



**Protocol for**

**ClimeCo Certified Product™ Program**



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The ClimeCo Certified Product™ certification is aimed at increasing awareness of the carbon dioxide emissions of products and recognizing companies that are taking action to hasten a market transformation to a low- carbon future. The product certification and labeling program was started by the Carbonfund.org Foundation in 2007, called the *Carbonfree* Product Certification Program, and is now owned and managed by ClimeCo. This program has been renamed, rebranded, and the protocol has been reviewed and updated based on current standards. Prior to this program rebranding and relaunch, the last update to the program protocol was completed in November 2022.

## **Authors**

The first version of the *Carbonfree* Product Certification Carbon Footprint Protocol was developed jointly by the staff at the Edinburgh Centre for Carbon Management and Carbonfund.org in 2007. The Protocol has been updated several times since the original version by Carbonfund.org, with input from EarthShift, WAP Sustainability, ClimeCo, program participants, and the general public.

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## Purpose of this document

The purpose of this protocol is to establish the requirements for the ClimeCo Certified Product™ Program (formerly called the Carbonfree® Certified Products program).

### 1. Background

Driven by corporate responsibility, consumer demand, investor expectations, and potential government regulation, companies are increasingly interested in quantifying, reducing, and offsetting the greenhouse gas (GHG) emissions associated with the products they manufacture and/or supply.

Carbonfund.org Foundation, a leading nonprofit provider of climate solutions for individuals and companies, developed the Carbonfree Product Certification as a globally recognized climate action product label. In October 2022, leading global sustainability company [ClimeCo LLC](#) purchased certain assets of the nonprofit Carbonfund.org, including the name “Carbonfund.org”, the website, the Carbonfree Product Certification Program, and others.

Under the new leadership and management of ClimeCo, the Carbonfree Product Certification Program is being renamed as the **ClimeCo Certified Product™ Program** (“Program”) and provides more opportunities to enhance value, reliability, and transparency to companies and their stakeholders. ClimeCo’s expansive suite of services and credible, high-quality market-based solutions provide customers with additional trustworthy options to bolster their ClimeCo Certified Product™ certification and take targeted steps towards positive climate action.

This document provides Program participants and affiliates a standard approach to follow when applying for the Program.

### 2. Key objectives

This protocol provides a credible, transparent, and practical method to determine the Global Warming Potential (GWP) of products. The method can be consistently applied by qualified third party consultants and product manufacturers across a broad range of industries and products to discover and develop strategies to reduce product carbon footprint. This method can also be used to inform decisions to offset un-abatable product carbon impacts with high quality verified carbon credits sourced from science-backed carbon offset projects.

### 3. Protocol updates

This iteration of updates to the Protocol has been driven by and addresses the following:

- Change in ownership
  - ClimeCo taking over the administration of the Program
  - Expanded opportunities for partnering with ClimeCo

- Provisions to avoid potential conflicts of interest
- Market Factors including increased legal scrutiny of environmental labels, certifications and claims, and increasing inquiries into the quality and credibility of offsets purchased
  - Added stringency around acceptable requirements for achieving the certification
  - Added stringency around requirements for developing and maintaining a carbon emissions reduction plan
  - Added transparency around acceptable categories of offsets
  - Requirements for annual renewal
- Ease of participation
  - Greater clarity on certification process
  - Recommended formats for submitting Product Life Cycle Assessment (LCA) report
  - Guidance for communication and disclosure

#### 4. Glossary and acronyms

**ClimeCo Certified Products™** – Products whose “cradle-to-grave” life cycle carbon footprints have been calculated, reviewed, certified, approved and offset as part of the ClimeCo Certified Product™ Program AND been registered into the Program.

**Product Carbon Footprint** – A calculation of a product-level GWP based upon an analysis of the GHG (Greenhouse Gas) emissions produced during the “cradle-to-grave” life cycle of a product and calculated using an accepted LCA methodology. Product Carbon Footprint is usually reported as a numerical value expressed in kilograms of CO<sub>2</sub>e per defined product functional unit. Product Carbon Footprint and product GHG Footprint/assessment/inventory are considered interchangeable terms in this protocol.

