EPEAT Program
Continuous Monitoring Outcomes Report

Computers and Displays
CD-2022-03
March 21, 2023

1.0 Background

EPEAT® is a comprehensive voluntary sustainability Type 1 ecolabel that helps purchasers identify sustainable technology products and services. Central to EPEAT are conformity assurance activities that meet the technical rigor and credibility needs of the institutional purchasers who rely upon EPEAT. The EPEAT Program ensures the ongoing conformance of EPEAT-registered products through an ongoing surveillance process known as Continuous Monitoring. Continuous Monitoring activities occur throughout the year and test the ability of Participating Manufacturers to prove conformance with EPEAT Criteria on an ongoing basis.

Some Continuous Monitoring activities require that Investigations be conducted in discrete timeframes called Rounds. The EPEAT Program develops an individual plan for each Continuous Monitoring Round, which specifies the EPEAT Criteria to be investigated, the method of investigation that GEC-approved Conformity Assurance Bodies (CABs) must use and the specific dates when the Investigation activities must be completed. The EPEAT Program also selects the Participating Manufacturers and EPEAT-registered products and assigns Investigations to CABs, which must fully participate in and are responsible for implementing Continuous Monitoring Round activities with their Participating Manufacturer clients. Participating Manufacturers are required to cooperate fully with their GEC-approved CAB during Round activities.

To maintain the level of transparency relied on by purchasers, the EPEAT Program publishes an Outcomes Report at the conclusion of each Round to summarize the activities conducted and to identify the products and Participating Manufacturers that received nonconformances and the actions taken to restore accuracy of the EPEAT Registry.

This document summarizes the activities and results of Continuous Monitoring Round CD-2022-03 conducted for the Computers and Displays category.

2.0 Overview of Continuous Monitoring Round CD-2022-03

2.1 Investigation Activities

As per the published Round Plan, Continuous Monitoring Round CD-2022-03 used Level 1 Investigations (documentation review activities to determine Participating Manufacturers' conformance with specific EPEAT Criteria). Participating Manufacturers had a discrete time period to provide their CABs with evidence supporting conformance with the selected EPEAT Criteria. GEC-approved CABs reviewed the documentation, made recommendations on conformity based solely on the evidence provided by Participating Manufacturers, and sent Investigation Reports to the EPEAT Program. The EPEAT Program made the final decisions on conformity for the Investigations.

2.2 Criteria Investigated

Both the products and Criteria for investigation in Continuous Monitoring Round CD-2022-03 were selected randomly using a random number generator. Each Participating Manufacturer was assigned two investigations, and any manufacturer who received a nonconformance in a 2021 Continuous Monitoring Round were assigned one additional investigation.

Table 1: Criteria Investigated in Round CD-2022-03

Criteria Number	Criterion Title
4.1.1.1	Conformance with European Union RoHS Directive substance restrictions
4.1.3.1	Elimination of intentionally added mercury in light sources
4.1.4.1	Restriction of the use of beryllium
4.1.5.1	Reduction of bromine and chlorine content in plastic parts >25 g
4.1.5.2	Further reduction of bromine and chlorine content of plastic materials
4.1.6.1	Avoidance or elimination of substances on EU REACH Annex XIV (authorization list)
4.1.7.1	Compliance with provisions of EU Battery Directive
4.1.9.1	IEC 62474 declarable substances
4.1.9.2	Requesting substance inventor
4.1.10.1	Reduce fluorinated gas emissions from flat panel display manufacturing
4.1.10.2	Reduce fluorinated greenhouse gas emissions from semiconductor production
4.2.1.1	Minimum post-consumer recycled plastic, ITE-derived post-consumer recycled plastic or bio based plastic content
4.3.2.1	Plastic parts compatible with recycling
4.3.2.2	Plastic parts separable for recycling
4.4.1.1	Service support
4.4.2.1	Removal of external enclosure
4.4.2.4	Battery replacement and information
4.4.2.6	Removal of lithium-ion batteries
4.5.1.1	Conformance to current ENERGY STAR® program requirements
4.5.1.2	Lowest power mode limit
4.5.1.4	Energy efficiency for external power supplies exceeding International External Power Supply Efficiency Level VI
4.5.1.5	Product energy consumption less than the ENERGY STAR® Maximum energy limit
4.6.1.1	Provision of product take-back services
4.6.2.1	Provision of a removable rechargeable battery take-back program
4.6.3.1	End-of-life processing
4.7.1.2	Elimination of elemental chlorine as a bleaching agent in packaging material
4.7.2.1	Separable packaging material
4.7.2.2	Plastics marked in packaging materials
4.7.3.1	Recycled content in wood-based fiber packaging
4.8.2.1	Corporate carbon footprint
4.8.2.2	Greenhouse gas emissions from product transport
4.9.1.1	Third party certified environmental management system (EMS) for design and manufacturing organizations
4.9.2.1	Corporate environmental performance reporting by manufacturer
4.9.3.1	Energy management system/energy performance improvement - manufacturers

