

Product-Category Rules (PCR)  
for Preparing an Environmental Product  
Declaration (EPD) for  
Cushioned Furniture  
PCR 2017:1.0

Oderbau Furniture Co., Ltd.

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## **1. General information**

This document is intended to be used as the product category rules (PCR) for the manufacturing of cushioned furniture (“product”) globally, excluding furniture which consists only of wood or stone frame. This PCR covers products with the Central Product Classification Code (CPC Code) of 38111, 38112, 38119 and 38150, and Harmonized System (HS) Code of 9401.30 to 9401.69, 9401.71, 9401.79, 9401.80, and 9404.10 to 9404.29. The requirements specified in this PCR are intended to be used for EPDs certified in accordance with the ISO 14025 standard. This document shall be valid until November 30, 2020.

This PCR was first drafted by the Oderbau Furniture Co., Ltd. Representatives from major Taiwanese manufacturers of similar products and stakeholders were then invited by the Taiwan National Furniture Association (NFA) to the open consultation meeting held on November 2, 2017, to participate in the discussion and review of the draft PCR. The Environment and Development Foundation (EDF) subsequently reviewed and approved this PCR.

For further information and comments concerning this PCR, please contact: Oderbau Furniture Co., Ltd.- Roger Lin manager (Tel: 886-3-4902000 Ext 140; Fax: 886-3-4905508; Email: roger@oderbau.com).

## **2. Company and product description**

The EPD shall include information about the manufacturing company/organization. The information may include manufacturing process related information, and environmental management related information, such as the environmental management system information. The information may also include special issues, which the company/organization would like to emphasize, such as the products meeting certain environmental criteria, or environmental safety, and health related information.

This PCR covers the whole life cycle stages of the cushioned furniture, and is applicable to the Business-to-Customer/Consumer (B2C) and Business-to-Business (B2B) communications. During the inventory of product related environmental impacts, the scope of inventory shall also cover the accessories and packaging materials.

### **2.1 Product group functions**

Cushioned furniture (“product”) is designed and manufactured to meet the needs of the environment and people's lifestyles. Cushioned chairs and mattresses are usually comfortable to use and offer great user support and convenience, in order to support human body, provide a convenient living environment, and enable the user to fully enjoy and relax. Cushioned furniture is usually designed specifically for a variety of settings and uses (e.g., living room, dining room and bedroom), in the forms of chairs and mattresses. They can offer users with a wide variety of selections and functions, and often add to comfortable feeling and aesthetic of the living environment.

## 2.2 Product components

### Main components:

The product's main components may include but not limited to the following:

- **Covering**
  - Synthetic/artificial/faux leather (e.g., polyurethane (PU) and thermoplastic polyurethane (TPU))
  - Leather (e.g., grain leather and leather split)
  - Textile (e.g., ultra-fine fiber cloth, woven Fabrics, knitted fabrics and non-woven fabrics)
  - Natural materials (e.g., bamboo, and rattan)
- **Padding materials** (e.g., coil spring, PU foam (PUR), latex, cotton, down, coconut bristles, air and liquid)
- **Frame** (e.g., metal, wood, bamboo, rattan, plywood and plastics)□
- **Sewing threads** (e.g., nylon, Bundi, Tetoron, cotton threads)
- **Adhesives** (e.g., water-based, oil-based, TPR heat-melt adhesives)

### Secondary components

The product's secondary components may include but not limited to the following:

- **Velcro** (e.g., made of nylon, polyethylene and PE materials)
- **Fasteners** (e.g., metal and plastic buckles, nails and screws)

- **Elastic bands** (e.g., made of Tetoron, PP, nylon, TPU, and cotton materials)
- **Other accessories** (e.g., plastic and steel buttons, zipper)

**Auxiliary materials** (e.g., alcohols, cleaning agents, and solvents)

**Packaging materials** (e.g., sponge sheet, outer boxes, plastic bags, and tapes)

### 2.3 Product technical description

The product technical description part of the EPD may include but not limited to the following information:

- Brand logo
- Model number
- Size/dimension
- Color
- Date of manufacture
- Country of manufacture

## 3. List of materials and chemical substances

The contents of the following materials and substances in the product shall be declared:

- All materials of the product (excluding packaging material) with weight ratio (material weight/product weight (excluding packaging))  $\geq 1\%$ ;
- All materials of the packaging with weight ratio (material weight/packaging weight)  $\geq 1\%$ ;
- All substances/materials in the product restricted/regulated by legal and customer requirements.