**Life Cycle Assessment (LCA)** - is an accounting and evaluation practice for assessing the potential environmental aspects and potential aspects associated with a product (or service), by compiling an inventory of relevant inputs and outputs, evaluating the potential environmental impacts associated with those inputs and outputs, interpreting the results of the inventory and impact phases in relation to the objectives of the study. For the purposes of this Protocol, any reference to LCA refers to an analysis conducted on the product’s cradle-to-grave lifecycle GHG emissions while other environmental impacts associated with the product are excluded from consideration.

**IPCC** - Intergovernmental Panel on Climate Change

**GHGs** – Greenhouse Gases, currently including:

- CH<sub>4</sub> - Methane
- CO<sub>2</sub> – Carbon Dioxide
- HFC – Hydrofluorocarbon
- N<sub>x</sub>O<sub>x</sub> – Nitrous Oxides, Nitrogen Dioxide
- PFC – Perfluorocarbon
- SF<sub>6</sub> – Sulphur Hexafluoride

**CO<sub>2</sub>e** – Carbon Dioxide Equivalent is a common, globally accepted way of measuring and expressing GHG emissions. To convert emissions of a gas into CO<sub>2</sub> equivalent, its emissions are multiplied by the gas's Global Warming Potential (GWP). The GWP takes into account the fact that many gases are more effective at warming Earth than CO<sub>2</sub>, per unit mass.

**Global Warming Potential** - Global Warming Potential (GWP) allows comparisons of the global warming impacts of different GHGs. Specifically, it is a measure of how much energy the emissions of 1 metric tonne of a GHG gas will absorb over a given period of time, relative to the emissions of 1 metric tonne of carbon dioxide (CO<sub>2</sub>). The larger the GWP, the more that a given GHG gas warms the Earth compared to CO<sub>2</sub> over that time period. The time period used for GWPs for the purposes of this Protocol is 100 years (“GWP-100”).

**“cradle-to-gate”** – assesses the product life cycle impacts to include the extraction of raw materials; the processing, manufacturing, and fabrication of the product; the transportation or distribution of the product to the consumer. (Cradle-to-gate LCAs are not generally accepted into this Program. Exceptions may be made by ClimeCo for certain commercial/industrial products upon receiving a prior written request and supporting documents from the applicant).

