JEMAI Environmental Label Program

(EcoLeaf/Carbon Footprint Communication Program)

Base Document

Created: August 1st, 2013 File Number: JG-01-02

Japan Environmental Management Association for Industry

Index	
1. Objectives and Characteristics of the Environmental Label Program	3
1.1 Objectives	3
1.2 Characteristics	3
1.3 Basic Organization of the Program	4
1.3.1 Program Operation Framework	4
1.3.2 Approach to the Responsibility of Each Interested Party Participating in the	
Program	6
1.3.3 Applicable Range of the Program	6
1.3.4 Mechanism to Ensure Reliability of the Program	7
1.3.5 Provision of Base Unit Data	7
1.3.6 Fee Schedule	8
2. EcoLeaf program	9
2.1 Scope of Environmental Information Provided by the Program	9
2.2 Basics of EcoLeaf Quantification	9
2.2.1 Inventory Analysis (Fundamental Rules Pertaining to Quantification)	9
2.2.2 Impact Assessment (Fundamental Rules Pertaining to Quantification)	10
2.3 Basics of EcoLeaf Registration and Publication	10
2.3.1 Environmental Information Contents to be Published	10
2.3.2 Cautions When Making Environmental Information Publication	11
2.3.3 Handling of Comparisons in EcoLeaf	11
2.4 Procedure for EcoLeaf Quantification and Registration Publication	11
2.4.1 Development of EcoLeaf PCR	11
2.4.2 EcoLeaf Verification	12
2.4.3 EcoLeaf registration and publication	14
2.5 EcoLeaf Auditor and Verifier	15
2.5.1 Auditor's Qualifications	15
2.5.2 Product Environment Data Verifier's Qualifications	15
2.5.3 Compliance by System Accreditation/Certification Auditor and Data Verifier .	15
3 CFP program	16
3.1 Scope of Environmental Information Provided in the Program	16
3.2 Basics of CFP Quantification	16
3.2.1 GHGs Subjected to Quantification	16
3.2.2 Range of Quantification	16
3.2.3 Quantification Method (Fundamental Rules Regarding Quantification)	16
3.2.4 Unit of Quantification	17
3.3 Basics of CFP Declaration	17
3.3.1 Efforts by Businesses Making CFP Declaration	17

3.3.3 Handling of Comparisons in CFP Declaration	17
3.4 CFP Quantification and Declaration	17
3.4.1 Development of CFP-PCR	17
3.4.2 CFP Verification	18
3.4.3 Registration and Publication of CFP Declaration	20
3.5 CFP Registered Reviewer/Internal Verifier and CFP System Certification Body	21
3.5.1 Registered Reviewer/Internal Verifier Requirements	21
3.5.2 Requirements Relevant to CFP System Certification Body	21
4. Document Management	22
5. Ethical Standards and Handling of Confidential Information	22
6. Objection/Complaint Management	22
7. Program Operator	23
Supplement	25
Supplement-2	35

This document specifies the objectives, subjects, operation framework, procedure, and the like, for the JEMAI Environmental Label Program (collective reference to EcoLeaf/Carbon Footprint Communication Program; hereafter, "environmental label program") operated and administered by the Japan Environmental Management Association for Industry (hereafter, "the association").

EcoLeaf program adheres to the specifications of ISO/14025:2006 (Environmental labels and declarations—Type III environmental declarations—Principles and procedures) and ISO 14040 series life cycle assessment (LCA).

Carbon Footprint Communication Program (hereafter "CFP program") adheres to the specifications of ISO/TS14067 (Carbon footprint of products—Requirements and guidelines for quantification and communication).

ISO/TS 14067 takes into consideration several CFP information communication destinations and several communication methods. Of these, only those "CFP declarations intended to be publicly available" are the subjects of the CFP program.

1. Objectives and Characteristics of the Environmental Label Program

1.1 Objectives

The environmental label program takes the following two approaches

- quantitative visualization (quantification) of environmental information such as global warming burden based on quantification methods that ensure reliability and transparency, and
- (2) promotion of mutual understanding (communication) between providers (businesses) and users (stakeholders such as consumers and businesses) based on the "visualized" information for a reduction effort

with the following objectives:

- for businesses: to enforce further reduction behavior and fulfill their social responsibilities.
- for consumers: to transform their life styles and, through this, devise a reduction of the environmental burden.

1.2 Characteristics

The characteristics of the environmental label program are as follows:

- Characteristic 1: Quantitative display of environmental information; not an indication of environmental superiority judgment.
- Characteristic 2: The quantification adheres to the ISO 14020 series environmental label specifications and the 14040 series life cycle assessment (LCA) specifications.
- Characteristic 3: The environmental label program is composed of the following steps: product category rules (hereafter, "PCR") creation/development, PCR-based quantification, verification of the objectivity of the quantification results, and registration/publication.

Characteristic 4: A system accreditation/certification framework is provided, which allows for

registration/publication requests based on the internal verification results of a business.

- Characteristic 5: The objectivity of quantification result is verified and ensured by a qualified verifier appointed by the program operator.
- Characteristic 6: The quantification results are published and put into a database on the program operator's web site.
- Characteristic 7: While the CFP program only quantifies greenhouse gases, the EcoLeaf program covers various environmental characteristics (global warming, acidification, ozone layer destruction, water pollution, etc., and energy resources, resource depletion, etc.).

Characteristics 1, 2, 3, partially, and 7 are basic characteristics according to ISO 14025 and ISO/TS14067, while characteristics 3, 4, 5 and 6 are characteristics of the environmental label program that were devised in order to secure public trust.

1.3 Basic Organization of the Program

The program operator is responsible for the proper operation and administration of the environmental label program and ensures reliability, transparency and fairness with respect to program documents and individual audit results, through advices from an advisory board centered around interested parties and experts, and deliberations by various review panels.

The environmental label program is to operate while having the following basic organization, where each component has defined criteria, procedures, or the like:

- Development, approval and publication of product category rules (PCR)
 Referred to as EcoLeaf PCR in the EcoLeaf program, and to CFP-PCR in the CFP program
- Verification of quantification results (product-to-product verification and system accreditation (EcoLeaf program)/certification (CFP program))
- ③ Registration and publication

<Registration and publication in the CFP program of quantification results from the EcoLeaf program>

Among the results of quantification through the EcoLeaf program, it is possible for the GHG emissions to be registered and published as values in the CFP program.

However, use of the values of GHG emissions quantified through the CFP program as values in the EcoLeaf program (the opposite to the above) is not possible.

1.3.1 Program Operation Framework

(1) Committee in Charge of Program Operation

① Advisory Board

Provides advices regarding the operation and administration of the entirety of the environmental label program and the creation and revision of base documents in order to guarantee the reliability, transparency and fairness of the environmental label program. In addition, where necessary, it establishes working groups (hereafter, "WGs") under the advisory board to extract and sort out technical issues and problematic points that become apparent through program operation, and provides advices in order to have them reflected in the program.