The content of restricted substances in the main components may be declared.

The declaration of no restricted or regulated substances may only be made when appropriate evidences are available (for example, test reports from accredited laboratories/testing facilities). The following organizations may provide accreditation for testing facilities: Taiwan Accreditation Foundation (TAF), (Asia Pacific Laboratory

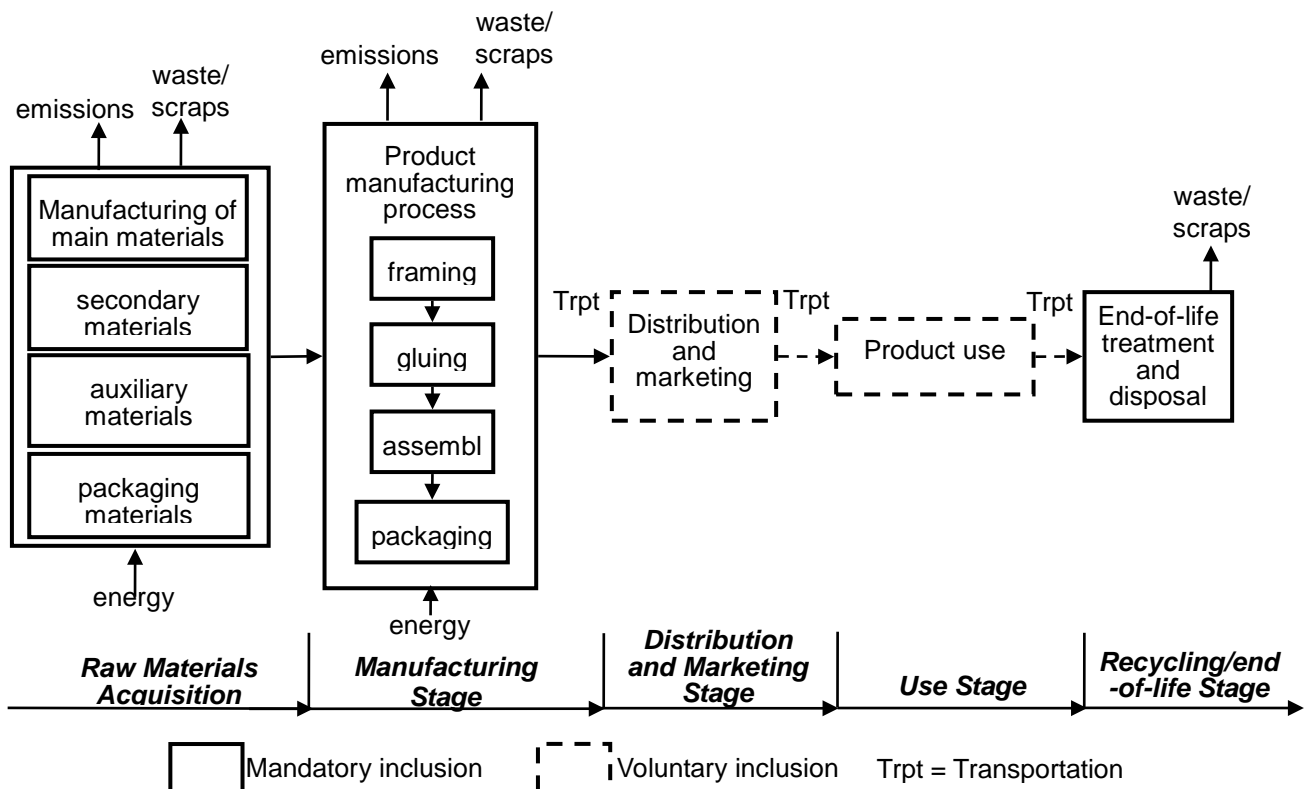
Accreditation Cooperation (APLAC), International Laboratory Accreditation Cooperation (ILAC) or ILAC Mutual Recognition Arrangement (ILAC MRA). For definitions of testing methodology and confirmations of regulated hazardous substances based on the accredited laboratories' product testing methods, please refer to IEC 62321 Standard.

#### 4. Declared unit or functional unit

The declared unit is one (1) piece or set of cushioned furniture ("product"), with the product's materials, size/dimension, and specification (e.g., queen size mattress, 152cm X 190cm X 20cm, made of latex and cotton) indicated. The reason for adopting this unit is that chairs or mattresses are usually sold and marketed in this unit.