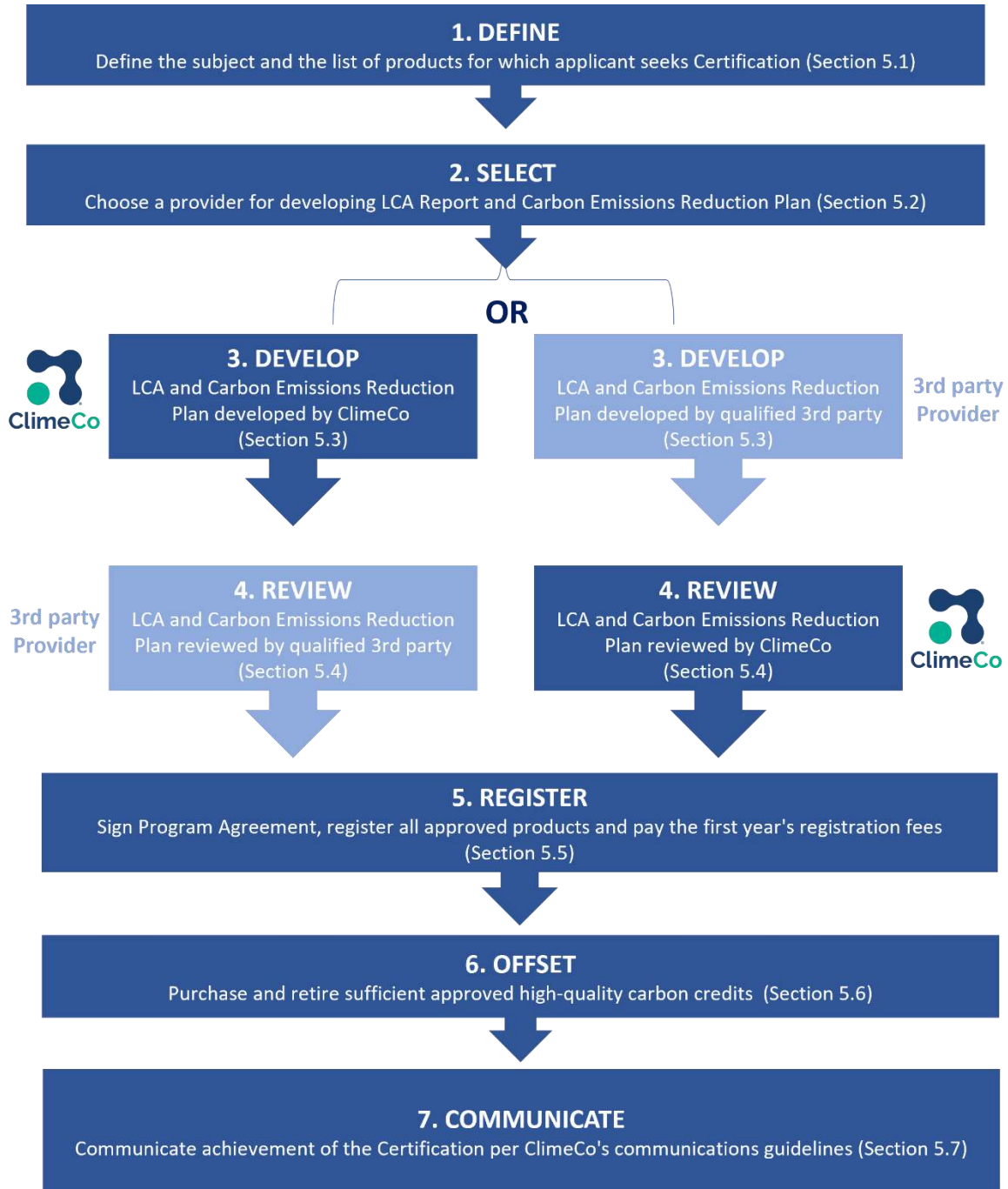
**“cradle-to-grave”** – assesses the full product life cycle impacts to include the extraction of raw materials; the processing, manufacturing, and fabrication of the product; the transportation or distribution of the product to the consumer; the use of the product by the consumer; and the disposal or recovery of the product after its useful life.

**EPD®** - Environmental Product Declaration is an independently verified and registered document based upon an International Organization for Standardization (“ISO”) Standard 14044 LCA Report or a Type III Product Specific LCA that communicates transparent and comparable information about the life-cycle environmental impact of products.

**Qualified third party consultants** – Qualified third party consultants are independent service providers who are listed in the EPD database of LCA Consultants ([see list here](#)) or are service providers able to provide requested credentials for ClimeCo’s review and approval. A list of qualified third-party providers is also available upon request.

## 5. Certification Process

The figure below describes the process for applying to the Program.



Process for achieving ClimeCo Certified Product™ certification

Applicants seeking to register their products into the Program shall adhere to the process and requirements described below:

## **5.1 Define**

### **5.1.1 Subject**

Applicants shall clearly define the subject for which the certification is sought, including the name and description of the subject boundary, a detailed description of the product(s) and supporting information to uniquely identify the product(s) and the product functional unit to be assessed.

### **5.1.2 Scope and Boundaries**

Applicants must include the product(s) full life cycle “cradle-to-grave” emissions inventory in the LCA. The LCA must include at least 95% of GHG emissions associated with the raw materials, manufacture and packaging of a product, and both upstream and downstream emissions from product distribution, product use and end of life.

In exceptional circumstances, applicants with products in the commercial or industrial sectors may submit a “cradle-to-gate” LCA that is compliant with one of the Standards listed in Section 5.3.1. In such cases, the applicant will request an exception providing justification for seeking the exclusion and obtain prior written consent from ClimeCo.