For information on rules regarding the establishment and operation of the advisory board, see the following document:

JR-02 Advisory Board Establishment and Operation Rules

(2) Review Panels in Charge of Various Audits

1) EcoLeaf Review Panel

Performs approval of the results of audit performed by system auditors and the EcoLeaf PCR drafts submitted by working groups (PCR-WGs) who create EcoLeaf PCR drafts.

For information on rules regarding the EcoLeaf review panel, see the following document:

ER-03 EcoLeaf Review Panel Rules

2 CFP Review Panel

Provides "final decision on an approval regarding a CFP-PCR review" and "confirmation/final decision on verification results associated with the 'product-to-product verification scheme', which is one of the CFP verification schemes in the CFP program, and confirmation of audit results associated with the 'system certification scheme'".

For information on rules regarding the CFP review panel, see the following document: <u>CR-03</u> <u>CFP Review Panel Establishment and Operation Rules</u>

③ Base Unit Review Panel

Provides confirmation/final decision on "common base unit" and "characterization factor" of the EcoLeaf program, and "basic data" of the CFP program, and on the results from the reviews on each of the above data.

For information on rules regarding the base unit review panel, see the following documents:

JR-04 Base Unit Review Panel Establishment and Operation Rules

1.3.2 Approach to the Responsibility of Each Interested Party Participating in the Program

In implementing the environmental label program, clarifying the relationships among the interested parties' responsibilities is important for the smooth operation of the program. These are:

- Participant businesses in the program: responsible for EcoLeaf and CFP quantification results, and, EcoLeaf and CFP declaration contents.
- CFP-PCR reviewers: responsible for performing CFP-PCR reviews based on CFP-PCR approval judgment criteria, by following the specified procedure.
- EcoLeaf and CFP verifiers: responsible for performing EcoLeaf or CFP verification based on EcoLeaf or CFP verification judgment criteria, by following the specified procedure.
- System accreditation/certification auditors: responsible for performing audits based on system certification/accreditation audit criteria, by following the specified procedure.
- Program operator: responsible for the proper operation of the environmental label program.

1.3.3 Applicable Range of the Program

(1) Parties Covered by EcoLeaf and CFP Declarations

A communication that uses EcoLeaf or CFP declaration covers interested parties such as product manufacturers, vendors and representatives, as well as service providers, and consumers and businesses using publicly available information.

(2) Range of Products Covered by the Program

The product range covered by the environmental label program includes everything from commodity and other industrial goods, consumer durables, food and other products from agriculture, forestry and fisheries industry, to services, etc. In addition, these are not limited to final goods and may be intermediate goods.

(3) Range of Environmental Label Program Participants

- a Product manufacturers, vendors and representatives, as well as service providers, can conduct label registration/publication.
- b All interested parties^{**} involved in the environmental label program can propose a PCR development.
 - *Types of interested party
 - (1) Product manufacturers, vendors and representatives
 - (2) Service providers, representatives
 - (3) Product and service purchasers (customers)
 - (4) General consumers
 - (5) Administrative authority

(6) Other parties directly involved in an environmental label program task

(4) Territories where the Program is Implemented

The environmental label program has been put together for the purpose of being used in communications mainly within Japan. However, there is no limitation to participation from overseas.

In principle, requests or the like are to be made in Japanese; however, where necessary, another language may be sometimes be acknowledged.

1.3.4 Mechanism to Ensure Reliability of the Program

Reliability of the information provided needs to be ensured, since EcoLeaf and CFP declarations of the environmental label program are used for the communication with interested parties. Therefore, reliability, transparency and fairness are to be ensured in making EcoLeaf and CFP declarations, through measures such as in the following:

(1) Use of EcoLeaf PCR and CFP-PCR

EcoLeaf PCR and CFP-PCR are to be used in the environmental label program. EcoLeaf PCR and CFP-PCR are basic rules per product category for quantifying EcoLeaf and CFP values and making EcoLeaf and CFP declarations, with the purpose of providing interested parties with information on which conditions EcoLeaf and CFP values are being quantified under, and, improving the understanding of the contents of a communication.

(2) Enforcement of Verification

The environmental label program is to enforce verification of EcoLeaf PCR and CFP-PCR-based quantification results and EcoLeaf/CFP declaration methods, in order to provide interested parties with information ensuring reliability, transparency and fairness.

1.3.5 Provision of Base Unit Data

The environmental label program is to manage and provide the base unit data used in the quantifications.

Base Unit Data Verification and Operation

The "common base unit" and the "PCR base unit" in EcoLeaf, and the "basic data" in the CFP program must receive the base unit data verification specified by the program operator.

For information on rules regarding base unit data, see the following documents:

EcoLeaf	<u>ER-14</u>	EcoLeaf Label Support Software and Database Usage Rules
CFP	<u>CR-05</u>	Base Unit Data Verification and Operation Rules

1.3.6 Fee Schedule

For the proper operation of the environmental label program, appropriate fees are to be set to secure the funds needed for the operation.

For information on rules regarding fee setting, see the following documents:

EcoLeaf <u>ER-15</u> EcoLeaf Environmental Label Pricing Rules

CFP <u>CR-14 Pricing Rules</u>

2. EcoLeaf program

2.1 Scope of Environmental Information Provided by the Program

The EcoLeaf program provides the calculation results from inventory analysis and impact assessment based on LCA, as product environmental information.

2.2 Basics of EcoLeaf Quantification

2.2.1 Inventory Analysis (Fundamental Rules Pertaining to Quantification)

In the EcoLeaf inventory analysis results, the boundaries of the inputs and outputs are unified and extend to natural environments.

The EcoLeaf calculation items consist of two environmental load category items: consumption and environmental discharge. The consumption load category item is divided into two major category items: exhaustible resources and renewable resources such as water and wood. The exhaustible resources further consist of energy resources such as coal and uranium ore, and mineral resources such as iron ore and bauxite. The environmental discharge load category item is divided into three: discharges into the atmosphere such as CO₂, into bodies of water such as BOD, and into soil.

In EcoLeaf, I, the amount of inventory at each stage, can be determined using formula (1), by summing the products between W, the amount of relevant activity, and a, the corresponding base unit.

I=Σ (a×W)

 $\cdots (1)$

- I: amount of inventory (amount of crude oil extracted, amount of iron ore excavated, CO₂ emissions, etc.)
- a: base unit (amount of inventory per amount of unit activity)
- W: amount of activity (quantities used, quantities discharged, quantities treated, quantities transported, etc.)

<Types of EcoLeaf Base Unit>

An EcoLeaf base unit adopts a "process totaling data" scheme and includes the following two: Common base unit:

base unit prepared by the program operator for the purpose of creating an EcoLeaf environmental label, which can be used commonly to all the product categories as background data for LCI calculations.

PCR base unit:

base unit created for each product category as necessary for the purpose of using it on a per-product-category, which can be used as a background data for LCI calculation only in the same product category.