#### 5. System boundaries

The main system boundaries for the declared product system are presented as follows:



**Figure 1 System boundary of the product system**

As noted in Figure 1 above, the life cycle of cushioned furniture ("product") covers five life cycle stages: raw material acquisition, product manufacturing, distribution and marketing, use, and recycling/end-of-life.

product use and recycling/end-of-life. The data quality requirements for the life cycle inventory data are described in Section 9 on calculation rules and data quality requirements. The system boundaries and required information for the various life cycle stages are described as follows.

### **Raw Materials Acquisition Stage**

The LCA shall include information for the following unit processes related to main and secondary components and packaging materials:

- Processes related to the extraction, production, forming and refining for raw materials used in the primary materials, secondary materials, auxiliary materials and packaging materials or components;
- Environmental impacts associated with the manufacturing of primary materials;
- Environmental impacts associated with the manufacturing of secondary materials;
- Environmental impacts associated with the manufacturing of auxiliary materials;
- Environmental impacts associated with the manufacturing of packaging materials;
- Processing related to the processing and treatment of waste generated from the above processes.

The inclusion in the LCA the information on the transportation of raw materials is optional (voluntary).

### **Manufacturing Stage**

The LCA shall include information for the following unit processes:

- Transportation of primary, secondary, auxiliary and packaging materials to the product assembly plant;
- Inputs of energy/resources and outputs of waste associated with the product manufacturing processes (including framing, gluing, assembling and packaging of products);
- Transportation of semi-finished or finished products within the manufacturing plant;
- Transportation of process waste to the waste treatment facilities.

### **Distribution and Marketing Stage**

The LCA shall include information for the following unit processes:

- Transportation of products to the distribution sites or customer designated locations;
- For waste associated with transportation of products to the distribution sites or customer designated locations, if the waste is being recycled or reused, the inventory shall cover only the transportation to the waste recycler;
- The declaration of transportation and energy/resource inputs associated with the shipment of products from distributors/retailers to the customers is optional;
- The inventory does not include the processes associated waste treatment.

### **Use Stage**

The LCA may include information for the following unit processes.

In general, if the cushioned furniture becomes dirty or soiled, it is generally cleaned with a wet cloth to remove or wipe away the dirt, followed by wiping with a dry cloth. The routine maintenance of the furniture typically involves using vacuum to remove accumulated dust or debris. As very little water or electricity is involved with the furniture's daily use and maintenance, it is recommended that the water and electricity consumption during the product use stage can be neglected.

### **Recycling/end-of-life Stage**

The LCA shall include information for the following unit processes:

- Transportation of end-of-life product to the recycler or treatment facilities;
- Reporting of recycling information (such as recycling and dis-assembly report or information on recycling channels) is mandatory in the EPD; and the environmental impact shall be calculated based on the declared recycling rate;
- If there are potential recycling benefits associated with the recycler's recycling technologies or recycling approach, information related to such benefits shall be provided in the EPD.

## **5.1 Specification of different boundary settings**



## **Boundary in time**

The validity period for the LCA results presented in the LCA report shall be defined.

## **Boundary towards nature**

If the manufacturing processes are located within Taiwan, the solid waste categories as defined in Taiwan's Waste Disposal Act shall be adopted. If the processes are located in other countries, equivalent legal requirements shall be considered.

The natural boundary of the system shall describe the boundary where the materials and energy resources flow from nature into the system, and where the water and air emissions and waste are released out of the system.

Only the quantity of the disposed waste needs to be considered; the landfilling process does not need to be considered. If the waste is generated through wastewater treatment or incineration process, such waste should be included into the wastewater treatment or incineration process.

## **Boundaries in the life cycle**

The boundaries in the product life cycle are described in Figure 1. The construction of the site and infrastructure, as well as the production of manufacturing equipment and activities of site operators do not need to be included.

## **Boundaries towards other technical systems**

Boundaries towards other technical systems describe the inputs of material and other components towards other systems, as well as outputs of materials towards other systems. For the inputs of recycled materials and energy towards the product manufacturing stage, the transportation between the recycling process and use of recycled materials shall be included in the data set. For the production of recyclable products during the manufacturing stage, the transportation towards the recycling process shall be included.

