

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		

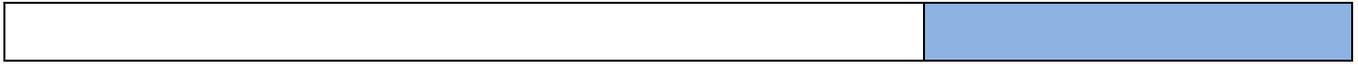


Table 2: Specific/detailed review reporting items for LCI data set: Quality compliance (ISO 14040 & 14044). Please note that for aggregated LCI result data sets, this includes key processes in the background system.

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

ITEMs	Comments
	<p>plausibility of mass and energy flows. The methodological framework is consistent throughout the whole model as the same methodological principles are used both in foreground and background system. Consistent methodology & GaBi d/b, x-checked internally</p> <p style="text-align: right;">(p. 10)</p>
Sources of the data; Appropriateness of use primary/secondary data source	<p>Primary data was collected from producers (p. 9).</p> <p>Secondary data was sourced from GaBi (p. 10--11).</p>
Uncertainty of the information (e.g. data, models and assumptions).	<p>Variation of single data was not recorded. Variation of the model/dataset not applicable due to vertical average of production lines and technologies.</p> <p>Information on data variation (prim/sec) n/a; assumptions were not explicitly reported (p. 9); but models were thoroughly plausibility-checked (p. 21).</p> <p>Hence, Precision above rated "n/a".</p>
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.)	<p>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:</p> <ul style="list-style-type: none"> • 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.