2.2.2 Impact Assessment (Fundamental Rules Pertaining to Quantification)

Includes up to the characterization analysis phase of the impact assessment defined in EcoLeaf, the boundaries being unified and extending to natural environments similarly to the inventory analysis.

Similarly to the inventory analysis, the environmental impact items are divided into two major load category items: consumption and environmental discharge. The consumption load category item is divided into energy resource and mineral resource depletion loads, while the environmental discharge load category item is subdivided into category items such as global warming and acidification for the atmosphere, and eutrophication for bodies of water. The category items are determined for each product category.

In EcoLeaf, P, the impact assessment quantity per category, such as global warming, at each stage can be determined using formula (2), by summing the products between I, the amount of a relevant inventory, and α , a per-category characterization factor:

 $\cdots (2)$

Ρ=Σ (α×Ι)

P: per-category impact assessment quantity (global warming load, acidification load, etc.)

α: characterization factor (global warming potential, acidification factor, etc.)

Reference (from ISO14044): factor derived from a

characterization model, used for conversion into a common unit

I: amount of inventory (crude oil amount, iron ore amount, CO₂ emissions, etc.)

2.3 Basics of EcoLeaf Registration and Publication

2.3.1 Environmental Information Contents to be Published

The EcoLeaf program provides the calculation results from inventory analysis and impact assessment based on LCA, as product environmental information in the following 3 sheets:

① Product Environmental Aspects Declaration (PEAD)

Information that compiles quantitative environmental aspects of, e.g., a product, concisely represented by paying attention to uniformity and visuals in order to help a product purchaser or a general consumer understand.

2 Product Environmental Information Data Sheet (PEIDS)

Detailed data displaying the basis of the PEAD, in which inventory analysis results, impact assessment results and energy consumption are summarized.

In an inventory analysis, inputs and outputs in terms of energy resources, raw materials and environmental materials through the entire life cycle of, e.g., a product are calculated and evaluated based on unified LCA methods, and organized in a given format. An impact assessment indicates these results in terms of magnitude of impact on specific categories that are easily understood in general, i.e., resource depletion, global warming, etc.

③ Product Data Sheet (PDS)

This sheet is a document in which basic data that are to support the preparation of the PEIDS have been aggregated.

It is a data sheet that describes the inputs and outputs such as energy resources, raw materials and substances of concern per product or service unit based on actual values within a range that the EcoLeaf environmental label preparer can grasp (for instance, within its factory).

2.3.2 Cautions When Making Environmental Information Publication

A publication of an EcoLeaf environmental label is to be readily understood by an interested party receiving the information and is to have avoided any misleading expressions.

2.3.3 Handling of Comparisons in EcoLeaf

In order to ensure that comparisons are possible, the EcoLeaf program has adopted the use of common base units and concrete agreements on EcoLeaf PCRs.

2.4 Procedure for EcoLeaf Quantification and Registration Publication 2.4.1 Development of EcoLeaf PCR

Those who wish to have an EcoLeaf PCR developed, amended, etc., are to follow the rules specified in the following:

ER-04 EcoLeaf Product Category Rules (PCR) Creation Rules

(1) Creation of EcoLeaf - PCR Draft

A business that wishes to have an EcoLeaf PCR established is to develop a PCR draft through the following procedure:

<< Proposal Application Formalities>>

Those who wish to have a new EcoLeaf PCR created are to make a written request to the secretariat (program operator) by following given formalities.

<<Adoption/rejection Determination>>

The program operator determines whether or not to accept the proposal in accordance with criteria from a manual established separately, and notifies the proposer of the results. <<<Formation of PCR-WG>>

The program operator makes an announcement on the operator's home page, or the like, and calls for participants in the PCR-WG.

<<Development of PCR Draft>>

The participants in the PCR-WG develop a PCR draft according to a separately established manual.

For the purpose of securing fairness and ease of comparison of the data to be published, EcoLeaf PCR draft must have, for each product category concerned, a content that unifies basic requirements such as the product's target range and various conditions and rules applied for LCA calculations.

In developing an EcoLeaf PCR draft, data-related requirements described in the PCR development rules must be followed.

(2) EcoLeaf PCR Approval

To determine whether or not it should be established, a PCR draft submitted from a PCR-WG undergoes evaluation and approval from an EcoLeaf review panel according to criteria from a manual established separately. The approved PCR is published on the EcoLeaf web site.

(3) EcoLeaf PCR Validity Period and Post-approval Handling

The validity period of an approved EcoLeaf PCR is 3 years.

An EcoLeaf PCR that has reached expiration is subjected to the following procedure to determine either to renew, revise or discontinue the PCR:

- (1) Hearing of comments from interested parties
- (2) Renewal revision or discontinuation is determined by the program operator in accordance with criteria from a manual established separately.

A proposal for PCR revision can be made even when the 3-year validity period has not been reached.

2.4.2 EcoLeaf Verification

A business that wishes to make an EcoLeaf registration and publication must undergo the third party verification specified by the program operator, in order to confirm that the quantification results (quantitative environmental data per individual product) conform to set EcoLeaf PCR requirements and that they are based on adequate grounds. EcoLeaf verification schemes include a product-to-product verification scheme and a system accreditation scheme.

(1) Preparation of EcoLeaf Quantification and Verification Documents

A business that wishes to make an EcoLeaf environmental label registration and publication is to perform LCA quantification of its own product according to relevant rules and manuals and applicable EcoLeaf PCR, and prepare the following 6 types of documents (a set of verification documents) provided by the program operator:

· Product environmental aspect declaration (PEAD)

- · Product environmental information data sheet (PEIDS)
- · Product data sheet (PDS)
- ·Breakdown data sheets (1: Product; 2: Manufacturing site; 3: Stage)
- · Relevant calculation documents (1: Inventory analysis; 2: Impact Assessment)
- · Various figures and tables supplementing the contents, and others

For information on rules regarding EcoLeaf quantification, see the following document: <u>ER-05</u> EcoLeaf Quantification Rules

(2) Basic Ideas Behind EcoLeaf Verification

The EcoLeaf program examines the contents of the verification documents from the following basic standpoints:

- ·Conformity to PCR
- · Appropriateness of LCA calculation
- · Appropriateness of the data foundation

For information on rules regarding verification, see the following document: <u>ER-07</u> EcoLeaf Verification Rules

(3) Product-to-product verification scheme

Upon receiving a request for verification from a business that wishes to make an EcoLeaf registration publication, the program operator assigns a verifier from among the registered verifiers. The verifier conducts a verification of the draft that is the subject of the request in accordance to the verification rules, and makes an acceptance/rejection decision.

(4) System Accreditation Scheme

The system accreditation is for confirming whether or not a business possesses a system for accumulating quantitative environmental information data on its products. This system is audited for its appropriate, effective and continuous functionality, and accredited, with the objective of maintaining reliability of the quantitative data displayed on the EcoLeaf environmental label issued in the EcoLeaf program.