*(Note: Further explanations are provided in Section 7 on open-loop recycling.)*

## **Boundaries regarding geographical coverage**

The manufacturing stage may cover manufacturing processes located on any sites around the world. For processes located in a specific region, the data used should be representative of the region. The data for the main constituents shall be the specific regional data for the region where the process takes place (see Section 9). For ease of comparison, no matter where the emissions are generated, the same environmental impact parameters should be used for life cycle impact assessment (see Section 10).

## 6. Cut-off rules

For any impact category, if the sum of various impacts from a specific process/activity is less than 1% of the impact equivalent in that category, such a process/activity may be neglected during the inventory analysis. Nonetheless, the accumulated impact of neglected process/activity may not exceed 5%. That is, at least 95% of the potential life cycle emissions shall be evaluated. Components and materials omitted from the LCA shall be documented.

(Note: This judgment for this “1% Rule” is based on the environment relevance assessment of material input to the system, and does not consider special and exceptional environmental impacts.)

## 7. Allocation rules

The main allocation rules shall be valid for the entire product system. For other secondary processes, other allocation rules may be defined; however, the use of these rules should be justified. Product-specific information should be preferentially collected in order to avoid the need for allocation. While selecting allocation rules, the following principles are recommended.

- **Multi-output:** The allocations are based on the changes in the resource consumption and pollutant emissions (for example, adopted quantity allocation for some main component, or surface allocation for some components), following the changes in the studied system’s output product or function or economical relationship.
- **Multi-input:** The allocation is based on actual relationship. For example, the manufacturing process’s emissions may be affected by the change in waste flow

input.

- **Open loop recycling:** For the input of recycled materials or energy during the manufacturing stage of the product system, the transportation between the recycling process and the recycling to material use shall be included in the dataset. For the product which shall be recycled during the manufacturing stage, the transportation towards the recycling process shall be included.

*(Notes: - Allocation may be avoided through avoidance of dividing processes, for example as described in Section 6.3 of ISO/TR 14049; or through expansion of system boundary (for example as described in Section 6.4), so that the amended system shares the same product exchanges as the original system.)*

## 8. Units

The base units and derived units of the International System of Units (SI, *Système International d'unités*) shall be used preferentially.

### Power & energy units:

- power unit: W
- energy unit: J

### Specification units:

- length unit: m
- capacity unit: m<sup>3</sup>
- area unit: m<sup>2</sup>
- weight unit: kg

### If necessary, prefixes may be used before the SI units:

- 10<sup>9</sup> = giga, symbol “G”
- 10<sup>6</sup> = mega, symbol “M”
- 10<sup>3</sup> = kilo, symbol “k”
- 10<sup>-2</sup> = centi, symbol “c”
- 10<sup>-3</sup> = milli, symbol “m”

- $10^{-6}$  = micro, symbol “ $\mu$ ”
- $10^{-9}$  = nano, symbol “n”

## 9. Calculation rules and data quality requirements

### Data quality requirements for the raw material acquisition stage

- Generic data may be used for the extraction, production, forming, refining and transportation of main, secondary, auxiliary and packaging materials used for the products. Please refer to Appendix I for the common sources of generic data. When generic data are used, the latest version of the data shall be used.

### Data quality requirements for the manufacturing stage

- Site specific data (for example, specific data for manufacturing plant or transportation) shall be used for the manufacturing and assembly of product (including the framing, gluing, assembly and packaging processes). If there are multiple manufacturing sites, specific data from a plant representative of such a site may be used.
- Generic data may also be used when contract manufacturers refuse to provide specific data, or when even if generic data are used in place of specific data, there is only minor impact to the results. The general rule is that if generic data are used in place of specific data, their combined contribution for all life cycle stages shall not be greater than 20% of total impacts for each impact category.
- When generic data are used, the equivalence between the chemical and/or physical process or at least the same technical range of referred systems shall be considered. Moreover, it is also recommended to consider the date or geographic aspects of the data quality when feasible. The latest version of the generic data shall be used.
- The data shall be representative for the average of a specific year. If the average data for a specific year cannot be obtained, average data for a specific time period may be used. However, the selected specific time period should be representative, and the reason for using such data shall be provided.
- The electricity mix for the manufacturing stage should be site specific data. If site specific data cannot be obtained, the official electricity mix for the country where the site is located may be used as approximate value. The electricity mix should be documented. If other combination of electricity is used, the reason for using such data

shall be documented and provided.

