LCI Review report (reviewed against "ILCD Data Network - entry-level requirements")

Draft template

Table 1: General review reporting items

REVIEW REPORTING			
General information			
Data set name	**Polycarbonate granulate (PC); technology mix; production mix, at plant; (en)**		
Data set UUID and version number	c4161063-3fde-4540-ad1c-f2da1828bf7b (00.00.000)		
Data set locator (e.g. Permanent URI, URL, contact point, or database name and version, etc.)			
Data set owner	**PlasticsEurope**		
Review commissioner(s)	**PlasticsEurope/JRC**		
Reviewer name(s) and affiliation(s), contact	**Dr.-Ing. Ivo Mersiowsky, DEKRA Consulting GmbH**		
Review type applied	**Independent external**		
Date of review completion (DD/MM/YYYY)	**15/08/2013**		
Reviewed against / Compliance system name	**ILCD Data Network - Entry-level requirements**		
Reviewer assessment:			
Aspect	**Yes**	**No**	**Comments**
Quality compliance (aspects of ISO 14040 & 14044) fulfilled (see table 2)	x		
Method compliance (as in ISO 14040 & 14044) fulfilled and documented in data set	x		
Nomenclature compliance (see table 3) fulfilled	x		
Documentation compliance (see table 3) fulfilled	x		
Review compliance (Independent external review OR independent internal review + review report) fulfilled	x		
Overall compliance with ISO 14040 & 14044	x		
Overall compliance with "Compliance system"	x		
Date, location, reviewer signature	Stuttgart, 28/08/2013		

Table 2: Specific/detailed review reporting items for LCI data set: Quality compliance (ISO 14040 & 14044). Please note that for aggregated LCI result data sets, this includes key processes in the background system.

ITEMs	Comments
Time-related coverage/representativeness: "age of data and the minimum length of time over which data should be collected" "qualitative assessment of the degree to which the data set reflects the true population of interest"	**Very good** Foreground: 12 month averages representing the reference year 2007. Background: mainly 2005 – 2008. Maximum temporal validity until 2020. (p. 8--9)
Geographical coverage/representativeness: "geographical area from which data for unit processes should be collected to satisfy the goal of the study" "qualitative assessment of the degree to which the data set reflects the true population of interest"	**Very good** European production average (data from 3 suppliers in Germany, Belgium, Spain, the Netherlands representing 100%). (p. 9)
Technology coverage/representativeness: "specific technology or technology mix" "qualitative assessment of the degree to which the data set reflects the true population of interest"	**Very good** Technology mix representing European production (see above). 100 % of the European PC production capacity (EU-27) in 2007. Specific production lines averaged into mix (cf. GR) (p. 8)
Precision: "measure of the variability of the data values for each data expressed (e.g. variance)"	**n/a** Not quantifiable due to nature of technology mix; see Uncertainty below for explanation of "n/a" rating. (p. 10)
Completeness: "percentage of flow that is measured or estimated"; assessed on level of process	**Very good** Reference to cut-off (p. 9); justified that all available data were modelled; cross check on impact level confirms that >95% arequantifiable. (p. 10)
Consistency: "qualitative assessment of whether the study methodology is applied uniformly to the various components of the analysis"	**Very good** To ensure consistency, only primary data of the same level of detail and background data from the GaBi 5 databases [GABI 5 2011] were used. While building up the model, cross-checks ensured the

ITEMs	Comments
	plausibility of mass and nergy flows. The methodological framework is consistent throughout the whole model as the same methodological rinciples are used both in foreground and background system.Consistent methodology & GaBi d/b, x-checked internally (p. 10)
Sources of the data; Appropriateness of use primary/secondary data source	Primary data was collected from producers (p. 9). Secondary data was sourced from GaBi (p. 10--11).
Uncertainty of the information (e.g. data, models and assumptions).	Variation of single data was not recorded. Variation of the model/dataset not applicable due to vertical average of production lines and technologies. Information on data variation (prim/sec) n/a; assumptions were not explicitly reported (p. 9); but models were thoroughly plausibility-checked (p. 21). Hence, Precision above rated “n/a”.
Others	

Table 3: Specific/detailed review reporting items for LCI data set: Nomenclature and Documentation

ITEMs	Comments
Nomenclature	
Correctness and consistency of applied nomenclature (Preferred use of ILCD flows etc.; Correct nomenclature of other flows; Exclusion of not permissible waste flows, sum indicator elementary flows etc.)	Yes – GaBi internal database format is aligned and compatible with ILCD requirements (consistent nomenclature) -- conducted spot checks on the LCI (xls and ILCD xml); spot checks were conducted on flows in XLS: • Some resources not attributed to compartments – only in XLS, correct in ILCD; • No emissions designated as long-term – only in XLS, correct in ILCD.
Documentation	
Appropriateness of documentation (see Document “Documentation of LCA data sets”)	Yes – meta-data completed and appropriate; documentation aligned with ILCD standards.
Appropriateness / correctness of documentation form (ILCD Format)	Yes – GaBi internal database format is aligned and compatible with ILCD requirements (consistent format of meta-data and content) -- spot checks were conducted on dataset.