Applicants seeking the ClimeCo Certified Product™ certification who also intend to be enrolled in programs like Amazon’s Climate Pledge Friendly Program cannot apply to ClimeCo for any exclusions and must include the full “cradle-to-grave” inventory in their LCA report.

## **5.2 Select Provider**

Companies must work with an LCA consultant to perform the LCA analysis and develop the LCA Report and Carbon Emissions Reduction Plan (see Section 5.3.3). Companies seeking to register products into the Program must bear all costs of the Product LCA assessment and any required third-party review. Program applicants have one of two options when choosing an LCA Provider:

1. Applicants can choose to partner with ClimeCo to conduct the LCA analysis. ClimeCo’s LCA team can support the applicant by conducting the LCA analysis per the subject, scope and products desired by the applicant to develop an LCA report and a Carbon Emissions Reduction Plan that adheres to the requirements of this Protocol.
  - a. In this case, a review of the LCA report and Carbon Emissions Reduction Plan will be conducted by a qualified third-party consultant to ensure objectivity and quality.
2. Applicants also have the option to work with qualified third-party consultants/providers to conduct the LCA and develop the LCA report and the Carbon Emissions Reduction Plan in adherence to this Protocol.
  - a. In this case, ClimeCo will review the LCA report and the Carbon Emissions Reduction Plan to ensure objectivity and quality.



## 5.3 Develop

Applicants are required to conduct an LCA analysis for all products for which certification is sought based on the boundaries and scope defined above. LCA Requirements are listed in **Section 5.3.1** below.

Applicants shall develop and submit to ClimeCo an LCA report (see **Section 5.3.2** for more details) based on the results of the LCA analysis. Applicants shall also develop and submit a Carbon Emissions Reduction Plan (see **Section 5.3.3** for more details).

### 5.3.1 LCA Requirements

#### Standards

The LCA report submitted by applicants must be compliant with one or more of the following internationally recognized standards<sup>1</sup>:

- PAS 2050:2011 and PAS 2060:2010
- ISO 14067:2018
- ISO 14040-14044:2006 Product Life Cycle Assessment (LCA) – full LCA or single attribute LCA for product carbon footprint only
- ISO 14024:2018
- ISO 14025:2006 Environmental Product Declaration following applicable ProductCategory Rule
- World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol for Product Accounting & Reporting Standard (2015)

It is the responsibility of the preparer of the LCA report:

- to apply conservative processes and measurements in order to assure that the full carbon footprint of the product is captured,
- to attest that the resulting LCA report is in compliance with one or more of the protocol's required Standards, and
- to identify the Standard(s) to which the LCA complies.

Any material deviations or exclusions from the Standard(s) followed in the product's carbon footprint assessment must be explained, justified according to the methodologies as allowed in the Standard(s), and accepted by ClimeCo prior to the product's consideration for program registration.

#### Emissions to be included

The LCA report shall include an assessment of all GHGs required by the UNFCCC/Kyoto Protocol and the applicable standard(s) at the time the product inventory is being compiled and corresponding emissions shall be converted to CO<sub>2</sub> equivalents (CO<sub>2</sub>e).

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<sup>1</sup> For short description of these standards, see the Appendix.

## **Global Warming Potential**

The GHGs shall be assessed to the 100-year GWP values for these GHGs as defined in IPCC Assessment Reports, unless otherwise specified in the applicable Product Category Rule in compliance with ISO 14025.

### **Data sources and transparency of data quality**

Product LCA estimates shall use primary and secondary data and data sources consistent with the requirements of the chosen Standard and its required methodology.

All data sources, assumptions and sources of evidence shall be clearly stated in the LCA report.

### **5.3.2 LCA Report**

The results of the LCA analysis along with detailed descriptions of the subject, scope, boundaries, limitations, etc. must be summarized in the LCA report.

See **Appendix B** for the recommended format in which the LCA report should be submitted.

### **5.3.3 Carbon Emissions Reduction Plan**

The LCA report can be used to help companies identify and target GHG savings and reduction opportunities in their product supply chain. Emissions reduction is a critical component of climate action and an important requirement for continued participation in the Program.

ClimeCo requires applicants to submit a Carbon Emissions Reduction Plan as part of their application that describes their efforts for achieving said reductions.