- For the definition of hazardous waste, the definition as defined in Taiwan's Waste Disposal Act shall be used for sites located in Taiwan. For sites located outside Taiwan, legal requirements for the host country shall be observed.
- For the transportation of main components/materials to the manufacturing plant, the actual transportation modes used and distance traveled shall be considered.

Note: For purpose of inventory and declaration of product carbon footprint, where the organization implementing this PCR does not contribute 10% or more to the upstream GHG emissions of the product or input prior to its provision to another organization or the end-user, the primary activity data requirement shall apply to the emissions arising from those processes owned, operated or controlled by the first upstream supplier that does contribute 10% or more to the upstream GHG emissions of the product or input.

#### **Data quality requirements for the distribution and marketing stage**

- For transportation of products to the downstream distributors/retailers, the actual mode of transportation and distance traveled shall be considered.
- The inputs of energy and resource, and the outputs of waste during the distribution and marketing stage shall be considered.

#### **Data quality requirements for the use stage**

- The resource inputs and energy consumption during the product use stage scenario shall be included and generic data may be used. When generic data are used, the latest version of the data shall be used.

#### **Data quality requirements for the recycling/end-of-life stage**

- For transportation of end-of-life product as post-consumer waste for delivery to processors or recyclers, the data from national or industry sources or consumer behavior surveys can be used. When such data cannot be obtained, evaluation based on assumed scenario can be made, and the assumptions for such a scenario shall be reported in the EPD.
- Generic data may be used during the recycling/end-of-life stage, if for specific reason the site specific data for the recycling/waste disposal system cannot be obtained.

Then generic data and recycling rate may be used to calculate environmental impact. Please refer to Appendix I for the common sources of generic data. When generic data are used, the most recent data shall be used.

## **10. Parameters to be declared in the EPD**

The following parameters shall be declared in the EPD:

### **Energy consumption**

- Consumption of energy (e.g., electricity or other energies) shall be declared for all stages of the product life cycle.

### **Resource use**

- non-renewable resources
  - materials resources
  - energy resources (used for energy conversion purposes)
- renewable resources
  - material resources
  - energy resources (used for energy conversion purposes)
- secondary resources
  - material resources (pre-consumer or post-consumer recycling and reuse)
  - energy resources (used for energy conversion purposes)
- recovered energy flows (such as thermal energy) expressed in MJ
- water resource use indicators shall also be calculated from the life cycle inventory. These indicators do not constitute a “water footprint” as potential environmental impacts due to the water use in different geographical locations is not captured. The minimum indicators for water resource use in the EPD shall be:
  - total amount of water (consider make-up water for in-plant recycling and reuse)

- direct amount of water used by the core process
- The following requirements for the water resource use indicators apply (in part adopted from water footprint inventory in *ISO 14046 Environmental management - Water footprint - Principles, requirements and guidelines*):
  - water use includes evaporation, transpiration, product integration, release into different drainage basins or the sea, displacement of water from one water resource type to another water resource type within a drainage basin (e.g. from groundwater to surface water). In-stream water use is not included.
  - for water used in closed loop processes (such as cooling system) and in power generation only the net water consumption (such as reintegrations of water losses) should be considered.
  - sea water shall not be included in the indicator.
  - tap water or treated water (e.g. from a water treatment plant), or waste water that is not directly released in the environment (e.g. sent to a wastewater treatment plant) are not elementary water flows, but intermediate flows from a process within the technosphere.
  - additional transparency in terms of geographical location, type of water resource (e.g., groundwater, surface water).

**The following requirements on the resource declaration shall also apply:**

- all parameters for resource consumption shall be expressed in mass, with the exception of renewable energy; resources used for the generation of hydroelectric, wind electricity and solar energy, which shall be expressed in MJ;
- all parameters shall not be aggregated but reported separately. Resources which contribute for less than 5% in each category shall be included in the resources list as “other”;
- nuclear power shall be reported among the non-renewable energy resources as kg of uranium calculated by converting the thermal energy (MJ) considering a reactor of III generation with an efficiency of 33%;

- the PCR can define other resources (for example rare materials originating from the LCI data) which may be listed and detailed in the EPD for each specific product category;
- the energy content of some products (such as paper or plastic based products) is useful information for the end of life management. For this reason, the “energy content of product” shall be declared in MJ: its estimation shall be made considering the gross calorific value of the product. Only the energy that is suitable for an eventual energy recovery at the end of life shall be considered (energy content of steel due to its carbon content, for example, shall not be considered since it is not practically recoverable);
- energy content of biomass used for feed or food purposes shall not be considered.

