

EPEAT Clarification #41

Korean Environmental Industry & Technology Institute (KEITI) Carbon Footprint (CFP) labeling program

This Clarification applies to the following IEEE Standards and criteria:

Applicable Standards:

- IEEE 1680.1 – Computers and Displays
- IEEE 1680.2 – Imaging Equipment
- IEEE 1680.3 – Televisions

Applicable Criteria:

4.5.2.1, 4.5.2.2

CDP Determination:

Products certified to the Korean Environmental Industry & Technology Institute (KEITI) Carbon Footprint (CFP) labeling program, including the basic phase 1 level certification, are deemed conformant with the following IEEE 1680 criteria:

- IEEE 1680.2 Imaging Equipment – 4.5.2.1 and 4.5.2.2.

The above listed criteria are product-specific, so only products that have been awarded a CFP label may successfully claim these criteria.

Background information:

KEITI is an organization affiliated with the Korean Ministry of the Environment and operates a series of environmental product certification programs. Among the programs, KEITI operates the CFP program for the certification of reported carbon data for various products, and the Environmental Product Declaration (EPD) program for reporting product-specific life cycle data. Both programs certify durable electronics products such as computers, imaging devices, and televisions. KEITI is a long-standing member of the Global Environmental Declarations Network.

The criteria 4.5.2.1, 4.5.2.2, and 4.7.3.1 all require some assessment of the environmental impacts of a product over its complete life-cycle. The KEITI program has established requirements for the certification of durable products that consume energy when in use, including those within the scope of the EPEAT

standards. Program requirements include those that support the calculation and reporting of carbon emissions generated over the complete life-cycle of the product. KEITI requirements are compliant with ISO 14040 series, ISO 14025, and ISO 14064 series standards.

The KEITI CFP program has three unique certification tiers: Certification of carbon emissions, Certification of low carbon products, and Certification of carbon neutral products. This analysis considers the most basic level of certification, and thus applies as well to both of the more advanced certification tiers.

KEITI guidelines are contained in a document entitled 5_1 Guidelines for Carbon Footprint of Products. The document is broken into 3 annexes that cover various types of products. General requirements relevant to EPEAT registered products are contained in Annex 2, Guidelines for Energy – Using Products. Annex 3 presents Guidelines for Use Scenario for Energy-using Products. Both sets of guidelines were evaluated in these analyses.

Criteria Specific Comparison:

1) 4.5.2.1 – Optional - Product specific greenhouse gas emissions – life-cycle assessment

This criterion requires the conduct of a cradle-to-grave assessment of greenhouse gas emissions for the declared product using one of several specified protocols.

Verification Requirements:

b) Identification of standard utilized -- **Conformant**

Conformance summary 4.5.2.1:

In accordance with KEITI document 5_1 Guidelines for Carbon Footprint of Products, Annex 1, Section 0.3, the guidelines meet the requirements of ISO 14025 and ISO 14064. Both of these standards are cited in the EPEAT criterion as acceptable reference standards.

Additionally, the criterion requires that the scope of the assessment of carbon emissions be cradle-to-grave, from raw material extraction through end-of-life disposal. Annex 2, Section 5.2.1 of the referenced guidance specifically states that the scope boundary is cradle-to-grave including pre-manufacturing, manufacturing, use, and end-of-life phases. It also stipulates that it applies to both B2C (business-to-consumers) and B2B (business-to-business) products.

2) 4.5.2.2 – Optional - Product specific greenhouse gas emissions – third party verification or making the LCA publicly available.

This criterion requires making the assessment of greenhouse gas emissions in criterion 4.5.2.2 publicly available. This can be achieved through two specific ways. Only one of two ways of making the assessment of greenhouse gas emissions publicly available needs to be met (Verification requirement c **OR** Verification requirement d). In addition to making the assessment of greenhouse gas emissions publicly available, conformance to this criterion requires that verification requirements a **AND** b must also be met.

Verification requirements:

b) Documentation of the assessment - **Conformant**

c) If third party verification was conducted, a document confirming that the process used to determine results of LCA assessment conducted under 4.5.2.1 were verified by an independent third party in conformance with ISO 14064 and ISO 14065 carbon accounting and verification standards, or another method referenced in one of the standards referenced in 4.5.2.1 (PAS 2050:2011, the GHG Protocol, ISO 14067, ISO14040/14044 or ISO 14025). The document shall include credentials and contact information of third party verifier. - **Conformant**

OR,

d) If the summary of results of the LCA assessment were made publicly available and results submitted into a national database: - **Non-conformant**

Conformance summary 4.5.2.2:

In accordance with the KEITI program guidelines, information reporting is a required part of the information on the label. Product certification to any program tier requires the reporting of the carbon emissions by life-cycle stage and total emissions (annex 2, section 6.2.3) on the environmental product label or packaging (6.2.4), and on the program operator website (6.2.5).

In addition, all submissions for certification to the CFP program are third party reviewed by the program. The website (<http://www.epd.or.kr/en/carbon/confirm01.asp>) details an elaborate application and verification process for both the certification of results as well as any future uses of the label. Also, the verification requirement stipulates that verification must be performed in a manner consistent with ISO14064, which is validated in the program guidance in Annex 1 section 0.2. KEITI is the external third party verifier in this system.

There is no requirement in the KEITI CFP program to make the results of the study public through submission to a public database.

This criterion is product specific.

Additional information regarding criterion - 4.7.3.1:

3) 4.7.3.1 Optional— Product life-cycle assessment and public disclosure of analyses

This criterion requires conduct of a cradle-to-grave life-cycle assessment for any one product covered under the scope of the standard in accordance with ISO 14044, and making the results publicly available in specified ways.

Verification Requirements:

b) Documentation of data contribution by the relevant database operator – **Not yet reviewed**

OR

c) Documentation of publication of LCA in peer-reviewed LCA journal or Environmental Product Declaration (EPD) label in accordance with the ISO 14025 standard – **Not yet reviewed**

1. Identification of the national database(s), or peer reviewed LCA journal, or EPD Type III label in accordance with ISO 14025 where the complete life-cycle assessment of at least one product, that is covered under the scope of this standard, has been submitted or published

2. Evidence of the submittal to the identified database/public disclosure system, publication in peer-reviewed LCA journal, or EPD label

Conformance Summary 4.7.3.1:

Insufficient detail regarding the requirements of the KEITI Environmental Declaration Program (EDP) were available at the time of this analysis to make an adequate determination about the conformance of the program with 1680.2 criterion 4.7.3.1. The KEITI website confirms the programs existence, and has a listing of current products with EDP certification. It also gives a history of program changes and developments, along with an overview of the program. More detail will be needed to assess conformance to criterion 4.7.3.1 and therefore it is not included in the CDP Determination.

Change History: Revision A approved by the Conformity Decision Panel and moves to 30 day comment period on 11/07/2016. No comments were received so previously approved Revision A published on 12/13/2016.