Requirements for the carbon emissions reduction plan are listed below.

#### **Requirements**

The applicant shall submit a Carbon Emissions Reduction Plan that includes the following:

- Details of historic, ongoing and planned/future emissions reduction initiatives
- Details of programs, partnerships, technologies and strategies adopted to reduce emissions across the value chain
- Targets and timeline for achieving further reductions

Elements of a product's Carbon Emissions Reduction Plan should include targets for annual product GHG emission reductions and progress towards achieving these targets, and should include an assessment of changes to areas in the product's life cycle that may have affected the product's carbon footprint, including but not limited to:

- a) changes in processes, equipment, technology and/or transportation methods due to improvements or upgrades made by the reporting organization;
- b) selection and/or changes to suppliers in any stage of the product's life cycle;
- c) deliberate and verifiable process improvements made by reporting organization and/or suppliers;
- d) improvements in the use stage and in the end-of-life stage achieved through improved product design or an improved end-of-life procedure.

#### **5.4 Review**

Applicants shall submit the LCA Report and Carbon Emissions Reduction Plan to ClimeCo for review.

The submitted LCA Report and Carbon Emissions Reduction Plan will be reviewed by ClimeCo or a qualified third-party consultant.

To ensure credibility of the certification Program and to avoid any biases or potential conflicts interest,

- If ClimeCo has conducted the LCA analysis and developed the LCA report and Carbon Emissions Reduction Plan for the applicant, then the reports will be reviewed by a qualified third-party consultant.
- If a qualified third-party consultant has conducted the LCA analysis and developed the LCA report and Carbon Emissions Reduction Plan for the applicant, then the reports will be reviewed by ClimeCo.

Any findings from the review process will be shared with the applicant to enable the applicant to explain, edit or modify their reports and resubmit. Upon completion of the review process, a brief Review Report will be provided to the applicant that summarizes the review findings and how they were addressed along with confirmation that the application can progress to the "Register" stage.

#### **5.5 Register**

Upon successful completion of the Review steps, the applicant's products are eligible to be registered into the ClimeCo Product Certification Program.

The applicant shall sign a 3-year Program Agreement with ClimeCo, register all approved products and pay the first year's Program registration fees and carbon offset purchases based on first year forecasted sales of all registered products.

#### **5.6 Offset**

The applicant shall purchase, and ClimeCo will retire on behalf of the applicant, sufficient carbon credits to offset the unavoidable GHG emissions from the total Product Carbon Footprint for all registered product sales.

To ensure purchase of sufficient carbon credits, applicants may report actual registered product sales on a quarterly basis but must pre-purchase carbon credits based on

forecasted annual sales, then report and manage the "bank" of carbon credits with ClimeCo on a quarterly basis.

ClimeCo shall facilitate the selection, purchase, and retirement of approved, relevant, high-quality carbon credits on behalf of the applicant. All carbon credits for the ClimeCo Certified Product™ Program must be purchased through ClimeCo.

Carbon credits purchased through ClimeCo are carefully vetted for the highest quality, credibility and transparency and meet the following internationally accepted standards for credible carbon credits:

- Carbon credits are procured from globally recognized Standards including:
  - Gold Standard
  - Verified Carbon Standard
  - American Carbon Registry
  - Climate Action Reserve
  - Cercarbono EcoRegistry
- Projects have been validated and carbon credits have been verified by a third-party verifier against an established Standard.
- Credits are generated from GHG reduction or removal enhancement projects.
- Projects generating the credits meet the criteria of additionality, leakage and double counting as defined in the WRI GHG Protocol for Project Accounting and/or ISO 14064:2.
- Carbon credits are retired by ClimeCo by unique serial numbers on the public registry maintained by the applicable Standard.

## **5.7 Communicate**

Once all applicant requirements have been met, including the purchase of offsets from ClimeCo, the ClimeCo Certified Product™ certification will be given to the applicant. They will receive a certification badge guide and will be permitted the use of the ClimeCo Certified Product™ logo for the relevant products and the applicable Scope.