### **Impact equivalents expressed as potential environmental impacts**

The potential environmental impacts associated with the various types of use of resources and pollutant emissions shall be reported into the following impact categories:

- Emission of greenhouse gases (expressed as the sum of global warming potential, GWP, 100 years, in CO<sub>2</sub> equivalents).
- Emission of acidifying gases (expressed as the sum of acidifying potential in sulphur dioxide (SO<sub>2</sub>) equivalents).
- Emission of gases that contribute to the creation of ground-level ozone (expressed as the sum of ozone-creating potential, ethene-equivalents).
- Emission of substances to water contributing to oxygen depletion (expressed as phosphate (PO<sub>4</sub><sup>3-</sup>) equivalents).

### **Impacts category for optional (voluntary) declaration**

In accordance with the LCA results of this product category, other categories of impacts with significance may also be declared.

### **Resource Recycling and Waste**

- hazardous waste (as defined in waste management laws of the country where the waste is generated);
- non-hazardous waste



- Plastic parts marking: Where technologically possible, plastic parts of the vehicle weighing  $\geq 25$  g shall be marked in accordance with the ISO 11469 and ISO 1043 Part 1/2/3/4, SPI or other international standard label to facilitate their identification and recovery at the end of life.
  - Plastic packaging material marking: The Plastic packaging materials shall be labeled on the parts with SPI or other international standards for ease of sorting.
- Recyclable resources or materials (optional information)
  - Pre-consumer recyclable materials (optional information)

Note: For characterization factors of each impact category, please refer to *EPD General Programme, Version 2.5 (2015-5-11)*.

## 11. Recycling information

The recycling information shall include information such as dis-assembly instructions, which parts/components are suitable for recycling (such as metal cases) or not suitable for recycling.

## 12. Other environmental information (Optional)

The EPD may cover information including technology adopted, site of product manufacturing and assembly, as well as information on other working environment, health and risk-related aspects.

If this PCR is intended to be used for product carbon footprint declaration purpose, in the declaration, information regarding commitment on GHG reduction should be included and shall ensure that the commitment is measurable, reportable and verifiable. The organization may also list environmental and energy management related information, such as awards, commendations and system certifications (e.g., ISO 14001, ISO 14064-1, and IECQ HSPM).

### 13. Information about the certification

The information on PCR review, EPD verification and verification organization shall be included.

EPD Certification is valid until 20XX-__-__	
It is in accordance with the Requirements for the international EPD system, <i>General Programme Instructions, Version 2.5 (2015-05-11) – www.environdec.com.</i>	
The PCR review for _____ (PCR 2017: ) was administered by the Environment and Development Foundation and carried out by an LCA expert panel chaired by Dr. Wen-Ching Chen (wenc@edf.org.tw).	
Independent verification of the declaration, according to ISO 14025:2006	
<input type="checkbox"/> Internal <input checked="" type="checkbox"/> External	
Third party verifier: Environment and Development Foundation in Taiwan.	
Accredited by :	
Name:	
Title:	
Organization:	Signature: _____
Name:	
Title:	
Organization:	Signature: _____
Name:	
Title:	
Organization:	Signature: _____
Environmental declarations from different programmes may not be comparable.	

## 14. References

The EPD established in accordance with this PCR shall refer to the following documents:

- EPD General Programme Instructions, Version 2.5 (2015-05-11), downloadable from: <http://www.environdec.com/en/The-International-EPD-System/General-Programme-Instructions/>
- Capacity of Toiletry, Taipei Water Department, <http://www.water.gov.taipei/ct.asp?xItem=991283&ctNode=48111&mp=114001>
- ISO 14040, “Environmental management — Life cycle assessment — Principles and framework”, second edition (2006-07-01)
- ISO 14044, “Environmental management — Life cycle assessment — Requirements and guidelines”, first edition (2006-07-01)
- PCR documents of relevance to product declaration
- The underlying LCA report
- Development of UN’s Central Product Classification (CPC), from the website of National Statistics of the Republic of China (Taiwan)
- Central Product Classification (CPC), Version 2.1 (2015-08)

When available, the following documents shall also be referenced:

- Other documents and recycling instructions that verify and complement the EPD.