In the system being subjected to accreditation, the origin of the product environment data must be specified, and the methods, criteria, responsibility framework, and the like, for measuring, recording, totaling and processing the data to have them issued as an EcoLeaf environmental label must be provided and functioning continuously.

The organization framework containing all the measures, methods, responsibilities and authorities mentioned above must be documented and conserved.

A business that wishes to have a system accredited must make a request for system accreditation, be audited by a system accreditation auditor assigned by the program operator, and have the results approved by the EcoLeaf review panel.

Having the system accredited allows a request for EcoLeaf registration/publication to be made via the business' internal verification.

In addition, the validity period for the system accreditation is 3 years.

For information on rules regarding EcoLeaf system accreditation, see the following document:

ER-06 EcoLeaf System Accreditation Rules

2.4.3 EcoLeaf registration and publication

A business determined to have passed the above verification is to undergo EcoLeaf registration/publication formalities by following the procedure specified by the program operator procedure.

For information on rules regarding EcoLeaf label registration publication, see the following document:

ER-09 EcoLeaf Label Registration Publication Rules

(1) EcoLeaf Registration/Publication Request

A business that passed the verification is to make an EcoLeaf registration/publication request to the program operator and publish formatted registration information (3 types of sheet) on the EcoLeaf web site.

(2) EcoLeaf Registration/Publication Renewal

While there is no expiration date for a registered and published EcoLeaf, registration continuation formalities are necessary at a period specified by the program operator, in principle every year, and if there are no continuation formalities, the EcoLeaf registration and publication concerned is canceled, and the verification becomes invalid.

(3) Modification of Registered/Published Contents

Should there be a significant modification to the registered/published contents, the business must immediately make a request for modification of the registered/published information, regardless of the renewal deadline. Where necessary, the program operator again performs verification.

(4) Request for Use Pertaining to Use of EcoLeaf Mark

When a business is to use an EcoLeaf mark in relation to a product under EcoLeaf registration/publication, it must submit a written request for use to the program operator, and make efforts to, e.g., prevent unauthorized use or misunderstanding when using the mark.

For information on rules regarding EcoLeaf label specifications, see the following document:

ER-08 EcoLeaf Label Specification Rules

2.5 EcoLeaf Auditor and Verifier

2.5.1 Auditor's Qualifications

An auditor who is to conduct an accreditation audit of a business' product environment data collection system must first pass a qualification test based on the EcoLeaf personnel qualification test/training rules defined separately, and register. The auditor must perform the audit in accordance with the criteria and procedures described in the EcoLeaf system accreditation rules defined separately.

For information on rules regarding EcoLeaf auditors, see the following documents: <u>ER-13</u> EcoLeaf Personnel Qualification Test/Training Rules <u>ER-06</u> EcoLeaf System Accreditation Rules

2.5.2 Product Environment Data Verifier's Qualifications

A verifier who is to conduct a product environment data verification must first pass a qualification test based on the EcoLeaf personnel qualification test/training rules specified separately, and register. The verifier must perform the verification in accordance with the criteria and procedures described in the EcoLeaf verification rules defined separately.

For information on rules regarding EcoLeaf verifiers, see the following documents: <u>ER-13</u> EcoLeaf Personnel Qualification Test/Training Rules <u>ER-07</u> EcoLeaf Verification Rules

2.5.3 Compliance by System Accreditation/Certification Auditor and Data Verifier

Auditors and verifiers are asked to have strong ethics, as they are in a position which brings them in contact with confidential matters that are relevant to the production, sales, etc., of a product, or the like, of a participant in the environmental label program, such as a business. It follows that, matters to be observed by both parties are to be spelled out and made known to all registered system accreditation auditors and verifiers.

For information on compliance by auditors and verifiers, see the following document: <u>ER-12</u> EcoLeaf Personnel Compliance Rules

3 CFP program

3.1 Scope of Environmental Information Provided in the Program

The CFP program only quantifies greenhouse gases (hereafter, "GHGs") and does not apply to the evaluation of other environmental impacts.

3.2 Basics of CFP Quantification

3.2.1 GHGs Subjected to Quantification

The GHGs that are to be quantified are as follows:

- GHG types: the six types covered by the Kyoto Protocol, i.e., CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆
- Target emission sources: anthropogenic processes (including emissions, or the like, from livestock and other agricultural processes)
- GWP (*): the 100-year value from the IPCC Secondary Assessment Report is to be adopted as the reference value since it has been the quantification standard of per-country emissions in the Kyoto Protocol
 - (*) GWP (Global Warming Potential): factor representing the extent of greenhouse effect of the GHG as a ratio to that of CO₂.

3.2.2 Range of Quantification

The range of quantification must be set so as to be a range in which a product's function is fulfilled and to include processes that cannot be ignored due to the magnitude of their contribution to CO_2 emissions.

3.2.3 Quantification Method (Fundamental Rules Regarding Quantification)

The CFP quantification method follows the following formula:

 CO_2 emissions = \sum (activity amount × base unit) (*i* represents a process)

An activity amount is an indicator representing the amount of emission activity that is correlated with CO_2 emissions. While it is different depending on the activity, it corresponds to the amount of material used, the amount of electricity consumed, the amount of landfill, etc.

The base unit is an indicator representing the CO_2 emissions during a life cycle per activity amount. While it is different depending on the activity, it corresponds to the CO_2 emissions during a life cycle per kg of material, etc. In the CFP program, it represents the basic data published by the program operator, etc.

<Types of CFP Base Unit>

In the CFP base unit data, there are "basic data" and, to complement the basic data, there are "usable data", etc, of which a utilization that follows the same philosophy is approved as needed.

In addition, when a business is considering using its own base unit data for CFP quantification, the program operator is to perform, as needed, an assessment according to separately specified requirements and determine whether or not it can be utilized as "usable data". By principle, such data has to be published.

3.2.4 Unit of Quantification

In the CFP program, the unit of quantification is the "functional unit". The functional unit includes "product unit", "sales unit" and "physical unit (for instance, "per 100 g")".

3.3 Basics of CFP Declaration

A CFP declaration is in the form of a CFP mark, a displayed value, additional information, and registered information posted on the CFP web site, which are released based on CFP quantification results, and the CFP program specifies the minimum requirements necessary for these four components.

When a business communicates through a CFP declaration, this is by principle accompanied by the use of a CFP mark.

3.3.1 Efforts by Businesses Making CFP Declaration

A business making a CFP declaration is asked to make continuous efforts to reduce CO₂ emissions.

3.3.2 Cautions When Making CFP Declaration

A CFP declaration is to be readily understood by an interested party receiving the information and is to have avoided any misleading expressions.

3.3.3 Handling of Comparisons in CFP Declaration

Unless otherwise approved in the CFP program, no CFP comparison must be performed.