The applicant can now communicate their achievement of the ClimeCo Certified Product™ certificate and the ClimeCo Certified Product™ logo on their website and may also use them in advertising, literature, publicity, labels, and technical bulletins in printed or electronic media. All communications related to the ClimeCo Certified Product™ certification must be in accordance with the guidelines provided in the certification badge guide.

ClimeCo can provide additional communication support, upon request, to enable companies to communicate their achievement effectively and in accordance with relevant standards.

## **Recommended Disclosure**

Companies are encouraged to disclose the following key information to further enhance transparency and build trust with their stakeholders:

- a) The carbon footprint of their products covered by the Program
  - When the carbon footprint of the product is disclosed to the public, the results shall be clearly shown in kilograms of carbon dioxide equivalent per LCA-assessed functional unit of product, and in accordance with any requirements for carbon footprint reporting and/or communication as set forth in the applicable standards in **Section 5.3.1**.
- (b) The certificate along with details of products covered under the certification, the scope of the certification and date of certification
- (c) The offset registry or program
- (d) The project identification number, if applicable
- (e) The project name as listed in the registry or program, if applicable
- (f) The offset project type and site location
- (g) The specific methodology used to estimate all greenhouse gas emission reductions

## 6. Renewal Requirements

The ClimeCo Certified Product™ certification is valid for a period of 12 months from the date of issue. Annual renewal is required to continue use of the certification and logo.

For annual renewal, the applicant shall provide the following information:

### 6.1 UPDATES to LCA Report

An update summarizing changes, if any, to areas in the product's life cycle that may have affected the product's carbon footprint, including but not limited to:

- changes in processes, equipment, technology and/or transportation methods due to improvements or upgrades made by the reporting organization;
- selection and/or changes to suppliers in any stage of the product's life cycle;
- deliberate and verifiable process improvements made by reporting organization and/or suppliers;
- improvements in the use stage and in the end-of-life stage achieved through improved product design or an improved end-of-life procedure.

### 6.2 UPDATED Carbon Emissions Reduction Plan

An updated plan that provides information on:

- Progress of emissions reduction initiatives described in previous Carbon Emissions Reduction Plan
- Amount of actual reductions achieved and the areas in which they were achieved
- Areas where reductions did not meet the set targets and the company's plans to address the same
- Updated targets for emissions reduction
- New or updated initiatives to achieve reductions

Product-level emissions reduction is an important requirement for continued participation in the Program. Applicants must take efforts to reduce product-level emissions and report said reductions in the Updated Carbon Emissions Reduction Plan.

### **Risk of decertification**

If a product's carbon footprint is found to have increased for more than two successive annual cycles, annual renewal will be denied, and the registered product will be decertified from the Program. Applicants will have to reapply to the Program after making process improvements to demonstrably reduce reductions.

## **6.3 UPDATED List of LCA-assessed and Approved Products**

An updated list of LCA-assessed and approved products to be registered for the upcoming annual program period.

## **7. Updating the Protocol**

The Protocol will be reviewed and updated periodically. ClimeCo will lead the review and update process, and will include input from program participants, qualified third-party consulting firms and the public, as ClimeCo determines is necessary and beneficial to the program, its protocol and achieving the programs goals. If updates to the protocol are significant, ClimeCo will also seek input from the public via a 30-day public comment period. After the public comment period, recommendations will be incorporated into the document and posted to the website for common use.

## **8. Contact information**

Please send comments and suggestions to:

ClimeCo Certified Product™ Program  
Attn: Linda Kelly  
1 E Philadelphia Ave.  
Boyertown, PA 19512

Or by e-mail to: [lkelly@climeco.com](mailto:lkelly@climeco.com) and [cbates@climeco.com](mailto:cbates@climeco.com)

### **Additional information**

Below are databases that may be useful in the development of the LCA report:

**National Renewable Energy Laboratory's US Life Cycle Inventory Database (NREL)**  
(<http://www.nrel.gov/lci/>)

NREL and its partners created the U.S. Life Cycle Inventory (LCI) Database to help LCA experts answer their questions about environmental impact. This database provides a cradle-to-grave accounting of the energy and material flows into and out of the environment that are associated with producing a material, component, or assembly. It's an online storeroom of data collected on commonly used materials, products, and processes.

