



Sustainability for a Connected Future

## Type 1 Ecolabels: Credible and Impactful by Design

Among the hundreds of ecolabels in the marketplace today, Type 1 ecolabels are recognized by the United Nations Environment Programme (UNEP) as being the most reliable and ones that public and private sector institutional purchasers can trust to provide credible environmental and social benefits.

Type 1 ecolabels are defined by two internationally recognized standards: ISO 14024 and ISO 14020. Founded in 1947, the International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from various national standards organizations. The ISO 14024 standard identifies key elements of Type 1 ecolabelling programs, while the ISO 14020 standard establishes guidelines the development and use of all types of environmental labels and declarations more broadly.

Together, these documents outline the principles and procedures for key aspects of Type 1 ecolabelling programs including: the selection of product categories, the development of criteria, stakeholder engagement, transparency, and conformity assurance. Because of these two standards, it means something very specific to refer to an ecolabelling program as a Type 1 ecolabel.

The [Global Electronics Council](#) (GEC) believes there are three important reasons why Type 1 ecolabels are considered the most reliable for public and private sector institutional purchasers.

### Criteria Development

The first reason is how Type 1 ecolabel criteria are formulated. All products and/or services must meet the specific criteria associated with an ecolabel be able to qualify for that ecolabel. But not all criteria are developed in the same way. Type 1 ecolabels engage a wide variety of perspectives in the criteria development process, including those from large and small manufacturers, scientific experts, sustainability advocacy organizations and even purchasers. By engaging many perspectives, Type 1 ecolabels have criteria that are not only scientifically credible but are also achievable. There is no point in having an ecolabel that no products and or services can meet!

### Lifecycle Impacts

The second reason is that Type 1 ecolabels address sustainability impacts across the entire product lifecycle. Purchasers don't always think about the fact that there are negative environmental and social impacts resulting from choices made by the manufacturer on each stage of the product lifecycle including: where the materials are sourced (are they conflict minerals?), the processes used to manufacturer and assemble the product (are hazardous chemicals used and if yes, are workers exposed?), when the product is used by the consumer (is the product as energy efficient as it can be?) and the end of life of the product (can the user repair or refurbish the product instead of immediately throwing it away? How easy can it be recycled when the product can no longer be used for its purpose?). It is not enough for institutional purchasers to engage in sustainable procurement. With their scale of purchasing power, institutional purchasers need to feel secure that their choices are having measurable impact.

## Third-Party Validation

The third reason, one that is essential for maintaining the credibility of Type 1 ecolabels, is that a separate third party has to validate that the product and/or service meets the ecolabels criteria. There are some ecolabels where all the manufacturer has to do is claim that they meet the criteria, called “self-attestation”, without providing evidence to anyone that these claims are valid. That is not acceptable for a Type 1 ecolabel. When a product and/or service carries a Type 1 ecolabel, it means that the manufacturer has worked with an outside third party to validate that the criteria have been met. Institutional purchasers, especially from the public sector, want confirmation that product and/or service claims are valid.

These three reasons are why the Global Electronics Council only manages Type 1 ecolabels such as EPEAT. We believe that only Type 1 ecolabels provide institutional purchasers with the necessary credibility and sustainable impact for their procurement choices.

## A Closer Look: How GEC Delivers Impact and Credibility

While GEC fulfills all principles and requirements outlined in the ISO 14024 and 14020 standards, the attributes below are especially unique to Type 1 ecolabelling programs, and crucial in delivering credible sustainability benefits for purchasers. GEC believes that an ecolabelling program can have the most meaningful impact if it is built on a solid foundation – the attributes described below are those foundational elements of the EPEAT Program.

### Consultation: ISO 14024 requires formal, open participation among interested parties

- GEC implements a balanced, multi-stakeholder consensus process to develop criteria. This process is in alignment not only with ISO principles, but also with the US Federal Government’s description of characteristics of a voluntary consensus process as well ([OMB Circular A119](#)).
- In addition to the consensus-based process implemented during criteria development, GEC also regularly engages an Advisory Council and Conformity Guidance Group and holds public stakeholder comment periods regarding key programmatic changes.

### Life cycle based: ISO 14024 requires criteria to be based on indicators arising from life cycle considerations

- GEC prepares a State of Sustainability Research Packet as an important first step when developing and revising criteria. We do this to identify key environmental and social impacts across the life cycle of the product, with the aim of considering how criteria can address these sustainability impacts. The findings of this research packet serve as the scientific basis for the development or revision of criteria, and they are always released for public comment.
- EPEAT criteria address impacts across the entire product lifecycle. Type 1 ecolabels address all materially important sustainability issues, they do not address some impacts while overlooking others.