3.4 CFP Quantification and Declaration

3.4.1 Development of CFP-PCR

Those who wish to have a CFP-PCR developed, amended, etc., are to follow the rules specified in the following:

CR-06 Carbon Footprint Product Category Rules (CFP-PCR) Approval Rules

(1) Development of CFP-PCR Draft

A business that wishes to have a CFP-PCR developed for a new product category is to examine a CFP-PCR draft in an individual company or in a CFP-PCR draft development WG. The WG is constituted from a group of several interested parties or an industry group.

A CFP-PCR draft is to contain a definition of the applicable product, each life cycle phase setting, data collection item, primary data collection item and its collection method, and the contents of rules such as for CFP declaration.

In developing the CFP-PCR draft, a trial calculation of the CFP is to be performed for the applicable product, which must be the basis for determining the data-related requirements, or the like, that are to be described in the CFP-PCR.

(2) CFP-PCR Approval

Upon receiving a request for approval of a CFP-PCR draft from a business, the program operator assigns a CFP-PCR reviewer from among the registered reviewers. The CFP-PCR reviewer conducts a CFP-PCR review of the request. The CFP review panel receives the report from the CFP-PCR reviewer and makes a final decision on the request. The approved CFP-PCR is published on the CFP web site.

(3) <u>CFP-PCR Validity Period and Post-approval Handling</u>

The validity period of an approved CFP-PCR is 5 years.

A business that wishes to have a CFP-PCR amended can be reviewed for CFP-PCR amendment by submitting a written request for CFP-PCR amendment regardless of the validity period. In addition, a request for CFP-PCR renewal can be made prior to the expiration of the validity period.

However, in cases where there are no records of CFP verification performed using the CFP-PCR for one year or longer after the approval, and in cases where a new technology needs to be reflected, it can be revised as appropriate, regardless of the validity period, by the program operator, through consultation with the parties involved.

3.4.2 CFP Verification

A business that wishes to make a CFP declaration must undergo the verification specified by the program operator regarding conformity of the CFP quantification results and a draft declaration to the approved CFP-PCR and relevant rules. The CFP verification has a product-to-product verification scheme and a system certification scheme.

(1) CFP Quantification and Development of a Draft CFP Declaration

A business that wishes to make a CFP declaration is to perform CFP quantification of its own product according to relevant rules and approved CFP-PCR, and develop a draft CFP declaration.

For information on rules regarding CFP quantification and development of draft CFP declaration, see the following document:

CR-07 Carbon Footprint Quantification/Declaration Rules

(2) Basic Ideas Behind CFP Verification

The CFP program examines CFP quantification and draft declaration from the following basic stand points:

·Conformity to relevant rules

·Conformity to applicable CFP-PCR

· Securing data traceability

(3) <u>CFP Product-to-product Verification Scheme</u>

Upon receiving a request for CFP verification from a business that wishes to make a CFP declaration, the program operator assigns a CFP verifier from among the registered reviewers. The CFP verifier conducts a CFP verification of the draft that is the subject of the request, and makes an acceptance/rejection decision. The review panel performs a confirmation of the verification results issued by the CFP verifier, and makes a final decision on the draft.

For information on rules regarding product-to-product verification scheme, see the following document:

CR-08 Carbon Footprint Verification Rules

(4) CFP System Certification Scheme

The objective of the system certification is to have the CFP quantification, verification and publication system established inside a business that wishes to make a CFP declaration meet the requirements, so that CFP quantification results and declaration originating from the quantification and verification performed by the business are trustworthy.

Based on the requirements specified below by the program operator, a CFP system certification body registered with the program operator conducts auditing and certification of the system established internally by the business. The CFP review panel performs confirmation of the audit results issued by the CFP system certification body.

Having the system certified allows a request for registration/publication of a CFP declaration to be made via the business' internal verification.

In addition, the validity period for the system certification is 3 years.

For information on rules regarding the system certification scheme, see the following

document:

CR-09 Carbon Footprint System Certification Rules

3.4.3 Registration and Publication of CFP Declaration

A business determined to have passed the CFP verification spelled in 3.4.2 must undergo CFP declaration registration/publication formalities by following the procedure specified by the program operator.

When a CFP declaration is to be made by using quantification results obtained through the EcoLeaf program, the product-to-product verification specified in the EcoLeaf program must have been passed or the internal verification by the system certification must have been completed.

For information on rules regarding CFP declaration registration/publication, see the following document:

CR-10 Carbon Footprint Declaration Registration/Publication Rules

(1) <u>CFP Declaration Registration/Publication Request</u>

A business that wishes to have a CFP declaration registered is to make a CFP declaration registration/publication request to the program operator and publish the registration information, or the like, on the CFP web site.

(2) <u>CFP Declaration Registration/Publication Renewal</u>

A CFP declaration registration/publication is to be renewed in principle every year, in accordance with the period specified by the program operator. If the registration/publication is not renewed, the verification concerning the corresponding CFP is no longer valid.

(3) Modification of Registered/Published Contents

Should there be a significant modification to the registered/published contents, the business must immediately make a request for modification of the registered/published information, regardless of the renewal deadline. Where necessary, the program operator again performs CFP verification.

(4) License Agreement Pertaining to Use of CFP Mark

When a CFP declaration is to be registered/published, a CFP mark license agreement is entered into with the program operator to agree on preventing unauthorized use, etc., in using the CFP mark.

3.5 CFP Registered Reviewer/Internal Verifier and CFP System Certification Body

Registered reviewer is a general term for an individual who has registered, through formalities specified by the program operator, as a person who reviews CFP-PCR or performs CFP verification. In addition, an internal verifier is a person or a team that performs internal verification in a CFP system.

CFP system certification body is a general term for a body that has registered through formalities specified by the program operator, is an independent organization from the program operator, and is a body that performs CFP system certification (hereafter, "CFP system certification body").

3.5.1 Registered Reviewer/Internal Verifier Requirements

The CFP program ensures reliability of CFP quantification results and declaration through tasks such as CFP-PCR review and CFP verification. Those parties involved in each of these tasks are thus asked to serve these roles with a given level of competence.

Therefore, in performing CFP-PCR review and CFP verification (including internal verification), they must attend classes to receive trainings enforced by the program operator. In addition, after attending the classes, a given level of practical work experience needs to be accumulated.

Those that the program operator judges as having the competence for the proper operation of the CFP program become registered as registered reviewers or internal verifiers.

For information on registration and competence of registered reviewers and internal verifiers, see the following document:

R-11 Registered Reviewer/Internal Verifier Registration and Evaluation Rules

3.5.2 Requirements Relevant to CFP System Certification Body

The value of the certification lies in the reliability established through a fair audit that is guaranteed to having been conducted competently by a third party.

The CFP system certification body and the CFP system certification auditor are thus asked to serve these roles with a given level of competence.

The CFP system certification auditor must attend classes to receive trainings specified by the program operator. In addition, after attending the classes, a given level of practical work experience needs to be accumulated.