**European LCA platform** (<http://eplca.jrc.ec.europa.eu/>)

The European LCA platform was created to help LCA experts integrate life cycle thinking into product development and policy making by providing them with structured, cost free and independent information.

**EDP List of LCA Consultants** (<https://www.environdec.com/resources/lca-consultants>)

EPD International AB offers a list of LCA consultants as an Information Service, without any warranties, for manufacturers and consultancies to facilitate for the initial contact between manufacturer and external LCA consultancy firms.

It provides a list of organizations that claim that they offer technical support for LCA/EPD and have requested to be listed on the EPD page.

## **Appendix A**

### **Short Summaries of Relevant Standards Publications**

#### **WRI/WBCSD Greenhouse Gas Protocol for Product Accounting & Reporting Standard:**

The World Business Council on Sustainable Development (WBCSD) – World Resources Institute (WRI) GHG Protocol Product Life Cycle Accounting and Reporting Standard (referred to as the Product Standard) provides requirements and guidance for companies and other organizations to quantify and publicly report an inventory of GHG emissions and removals associated with a specific product.

The primary goal of this standard is to provide a general framework for companies to make informed choices to reduce greenhouse gas emissions from the products (goods or services) they design, manufacture, sell, purchase, or use. In the context of this standard, public reporting refers to product GHG-related information reported publicly in accordance with the requirements specified in the standard. It is widely expected to become one of the leading standards used for product LCAs, particularly in the United States.

The Standard is available for public download at:

[http://www.ghgprotocol.org/files/ghgp/public/Product-Life-Cycle-Accounting-Reporting-Standard\\_041613.pdf](http://www.ghgprotocol.org/files/ghgp/public/Product-Life-Cycle-Accounting-Reporting-Standard_041613.pdf)

#### **PAS 2060:2010 (DEFRA, UK)**

The Publically Available Specification (PAS) 2060 was developed in response to broad community and industry desire for a consistent method for assessing the life cycle GHG emissions of goods and services. Life cycle GHG emissions are the emissions that are released as part of the processes of creating, modifying, transporting, storing, using, providing, recycling or disposing of such goods and services.

PAS 2060 offers organizations a method to deliver improved understanding of the GHG emissions arising from their supply chains, but the primary objective of this PAS is to provide a common basis for GHG emission quantification that will inform and enable meaningful GHG emission reduction programs.

The PAS 2060 standard is not available for public download, but is available for a fee:

<http://shop.bsigroup.com/ProductDetail/?pid=000000000030286698>

#### **ISO/TS 14067:2013 Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification and communication:**

The International Organization of Standardization (ISO) series 14000 discusses environmental management standards for conducting life cycle assessments. ISO/TS 14067 provides details regarding principles, requirements and guidelines for the quantification and communication of the carbon footprint of products (CFPs), including both goods and services, based on GHG emissions and removals over the life cycle of a product. Requirements and guidelines for the quantification and communication of a partial carbon footprint of products (partial CFP) are also provided.

The communication of the CFP to the intended audience is based on a CFP study report that provides an accurate, relevant and fair representation of the CFP.



This Technical Specification (TS) is based on existing International Standards ISO 14020, ISO 14024, ISO 14025, ISO 14040 and ISO 14044 and aims to set specific requirements for the quantification and communication of a CFP, including additional requirements where the CFP information is intended to be publicly available.

ISO/TS 14067 is not available for public download, but is available for a fee:

[http://www.iso.org/iso/catalogue\\_detail?csnumber=59521](http://www.iso.org/iso/catalogue_detail?csnumber=59521)

**ISO 14025:2006 Environmental labels and declarations -- Type III environmental declarations -- Principles and procedures:**

ISO 14025:2006 establishes the principles and specifies the procedures for developing Type III environmental declaration programs and Type III environmental declarations. It specifically establishes the use of the ISO 14040 series of standards in the development of Type III environmental declaration programs and Type III environmental declarations.