## Appendix I – Generic Data Sources to Refer to

For processes located within Taiwan, Taiwan generic data or the data published by the commercial, industrial and energy competent authorities of the Republic of China (ROC) government, may be used. However, for other regions (such as EU), if there are more relevant generic data available, these data should be used instead. Data from the following generic databases are recommended for use.

<b>Material</b>	<b>Database</b>	<b>Published</b>
Industrial processes	ecoinvent 3.3	2016
Packing materials, transport, Waste treatments	BUWAL 250, 2 <sup>nd</sup> edition	2004
Steel, Primary copper, Copper products, Electricity, Fuels, Aluminum, Chemicals, Transports, Waste management	ecoinvent 3.3	2016
	PE-GaBi 14	2014
	ELCD version 3.2	1995-2014
	The Boustead Model 6.0	2013
	EIME (Environmental Information and Management Explorer) EcoBilan	1999-2014
Plastics	PE Plastics Europe (Association of Plastics Manufacturers in Europe)	1993-2016
	PE-GaBi 14	2014
	ELCD version 3.2	1995-2014
	ecoinvent 3.3	2016
	The Boustead Model 6.0	2013
	EIME (Environmental Information and Management Explorer) EcoBilan	1999-2014
Electronic components	PE-GaBi 14	2014
	ELCD version 3.2	1995-2014
	ecoinvent 3.3	2016
	The Boustead Model 6.0	2013
	EIME (Environmental Information and Management Explorer) EcoBilan	1999-2014
LCA Database in Taiwan	<a href="#">Carbon Footprint Calculation Platform</a>	2017
	<a href="#">DoITPro</a>	2017

## **Appendix II – Reporting Format for the EPD**

This appendix provides guidance information for the titles of sections, types of data and required information to be reported in the mandatory reporting part of the EPD. As a generic reporting template, the following titles and sub-titles are recommended:

*(Refer to the PCR manual for the section numbering, the information in Italics are the recommended data/information for inclusion)*

### **Introductory part**

Each EPD should have an introduction part on the top part of the EPD which includes the following information:

- *Company/organization name*
- *Product name*
- *EPD registration number*

### **Description of the company/organization and product/service**

#### ***Company/Organization***

- *Description of company/organization*
- *Description of overall working environment, existing quality system and environmental management system*

#### ***Product and services (see Section 2)***

- *Product's main applications*
- *Description of product specification, manufacturing process, manufacturing sites (if there are several sites)*
- *For product's environmental performance aspects, characteristics which may improve the usefulness of product*
- *Other types of relevant information, for example, special manufacturing processes with special advantages to the environment*

## **List of materials and chemical substances**

- *Content declaration (see Section 3)*

## **Presentation of the environmental performance**

- *Outline of the LCA methodology, for example, period of LCA, declared units, system boundaries (graphical presentation), cut-off and allocation rules, and data sources. (see Section 5~10)*

### ***Raw Materials acquisition stage***

### ***Manufacturing stage***

### ***Distribution, Use and End-of-Life stage***

- *Geographical area where the product is delivered*
- *Transport data*
- *Design life*
- *Description of state of usage and energy consumption*
- *Annual power consumption and annual global warming potential*
- *End of life information*

## **Information about Company and Certification Organization**

### ***Recycling information (see Section 11)***

### ***Other environmental information (see Section 12)***

### ***Information regarding certification (see Section 13)***

- *Names of certification and verification organizations*
- *Validity of certification certificates*
- *Compliance with legal and relevant requirements*

### ***References (see Section 14)***

- *relevant PCR documents*

- *EPD General Programme Instructions, Version 2.5 (2015-05-11)*
- *underlying LCA study*
- *other supporting documents for LCA information*
- *other relevant documents regarding company/organization's environmental activities*

## Appendix III Abbreviations

Acronyms	Common Name
APLAC	Asia Laboratory Accreditation Cooperation
CFP	Carbon Footprint of Product
WFP	Water Footprint of Product
EPD	Environmental Product Declaration
ErP	Energy Related Product
ILAC	International Laboratory Accreditation Cooperation
ILAC MAR	International Laboratory Accreditation Cooperation Mutual Recognition Arrangement
ISO	International Organization for Standardization
LCA	Life Cycle Assessment
PCR	Product Category Rule
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
SPI	Society of the Plastics Industry
CPSC	Consumer Product Safety Commission
TAF	Taiwan Accreditation Foundation
AAFA	American Apparel & Footwear Association
RSL	Restricted Substance List