### Compliance and Verification: ISO 14024 requires verification and monitoring of participating companies

- GEC has a robust system in place that requires all companies (manufacturers, OEMs, and brands) participating in the ecolabel program to provide evidence to show their products meet both criteria and ecolabel requirements.
- To participate in EPEAT, companies must engage a GEC-approved Conformity Assurance Body, or CAB. CABs are impartial, independent (third party) conformity assurance experts responsible for assessing participating companies’ conformance with EPEAT criteria.

- GEC develops the rules for all conformity assurance activities and provides oversight and ongoing approval of CABs. Although GEC's requirements of CABs may appear prescriptive, this approach is grounded in ensuring consistency and objectivity, and maintaining the technical competency of CABs –all of which is required by ISO 14024. This approach allows participating companies to have a choice of different CABs to use for 3rd party validation of claims while also ensuring that regardless of which CAB a company chooses to work with, the company will have the same consistent and objective conformity assurance experience.
- Not only do participating companies have to initially prove that their product meets EPEAT Criteria, they must also prove it on an ongoing basis. GEC calls this ongoing surveillance activity its Continuous Monitoring process, and CABs are required to undertake investigations throughout the year as directed by GEC.

#### **Transparency: ISO 14024 requires programs to make key programmatic documents available to stakeholders**

- GEC is committed to ensuring that EPEAT Program documents are freely available to interested parties. This includes how product categories are selected; how sustainability criteria are identified, developed, and revised; and all conformity assurance requirements and processes. EPEAT criteria are also freely available to interested parties.

#### **Impartiality and Avoidance of Conflicts of Interest: ISO 14024 requires Type 1 ecolabels to be free from undue influence**

- GEC recognizes that impartiality and managing conflicts of interest are fundamental to maintaining the integrity of a Type 1 ecolabel, and does not allow commercial, financial, or other pressures to compromise impartiality in the EPEAT Program.
- The GEC executive leadership team is committed to ensuring the EPEAT Program is operated in a manner to safeguard objectivity and impartiality. We identify risks to impartiality on an ongoing basis and implement controls to mitigate and eliminate those risks. Additionally, all GEC personnel are obligated to disclose potential conflicts of interest, as part of their employment, and act objectively and free from any pressures that could compromise their objectivity.
- Although conflicts may arise in any facet of GEC's operations, GEC recognizes that as the manager of the EPEAT Program and as well as the manager of a GEC-approved CAB, there is an inherent risk to impartiality and a potential for conflicts of interest to arise, simply because we are responsible for overseeing all CABs. The GEC managed CAB is subject to the same level of scrutiny, auditing, and performance requirements as all other GEC-approved CABs.
- The activities of the Global Electronics Council are funded through a mix of trademark fees from our ecolabels, fees from CABs to support their training and auditing, in-kind support from partner organizations and increasingly, grants/research funding.

#### **Management System and Consistency**

- The credibility of a Type 1 ecolabel is a function of the integrity of the system supporting it. GEC has a robust quality management system in place to ensure that EPEAT continues to implement key ISO 14024 and 14020 principles consistently and efficiently. In fact, our ongoing recognition by ANAB requires that we have specific elements in place as per ISO 17065, an internally recognized standard for operating certification programs.
- GEC requires all GEC-approved CABs to have similar ISO accreditations in place as well, to ensure that they consistently implement our ecolabel policies and conformity assurance requirements. Creating this prescribed series of checks and balances ensures a consistent conformity assurance experience for participating companies, and uniform implementation of conformity assurance requirements across all CABs. It is an important tool in protecting and enhancing the integrity of the EPEAT Program, because it brings standardization to the way the program is delivered.