ISO 14025:2006 is not available for public download, but is available for a fee:

[http://www.iso.org/iso/home/store/catalogue\\_tc/catalogue\\_detail.htm?csnumber=38131](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=38131)

**ISO 14040:2006 Environmental management -- Life cycle assessment -- Principles and framework:**

ISO 14040:2006 describes the principles and framework for life cycle assessment (LCA) including: definition of the goal and scope of the LCA, the life cycle inventory analysis (LCI) phase, the life cycle impact assessment (LCIA) phase, the life cycle interpretation phase, reporting and critical review of the LCA, limitations of the LCA, the relationship between the LCA phases, and conditions for use of value choices and optional elements. ISO 14040:2006 covers life cycle assessment (LCA) studies and life cycle inventory (LCI) studies. It does not describe the LCA technique in detail, nor does it specify methodologies for the individual phases of the LCA.

ISO 14040:2006 is not available for public download, but is available for a fee:

[http://www.iso.org/iso/home/store/catalogue\\_tc/catalogue\\_detail.htm?csnumber=37456](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=37456)

**ISO 14044:2006 Environmental management -- Life cycle assessment -- Requirements and guidelines:**

ISO 14044:2006 specifies requirements and provides guidelines for life cycle assessment (LCA) including: definition of the goal and scope of the LCA, the life cycle inventory analysis (LCI) phase, the life cycle impact assessment (LCIA) phase, the life cycle interpretation phase, reporting and critical review of the LCA, limitations of the LCA, relationship between the LCA phases, and conditions for use of value choices and optional elements. ISO 14044:2006 covers life cycle assessment (LCA) studies and life cycle inventory (LCI) studies.

ISO 14044:2006 is not available for public download, but is available for a fee:

[http://www.iso.org/iso/home/store/catalogue\\_tc/catalogue\\_detail.htm?csnumber=38498](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=38498)

## APPENDIX B

### RECOMMENDED FORMAT FOR LCA REPORT

1. **COVER PAGE**
  - **Applicant’s name**
  - **Products Covered**
  - **Date of LCA Report**

2. **SUMMARY TABLE**

<b>MANUFACTURER</b>	
<b>PRODUCTS</b>	
<b>DECLARED FUNCTIONAL UNIT</b>	
<b>PRODUCT CARBON FOOTPRINT</b>	
<b>REFERENCE STANDARDS</b>	
<b>LCA SCOPE</b>	
<b>LCA STUDY DETAILS</b>	
<b>YEAR OF PRIMARY DATA</b>	
<b>LCA SOFTWARE</b>	
<b>LCA DATABASE</b>	
<b>LCA METHODOLOGY</b>	
<b>APPLICABLE REGIONS</b>	

3. **TABLE OF CONTENTS**
  
4. **EXECUTIVE SUMMARY**
  - **Introduction to Company, Products**
  - **LCA Results Summary**
  - **Company Profile**
  - **Details of LCA Commissioners and Practitioners**
  - **Reporting Date**
  - **Intended Application and Reasons for Study**
  - **Target Audience**
  - **Comparative Assertions and Public Disclosure**
  - **Standards**
  - **Product Description (including Classification and Applicability)**
  
5. **SCOPE OF THE STUDY**
  - **LCA methodological framework**
  - **Declared Unit**
  - **Reference Service Life**
  - **System Boundary**
    - **Product Stage (A1-A3)**
    - **Delivery**

- **Use Stage**
  - **End-of-life Cut-off Criteria**
  - **Allocation Procedures**
  - **Data Quality Requirements**
    - **Geographical Coverage**
    - **Time Coverage**
    - **Technological Coverage**
    - **Treatment of Missing Data**
    - **Data Quality Assessment**
6. **LIFE CYCLE INVENTORY ANALYSIS**
7. **LIFE CYCLE IMPACT ASSESSMENT**
- **Selection of Impact Parameters**
  - **LCA Results (for each Product)**
8. **INTERPRETATION**
- **Summary and product emissions reduction recommendations**
9. **REFERENCES**
10. **LIST OF TABLES AND FIGURES**