A body that the program operator judges as being competent becomes registered as a CFP system certification body. In addition, an auditor in a CFP system certification audit is required to have the level of competence required of a CFP system certification auditor.

For information on the registration and competence of a CFP system certification body and a CFP system certification auditor, see the following documents:

R-12 Carbon Footprint System Certification Body Registration and Evaluation Rules

4. Document Management

In order to operate the environmental label program smoothly, the program operator specifies the relationships among the documents used and the manner in which they are to be used, in a document management system. By principle, these documents are to be published.

In addition, based on the status of the program's implementation, the program operator performs a periodic review of the base document through advices made by e.g. the advisory board at least once every 5 years.

For information on rules regarding document management, see the following documents:EcoLeafER-01EcoLeafEcoLeaf Environmental Label Document Management RulesCFPCR-01Document Management Rules

5. Ethical Standards and Handling of Confidential Information

The program operator specifies ethical standards with the objective that the environmental label program's operation and tasks are executed equitably and fairly without being biased toward the interest of some.

The parties involved in the environmental label program and the program operator must adhere to the following ethical standards.

In addition, in environmental label program, given that one may come into contact with confidential matters relevant to the product of a business in the course of a verification, the program operator is to develop rules for "handling of confidential matters" that must be observed by the parties involved, and ensure that the parties involved are bound by the required non-disclosure agreement.

For information on rules regarding ethical standards and handling of confidential information, see the following documents:

EcoLeafER-11EcoLeaf Ethical StandardsCFPCR-13Ethics/Confidentiality Matters Handling Rules

6. Objection/Complaint Management

Should there be a formal objection/complaint or a dispute from a party involved, the program operator is to respond with integrity.

A formal objection is an appeal issued from an organization making a request or an organization undergoing certification, asking for reconsideration of a negative determination made in relation to its desired status.

A complaint is an expression of dissatisfaction against an organization making a request or an organization undergoing certification, regarding a product or a complaint handling process, which is explicitly or implicitly expected to be handled or resolved.

Regarding formal objection/complaint/dispute management, see the following documents:

EcoLeaf <u>ER-10 EcoLeaf Complaint/Dispute Management Rules</u>

CFP <u>CR-15 Objection/Complaint/Dispute Management Rules</u>

7. Program Operator

The environmental label program is operated and administered by:

- Name: Japan Environmental Management Association for Industry
- Address: 2-1 Kajicho 2-chome, Chiyoda-ku, Tokyo, JAPAN 101-0044

(Sumitomo Mitsui Banking Kanda-ekimae bldg.)

Appendix

Revision	Date	Page(s)	Description
No.			
01	August 1st, 2013	-	Document creation. Based on the revisions for
			integrating EcoLeaf and Carbon Footprint
			Communication Program, the EcoLeaf environmental
			label operation guidelines and the Carbon Footprint
			Communication Program Basic Instructions have been
			combined into one and issued.
02	January 31st,	4, 16	The description regarding the quantification results from
	2014		the EcoLeaf program being registered/published in the
			CFP program has been added.

Supplement

This document specifies the terms and definitions used in the "Carbon Footprint Communication Program" (hereafter, "CFP Program") operated and administered by the Japan Environmental Management Association for Industry.

1 Terms relating to CFP quantification

1.1

Carbon footprint of a product

CFP

Sum of greenhouse gas emissions (entry 2.5) and removals (entry 2.6) in a product system (entry 3.2). Expressed as CO_2 equivalents (entry 2.2) and based on a life cycle assessment (entry 4.3). Note 1 to entry: the CO_2 equivalent (entry 2.2) of a specific amount of greenhouse gas (entry 2.1) is calculated as the mass of a specific greenhouse gas (entry 2.1) multiplied by its global warming potential (entry 2.4).

1.2

Partial carbon footprint of a product

Partial CFP

Sum of greenhouse gas emissions (entry 2.5) and removals (entry 2.6) in one or more selected process(es) (entry 3.5) of a product system (entry 3.2). Expressed as CO_2 equivalents (entry 2.2) and based on a life cycle assessment (entry 4.3).

Note 1 to entry: A partial CFP often concerns a process modeled from a specific phase in a life cycle (entry 4.2).

Note 2 to entry: A partial CFP is based on or compiled from (a) specific process(es) or information modules (entry 3.4), which is/are part of a product system (entry 3.2) and may form the basis for a CFP (entry 1.1). More detailed information on information modules (entry 3.4) is given in ISO 14025:2006, 5.4.

1.3

Carbon-footprint-of-a-product study

CFP study

Study which includes the quantification and reporting of the CFP (entry 1.1) or the partial CFP (entry 1.2).

1.4Carbon-footprint-of-a-product study reportCFP study reportReport on a CFP study (entry 1.3).

1.5

Offsetting

Mechanism for compensating for a CFP (entry 1.1) or a partial CFP (entry 1.2) through the prevention of the release of, reduction in, or removal of an amount of greenhouse gas emissions (entry 2.5) in a process (entry 3.5) outside the boundary of the product system (entry 3.2).

Example: External investment in renewable technologies, energy efficiency measures, afforestation/reforestation.

Note 1 to entry: Offsetting is not allowed in the CFP quantification and thus is not reflected in any CFP communication.

[Source: ISO 14021:1999/FDAM 1:2011, modified—revised the information in the original Note to be presented as an "Example" (as above) and added a new "Note 1 to entry" providing information on rules regarding offsetting.]

2 Terms relating to greenhouse gases

2.1

Greenhouse gas

GHG

Gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the earth's surface, the atmosphere, and clouds.

Note 1 to entry: Water vapor and ozone are anthropogenic but, similarly to natural greenhouse gases, are not included as recognized greenhouse gases due to difficulties in isolating the human-induced component of global warming attributable to their presence in the atmosphere. [Source: ISO 14064-1:2006, 2.1, modified -- "Note 1 to entry" has been added; original Note listing examples of GHGs has been omitted.]

2.2

Carbon dioxide equivalent

CO₂ equivalents

CO₂e

Mass from a conversion of the radiative forcing of a greenhouse gas (entry 2.1) into an amount of carbon dioxide.

Note 1 to entry: A carbon dioxide equivalent is calculated as the mass of a given greenhouse gas multiplied by its global warming potential (entry 2.4).

[Source: ISO 14064-1:2006, 2.19, modified -- "Note 1 to entry" has been added.]

2.3

Carbon storage in product

Carbon removed from the atmosphere and stored as carbon in a product (entry 3.1).

2.4

Global warming potential GWP Characterization factor (IS

Characterization factor (ISO 14050:2009, 7.2.2.2) describing the mass of carbon dioxide that has the same accumulated radiative forcing over a given period of time as one mass unit of a given greenhouse gas (entry 2.1).