## Appendix A: Type 1 Ecolabelling Program Principles Identified in ISO 14024

Principle	Description
Voluntary nature	Type I environmental labelling programmes, including those developed or operated by government-sponsored agencies, shall be voluntary in nature.
Relationship with ISO 14020	In addition to the requirements of this document, the principles set out in ISO 14020 shall apply. Where this document provides for more specific requirements than ISO 14020, those specific requirements shall apply.
Use of ecolabels	Use of an ecolabel in accordance with this document is considered to indicate meeting all environmental and other relevant legal requirements.
Life cycle considerations	<p>The objective of reducing environmental impacts and not merely transferring impacts across media or stages of the product life cycle is best served by considering the whole product life cycle when setting product environmental criteria.</p> <p>Life cycle stages to be taken into account when developing the product environmental criteria should include extraction of resources, manufacturing, distribution, use and disposal relating to relevant cross-media environmental indicators. Any departure from this comprehensive approach or selective use of restricted environmental issues shall be justified.</p>
Selectivity	<p>Product environmental criteria shall be established to differentiate environmentally preferable products from others in the product category, based on a measurable difference in environmental impact. Product environmental criteria should differentiate between products only when these differences are significant. Testing and verification methodologies used to evaluate products have different levels of precision and accuracy. This should be considered when determining the significance of this difference.</p> <p>Once product environmental criteria are established according to the above, all products that meet the criteria shall be eligible to use the label.</p>
Product environmental criteria	<p>Life cycle considerations The product environmental criteria shall be based on indicators arising from life cycle considerations (see 6.4).</p> <p>Basis of criteria The product environmental criteria should be set at attainable levels and should give consideration to relative environmental impacts, measurement capability and accuracy.</p>
Product function characteristics	<p>In developing the criteria, the fitness for purpose of the product and the levels of performance shall be taken into account. International, regional or national standards for the product should be considered for use in the programme, according to the hierarchy for use of standards set out in ISO 14020.</p> <p>NOTE In the context of environmental labelling, fitness for purpose implies that a product satisfies health, safety and consumer performance needs.</p>
Validity of program requirements	<p>Period of validity The product environmental criteria and product function requirements for each product category shall be set for a predefined period.</p> <p>Review period The product environmental criteria and product function requirements shall be reviewed within a predefined period, taking account of factors such as new technologies, new products, new environmental information and market changes. Review of the product environmental criteria and product functional requirements need not necessarily lead to changes in them.</p>
Consultation	A process of formal open participation among interested parties shall be established at the outset for the purpose of selecting and reviewing product categories, product environmental criteria and product function characteristics.

Principle	Description
Compliance and verification	<p>All the elements in the product environmental criteria and product function characteristics of the environmental labelling programme shall be verifiable by the ecolabelling body. The methods for assessing compliance should make use of the following, in order of preference:</p> <ul style="list-style-type: none"> <li>- ISO and IEC standards;</li> <li>- other internationally recognized standards;</li> <li>- regional and national standards;</li> <li>- other repeatable and reproducible methods which follow accepted principles of good laboratory practice (see ISO/IEC 17025 for information on good laboratory practice);</li> <li>- manufacturer's evidence.</li> </ul>
Data quality	<p>The ecolabelling body shall require data that reduce bias and uncertainty as far as practical by requiring the best quality data available. Data quality shall be characterized by both quantitative and qualitative aspects and the source of data shall be specified in the criteria requirements whenever possible.</p>
Transparency	<p>A Type I environmental labelling programme should be able to demonstrate transparency through all stages of its development and operation. Transparency implies that information shall be available to interested parties for inspection and comment where appropriate. Adequate time shall be allowed for comments to be submitted. This information should include:</p> <ul style="list-style-type: none"> <li>- selection of product categories;</li> <li>- selection and development of product environmental criteria;</li> <li>- product function characteristics;</li> <li>- testing and verification methods;</li> <li>- certification and award procedures;</li> <li>- the review period;</li> <li>- the period of validity;</li> <li>- non-confidential evidence on which the awarding of the label is based;</li> <li>- funding sources for the programme development (e.g. fees, government financial support);</li> <li>- compliance verification.</li> </ul> <p>Transparency should not conflict with the requirements of 5.16.</p>
Accessibility	<p>Application to, and participation in, environmental labelling programmes shall be open to all potential applicants. All applicants that fulfil the product environmental criteria for a given product category and the other programme requirements shall be entitled to be granted a licence and authorized to use the label.</p>
Scientific basis of product environmental criteria	<p>The development and selection of criteria shall be based on sound scientific and engineering principles. The criteria should be derived from data that support the claim of environmental preferability.</p>
Avoidance of conflict of interest	<p>Type I environmental labelling programmes shall ensure that they are free from undue influence. Programmes shall be able to demonstrate that sources of funding do not create a conflict of interest.</p> <p>NOTE See also ISO/IEC 17065.</p>
Competence of verifiers	<p>The ecolabelling body shall establish procedures that include a process to assess and develop the competence of verifiers, e.g. by periodic training. The ecolabelling body shall have a transparent and documented process to manage the verification activity and to provide traceability.</p>
Costs and fees	<p>Fees may include application, testing or administration fees. In principle, the costs and fees for the granting and maintaining of a label should be based on all programme costs and should be kept as low as possible to maximize accessibility.</p> <p>Any fees should be applied equitably to all applicants and licensees.</p>
Confidentiality	<p>The confidentiality of all information that is identified as confidential shall be maintained.</p>
Mutual recognition	<p>Mutual recognition, based on confidence, should be encouraged. There may be mutual recognition of tests, inspections, conformity assessment, administrative procedures and, where appropriate, product environmental criteria.</p> <p>To ensure full transparency, information on existing mutual recognition agreements with other eco-labelling bodies shall be made available.</p> <p>NOTE For further guidance, see ISO/IEC 17040.</p>