency	1A3bi	Incorrect notation keys for activity data				DE-1A3bi-2018-0002		Yes	notation keys replaced by activity data values
Transparency	1A3bv	Incorrect notation keys for HCB and PCB emissions				DE-1A3bv-2018-0001		Yes	'NE' replaced by 'NA' as suggested by the TERT
Transparency	2D3d	Include explanation on recalculation to 1994 in the next submission.			DE-2D3d-2017-0001	DE-2D3d-2018-0001		Yes	Was reported in submission 2019.
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**
Consistency	1A4cii	IEF Cd trend since 2007 erratic				DE-1A4cii-2018-0001	DE-1A4cii-2018-0001 (ID reused)	No	All issues regarding the inconsistency of activity data from the National Energy Balance (NEB) can only be resolved as soon as the ongoing internal revision process launched by the provider of the NEB has been finished.
Consistency	1A4cii	Inconsistent AD values NFR vs. IIR				DE-1A4cii-2018-0001		Yes	no more inconsistency between NFR and IIR
Consistency	1A4ciii	Large increase in AD from 2015 to 2016				DE-1A4ciii-2018-0001	DE-1A4ciii-2018-0001 (ID reused)	No	All issues regarding the inconsistency of activity data from the National Energy Balance (NEB) can only be resolved as soon as the ongoing internal revision process launched by the provider of the NEB has been finished.
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**
Comparability	5C	Hg EF is 100 times smaller than the default value proposed in the 2016 EMEP/EEA Guidebook and the Cd and Pb EF are 1000 times smaller than the default values proposed in the 2016 EMEP/EEA Guidebook				DE-5-2018-0001		Yes	References to research Projects of CS-EF added
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Completeness	1B2aiv	Potential under-estimate of emissions of Hg, Cd, PCDD/F				DE-1B2aiv-2018-0001		No	Metal and PCDD/F emissions are not considered as fugitive. If IE would be used nevertheless one can assume there are such fugitives. Germany suggest to keep the notation key NA.
Completeness	2B3	Include the NOx emissions in the next submission preferably using a country specific method to account for the specific technologies and abatement equipment applied.			DE-2B3-2017-0001	DE-2B3-2018-0001	DE-2B3-2017-0001 (ID reused)	Yes	
Completeness	2B6	Include the NOx emissions in the next submission.			DE-2B6-2017-0001	DE-2B6-2018-0001	DE-2B6-2017-0001 (ID reused)	No	Germany will look into possible implementations for this in the future. Not reported 2018.
Completeness	2C1	Potential under-estimate of emissions of HCB				DE-2C1-2018-0001	DE-2C1-2018-0001 (ID reused)	No	please see table for NECD 2019 (with the same ID)
Completeness	2C3	Include NOx from aluminium production in the next submission to improve completeness and comparability.			DE-2C3-2017-0001	DE-2C3-2018-0002		Yes	Germany carefully assessed the situation regarding this issue and concluded, that no substantial NOx emission are to be expected from this source. But in order to avoid an underestimation Germany implemented the default EF of the emission guidebook 2019.
Completeness	2C3	Potential under-estimate of emissions of HCB				DE-2C3-2018-0001		Yes	Data acquisition for the resolution of this issue will be implemented in the framework of a research project updating several emission factors. The effort is scheduled to start in 2021 and will take about 3 years. Until then, the default emission factor from the EMEP/EEA Guidebook is used.

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Completeness	2D3g	Report PAHs from 2D3g Chemical Products				DE-2D3g-2018-0001	DE-2D3g-2018-0001 (ID reused)	No	A project is planned to collect AD and EF for this emission source with the goal to calculate PAHs emissions. Results will be available in 2021 at the earliest, so emission reporting could not be done before submission 2022.
Completeness	5A	Include NMVOC and PM2.5 emissions from 5A in its next submission.			DE-5A-2017-0001	DE-5A-2018-0001	DE-5A-2017-0001 (ID reused)	Yes	Implemented in 2020 reporting. Although only the reporting of NMVOC and PM2.5 emissions was requested, Germany decided to additionally report PM10 and TSP.
Completeness	5D	Include the estimation of NMVOC emissions from wastewater treatment plant in its next submission.			DE-5D-2017-0001	DE-5D-2018-0001		Yes	
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**
Accuracy	1A1a	Include the revised estimate of activity data and emissions for biogas in its next submission.			DE-1A1a-2017-0003	DE-1A1a-2018-0001	DE-1A1a-2017-0003 (ID reused)	Yes	Implemented in 2020 submission
Accuracy	2D3a	Rationale for not estimating emissions in category 2D3a and notation key selection				DE-2D3a-2018-0001	DE-2D3a-2018-0001 (ID reused)	No	Germany is in the process of evaluating data to calculate emissions of Hg from the use of fluorescent tubes.