[Source: ISO 14064-1:2006, 2.18, modified]

2.5

Greenhouse gas emission GHG emission Mass of a greenhouse gas (entry 2.1) released to the atmosphere. [Source: ISO 14064-1:2006, 2.5, modified -- "over a specific time period" has been omitted.]

2.6

Greenhouse gas removal GHG removal Mass of a greenhouse gas (entry 2.1) removed from the atmosphere. [Source: ISO 14064-1:2006, 2.6, modified -- "over a specific time period" has been omitted.]

2.7

Greenhouse gas source GHG source Process (entry 3.5) that releases a greenhouse gas (entry 2.1) into the atmosphere. Note 1 to entry: Process types include processes that are natural, mechanical, or the like.

2.8

Greenhouse gas sink GHG sink

Process (entry 3.5) that removes a greenhouse gas (entry 2.1) from the atmosphere. Note 1 to entry: Process types include processes that are natural, mechanical, or the like. 3 Terms relating to product, product system, and process

3.1

Product

Any goods or service.

Note 1 to entry: The product can be categorized as follows:

- service (e.g. transport, implementation of events, electricity);

- software (e.g. computer program);

- hardware (e.g. engine mechanical part);

- processed material (e.g. lubricant, ore, fuel);

- unprocessed material (e.g. agricultural produce)

Note 2 to entry: Services have tangible and intangible elements. Provision of a service can involve, for example, the following:

- an activity performed on a customer-supplied tangible product (e.g. automobile to be repaired)

- an activity performed on a customer-supplied intangible product (e.g. the income statement needed to prepare a tax return)

- the delivery of an intangible product (e.g. the delivery of information in the context of knowledge transmission)

- the creation of ambiance for the customer (e.g. in hotels and restaurants)

Software consists of information and is generally intangible and can be in the form of approaches, transactions or procedures.

Hardware is generally tangible and its amount is a countable characteristic. Processed materials are generally tangible and their amount is a continuous characteristic.

[Source: ISO 14044:2006, 9, modified -- "Note 1 to entry" has been modified to have "dictionary" removed from the second bullet, and "Note 3 to entry" dealing with the origin of the definitions has been omitted.

3.2

Product system

Collection of unit processes (entry 3.6) with elementary flows (entry 3.9) and product flows (ISO 14050:2009, 6.11), performing one or more defined functions and which models the life cycle (entry 4.2) of a product (entry 3.1). [Source: ISO 14044:2006, 28]

3.3

System boundary

Set of criteria specifying which unit processes (entry 3.6) are part of a product system (entry 3.2). [Source: ISO 14044:2006, 32]

3.4

Information module

Compilation of data covering a unit process (entry 3.6) or a combination of unit processes that are part of a life cycle (entry 4.2) of a product (entry 3.1).

Note 1 to entry: One or more information modules can be the basis a partial CFP (entry 1.2). In addition, several information modules can be the basis of a CFP (entry 1.1).

[Source: ISO 14025:2006, 13, modified—Reference in definition to being "used as a basis for Type III environmental declaration" has been removed, and a new "Note 1 to entry" has been added.]

3.5

Process

Set of interrelated or interacting activities that transforms inputs (ISO 14050:2009, 6.17) into outputs (ISO 14050:2009, 6.18).

[Source: ISO 14044:2006, 11]

3.6

Unit process

Smallest element considered in life cycle inventory analysis (entry 4.6) for which input (ISO 14050:2009, 6.17) and output (ISO 14050:2009, 6.18) data are quantified. [Source: ISO 14040:2006, 34]

3.7

Functional unit

Quantified reference unit representing the performance of a product system (entry 3.2). Note 1 to entry: As the CFP (entry 1.1) treats information on a product (entry 3.1), the functional unit can be a product unit, sales unit, or service unit.

[Source: ISO 14040:2006, 20, modified -- "Note 1 to entry" has been added.]

3.8

Reference flow

Quantitative measure of the output (ISO 14050:2009, 6.18) from processes (entry 3.5) in a product system (entry 3.2) required to fulfill the function expressed by the functional unit (entry 3.7).

Note 1 to entry: For an example of applying the concept of reference flow, see "Example" in entry 6.2.3.

[Source: ISO 14040:2006, 29, modified -- "Note 1 to entry" has been added.]

3.9

Elementary flow

Material or energy entering the system being studied, which is material or energy entering the

system being environmentally studied without previous human transformation that has been drawn from the environment (ISO 14050:2009, 1) without previous human transformation, or, material or energy leaving the system that has been drawn from material or energy released into the environment without subsequent human transformation, or, material or energy leaving the system that is released into the environment without subsequent human transformation. [Source: ISO 14044:2006, 12]

3.10

Product category Group of products (entry 3.1) that have equivalent functions. [Source: ISO 14025:2006, 12]

3.11

Product category rules PCR

Set of specific rules, requirements and guidelines for developing Type III environmental declarations (ISO 14050:2009, 8.5) for one or more product categories (entry 3.10). Note 1 to entry: PCR include quantification rules compliant with ISO 14044. [Source: ISO 14025:2006, 5, modified -- "Note 1 to entry" has been added.]

3.12

Carbon footprint of a product-product category rules

CFP-PCR

Set of specific rules, requirements and guidelines for quantification and communication on CFP (entry 1.1) for one or more product categories (entry 3.10).

3.13

Service life

Period of time during which a product (entry 3.1) in use meets or exceeds the performance requirements.

[Source: ISO 15686-1:2000, 1.1, modified—More general wording has been used.]

4 Terms relating to life cycle assessment

4.1

Cut-off criteria

Specification of the amount of material or energy flow (ISO 14050:2009, 6.13) or the level of significance associated with unit process (entry 3.6) or product system (entry 3.2) to be excluded from a CFP study (entry 1.3).

[Source: ISO 14044:2006, 18, modified -- "environmental significance" has been changed to "significance" and "study" has been changed to "CFP study".]

4.2

Life cycle

Consecutive and interlinked stages of a product system (entry 3.2), from raw material (ISO 14050:2009, 6.12) acquisition or generation from natural resources to final disposal. [Source: ISO 14044:2006, 1]

4.3

Life cycle assessment

LCA

Compilation and evaluation of the inputs (ISO 14050:2009, 6.17), outputs (ISO 14050:2009, 6.18) and the potential environmental impacts (ISO 14050:2009, 3) of a product system (entry 3.2) throughout its life cycle (entry 4.2).

[Source: ISO 14044:2006, 2]

4.4

Life cycle impact assessment

LCIA

Phase of life cycle assessment (entry 4.3) aimed at understanding and evaluating the magnitude and significance of the potential environmental impacts (ISO 14050:2009, 3) for a product system (entry 3.2) throughout the life cycle (entry 4.2) of the product (entry 3.1).

[Source: ISO 14044:2006, 4]

4.5

Life cycle interpretation

Phase of LCA in which the findings obtained from either the life cycle inventory analysis (entry 4.6) or the life cycle impact assessment (entry 4.4), or both, are evaluated in relation to the defined goal and scope in order to reach conclusions and recommendations in the life cycle assessment (entry 4.3).