NECD 2017

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Transparency	1A1	Presents its NH3 EF for stationary combustion in the next submission of its IIR, justify the use of these and compare these against the values in 2016 EMEP/EEA Guidebook.			DE-1A1-2017-0001	DE-1A1-2018-0001	DE-1A1-2017-0001 (ID reused)	No	A comparison with default values is not possible

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Transparency	1A1a	Improves the transparency of its IIR regarding PM2.5 shares used for each fuel (solid fuels (coal and lignite) and gaseous fuels, but also biomass if relevant).			DE-1A1a-2017-0001			Yes	
Transparency	1A1b	Include the country specific EFs for combustion in refineries in the relating chapter of its IIR to improve transparency.		§ 55	DE-1A1b-2017-0001	DE-1A1b-2018-0001		No	Emission factors are under revision. New emission factors will be included in the IIR following completion of the running refinery project.
Transparency	1A2gviii	Improve the transparency of the IIR to explain its assumptions on the PM2.5 fraction used for each fuel and particularly for liquid fuels, biomass and other fuels.			DE-1A2gviii-2017-0001			Yes	
Transparency	2A1	Include the explanation and rationale for using two sets of activity data to be included in the IIR for the next submission.			DE-2A1-2017-0001			Yes	
Transparency	2C	Update the SO2 emission factors for 2C5, 2C6 and 2C7a for the next submission to reflect the individual production activities and to include more transparent information on primary vs. secondary production of lead, zinc and copper in the IIR.			DE-2C-2017-0001			Yes	
Transparency	2D3d	Include explanation on recalculation to 1994 in the next submission.			DE-2D3d-2017-0001	DE-2D3d-2018-0001		Yes	Was reported in submission 2019.

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Transparency	3B	Include the information for the proportional of NO-N and N2 and the reference in the IIR to improve transparency.			DE-3B-2017-0002			Yes	
Transparency	3B2	Mention that NFR 3B2 includes lambs and also explain the lower EF NMVOC used for lambs. Furthermore, the TERT recommend that Germany in IIR mentioned that pullets are included in NFR 3B4giv other poultry.			DE-3B2-2017-0004			Yes	
Transparency	3F	Include more information in the IIR for the next submission, referring to the specific law and clarifying from which year the ban came into force. Furthermore, it is recommended to inform whether there are derogations for field burning under certain circumstances or for certain crop types.			DE-3F-2017-0001			Yes	
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**
Consistency	1A2	Use the right notation keys in the NFR tables for its next submissions. (1A2 Stationary Combustion in Manufacturing Industries and Construction, PM2.5, 2005-2015)			DE-1A2-2017-0001			Yes	
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Comparability	3Da1	Use the updated emission factors available in the 2016 EMEP/EEA Guidebook (Table 3.2) for the next submission.			DE-3Da1-2017-0001			Yes	
Completeness	2B10a	Investigate whether flaring occurs in relation to carbide production e.g. by contacting the single producer of carbide.			DE-2B10a-2017-0002			Yes	Flaring is a common destruction technic in chemical industry. But no information exists to assign flaring quantities to a single installation.
Completeness	2B3	Include the NOx emissions in the next submission preferably using a country specific method to account for the specific technologies and abatement equipment applied.			DE-2B3-2017-0001	DE-2B3-2018-0001	DE-2B3-2017-0001 (ID reused)	Yes	
Completeness	2B6	Include the NOx emissions in the next submission.			DE-2B6-2017-0001	DE-2B6-2018-0001	DE-2B6-2017-0001 (ID reused)	No	Germany will look into possible implementations for this in the future. Not reported 2018.
Completeness	2C3	Include NOx from aluminium production in the next submission to improve completeness and comparability.			DE-2C3-2017-0001	DE-2C3-2018-0002		Yes	Germany carefully assessed the situation regarding this issue and concluded, that no substantial NOx emission are to be expected from this source. But in order to avoid an underestimation Germany implemented the default EF of the emission guidebook 2019.
Completeness	3Da2b	Include the emission from sewage sludge applied to agricultural soils in the next submission.			DE-3Da2b-2017-0001			Yes	

Aspect	Sector	Finding summary	CLRTAP 2010	CLRTAP 2014	NECD 2017	NECD 2018	NECD 2019	Implemented	Official Comment for IIR
Completeness	5A	Include NMVOC and PM2.5 emissions from 5A in its next submission.			DE-5A-2017-0001	DE-5A-2018-0001	DE-5A-2017-0001 (ID reused)	Yes	Implemented in 2020 reporting. Although only the reporting of NMVOC and PM2.5 emissions was requested, Germany decided to additionally report PM10 and TSP.
Completeness	5D	Include the estimation of NMVOC emissions from wastewater treatment plant in its next submission.			DE-5D-2017-0001	DE-5D-2018-0001		Yes	
Completeness	5E	Although the Guidebook has methods for car and house fires in Chapter 6, it may be more transparent to include these in Chapter 7 as Chapter 6D is more focused on compost and sludge. The ERT encourages Germany to consider including some of these emissions in the next submissions.	§ 116	§139	DE-5A-2017-0003			Yes	
Aspect	**Sector**	**Finding summary**	**CLRTAP 2010**	**CLRTAP 2014**	**NECD 2017**	**NECD 2018**	**NECD 2019**	**Implemented**	**Official Comment for IIR**
Accuracy	1A1a	Include the revised estimate of activity data and emissions for biogas in its next submission.			DE-1A1a-2017-0003	DE-1A1a-2018-0001	DE-1A1a-2017-0003 (ID reused)	Yes	Implemented in 2020 submission

CLRTAP 2010 & 2014

2014

2010