[Source: ISO 14044:2006, 5, modified—The term "inventory analysis" has been changed to "life cycle inventory analysis".]

4.6

Life cycle inventory analysis

LCI

Phase of life cycle assessment (entry 4.3) involving the compilation and quantification of inputs (ISO 14050:2009, 6.17) and outputs (ISO 14050:2009, 6.18) for a product throughout its life cycle

(entry 4.2). [Source: ISO 14044:2006, 3]

4.7

Sensitivity analysis

Systematic procedures for estimating the effects of the choices made regarding methods and data on the outcome of a CFP study (entry 1.3).

[Source: ISO 14044:2006, 31, modified—By making specific reference to "CFP study".]

5 Terms relating to data and data quality

5.1

Primary data

Quantified value of a unit process (entry 3.6) or an activity within the product system (entry 3.2) obtained from a direct measurement or a calculation based on direct measurements at its original source.

Note 1 to entry: Primary data need not necessarily originate from a product system (entry 3.2) under study.

5.2

Site-specific data

Data obtained from a direct measurement or a calculation based on direct measurements at its original source within the product system (entry 3.2).

Note 1 to entry: All site-specific data are "primary data" (entry 7.1), but not all primary data are site-specific data, because these may also relate to a different product system (entry 3.2).

5.3

Secondary data

Data obtained from sources other than a direct measurement or a calculation based on direct measurements at the original source within the product system (entry 3.2).

Note 1 to entry: Such sources can include databases, published literature, national inventories and other generic sources.

5.4

Uncertainty

Parameter associated with the result of quantification which characterizes the dispersion of the values that could be reasonably attributed to the quantified amount.

Note 1 to entry: Uncertainty information typically specifies quantitative estimates of the likely dispersion of values, and a qualitative description of the likely causes of the dispersion.

[Source: ISO 14064-1:2006, 2.37]

6 Terms relating to biogenic material and land use

6.1

Biomass

Material of biological origin excluding material embedded in geological formations and material transformed to fossilized material.

Note 1 to entry: This includes organic material (both living and dead) (e.g. trees, crops, grasses, tree litter, algae, animals, and waste of biological origin, e.g. manure).

6.2

Biogenic carbon Carbon derived from biomass (entry 6.1).

6.3

Biogenic CO₂

CO₂ formed from the oxidation of biogenic carbon (entry 6.2).

6.4

Fossil carbon

Carbon which is contained in fossilized material.

Note 1 to entry: Examples of fossilized material are coal, oil and natural gas.

6.5

Direct land use change

dLUC

Change in human use or management of land at the location of the production, use or disposal of raw materials (ISO 14050:2009, 6.12), intermediate products (ISO 14050:2009, 6.2.1) and final products (entry 3.1) or wastes (ISO 14050:2009, 12) in the product system (entry 3.2) being assessed.

6.6

Indirect land use change

iLUC

Change in the use or management of land which is a consequence of the production, use or disposal of raw materials (ISO 14050:2009, 6.12), intermediate products (ISO 14050:2009, 6.2.1) and final products (entry 3.1) or wastes (ISO 14050:2009, 12) in the product system (entry 3.2), but which is not taking place at the location of the activities that cause the change.

7 Terms relating to verification

7.1

Carbon-footprint-of-a-product verification

CFP verification

Confirmation of the validity of an environmental claim (ISO 14050:2009, 8.2) based on reliable data, using predetermined specific criteria and procedures with assurance of data reliability. [Source: ISO 14021:1999, 1.4, modified—the first preferred term designation has been changed from "environmental claim verification" to the above term.]

7.2

Carbon-footprint-of-a-product verifier

CFP verifier

Competent person, body or team that carried out a CFP verification (entry 7.1).

[Source: ISO 14064-1:2006, 8, modified—changed term designation and definition to be specific to CFP verification and added reference to essential characteristic of the CFP verifier being competent.]

7.3

Verification criteria

Policy, procedure or requirement used as a reference against which evidence is compared.

Note 1 to entry: Verification criteria may be established by governments, GHG programs (ISO 14050:2009, 9.4.1), voluntary reporting initiatives, standards or good practice guidance.

[Source: ISO 14064-1:2006, 2.32, modified—Deleted reference to validation at the beginning of the "Note 1 to entry".]

Supplement-2

This document specifies the terms and definitions used in the "EcoLeaf environmental label program" (hereafter, "EcoLeaf program") operated and administered by the Japan Environmental Management Association for Industry, with the omission of the terms already defined in Supplement-1 (CFP) to avoid repetitions.

1 Terms relating to environmental labels

1.1

Type III environmental declaration

Environmental declaration providing quantified environment data using predetermined parameter and, where relevant, additional environmental information.

[Source: JISQ14025:2008 Environmental labels and declarations—Type III environmental declarations—Principles and procedures (H20,6,20)]

1.2

Environmental aspect

Element of an organization's activities or products that can interact with the environment. [Source: JISQ14025:2008 Environmental labels and declarations—Type III environmental declarations—Principles and procedures (H20,6,20)]

1.3

Interested party

All parties affected by the Type III environmental label system.

[Source: JISQ14025:2008 Environmental labels and declarations—Type III environmental declarations—Principles and procedures (H20,6,20)]

1.4

Consumer

Individual member of the general public purchasing or using goods, property or services for private purposes.

[Source: JISQ14025:2008 Environmental labels and declarations—Type III environmental declarations—Principles and procedures (H20,6,20)]

1.5

Third party

Individual or body that is recognized as being independent of the parties involved concerning the issues in question.

[Source: JISQ14025:2008 Environmental labels and declarations—Type III environmental declarations—Principles and procedures (H20,6,20)]

1.6

Program operator

Body or bodies that conduct a Type III environmental declaration program. [Source: JISQ14025:2008 Environmental labels and declarations—Type III environmental declarations—Principles and procedures (H20,6,20)]

1.7

Certification

Procedure whereby a third party guarantees in writing that a product, process or accessory service meets given requirements.

[Source: JISQ14024:2000 Environmental labels and declarations—Type I environmental label display—Principles and procedures (H12,8,21)

1.8

Verification

Confirmation, through the provision of objective evidence, that the specified requirements have been fulfilled.

[Source: JISQ14025:2008 Environmental labels and declarations—Type III environmental declarations—Principles and procedures (H20,6,20)]

1.9

Verifier

Person or body that carries out verification (verifier is spelled differently in JIS) [Source: JISQ14025:2008 Environmental labels and declarations—Type III environmental declarations—Principles and procedures (H20,6,20)]

1.10

Comparative assertion

Environmental claim regarding the superiority or equivalence of one product versus a competing product that performs the same function.

[Source: JISQ14025:2008 Environmental labels and declarations—Type III environmental declarations—Principles and procedures (H20,6,20)]