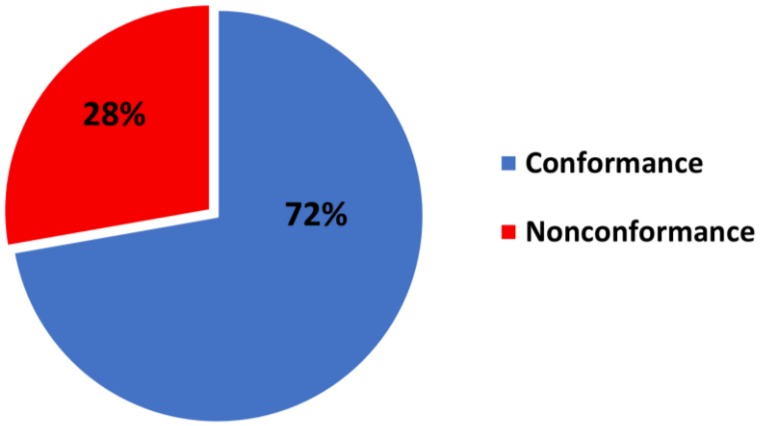
Table 1: Criteria Investigated in Round CD-2022-03	
Criteria Number	**Criterion Title**
4.9.3.2	Energy management system/energy performance improvement - manufacturers
4.10.2.1	Public disclosure regarding conflict minerals in products

3.0 Summary of Investigations and Final Decisions on Conformity for CD-2022-03

Highlights from this Continuous Monitoring Round are:

- **90** investigations completed
- **65** decisions of Conformance
- **25** decisions of Nonconformance *Further details provided in Section 4.* ***Of these 25 nonconformances, 19 were due to CAB failure to submit the Investigation Report.***

Figure 1: Final Conformity Decisions for CD-2022-03
(shown as percentage of total investigations)



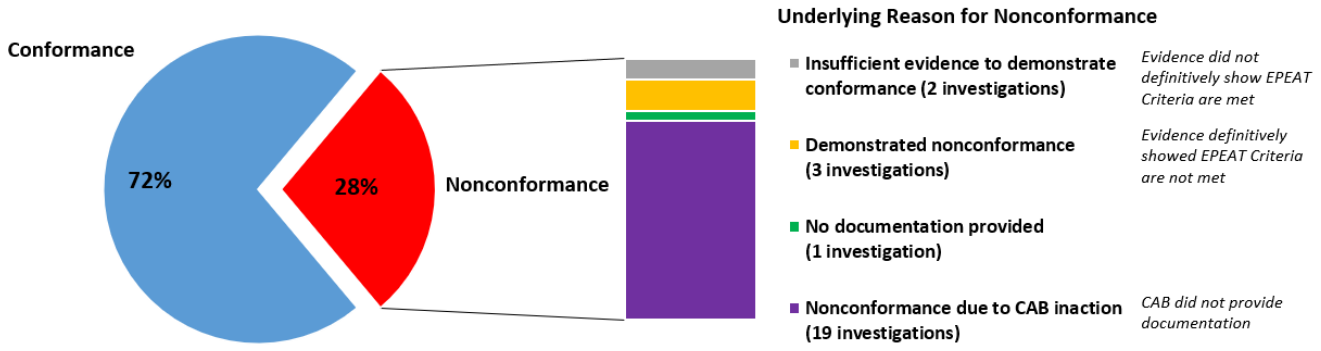
4.0 Further Details on Nonconformances for CD-2022-03

Table 2 below provides a further breakdown of the nonconformances by Criterion. All nonconformances must be categorized as either a minor error, nonconformance, or nonconformance due to CAB inaction or delay not attributable to the Participating Manufacturer.

Table 2: Breakdown of Nonconformances by Criterion for CD-2022-03		
Criteria Number	**Criterion Title**	**Total Nonconformances**
4.1.1.1	Conformance with European Union RoHS Directive substance restrictions	1
4.1.10.1	Reduce fluorinated gas emissions from flat panel display manufacturing	1
4.1.10.2	Reduce fluorinated greenhouse gas emissions from semiconductor production	1
4.1.4.1	Restriction of the use of beryllium	1
4.1.5.1	Reduction of bromine and chlorine content in plastic parts >25 g	2
4.1.7.1	Compliance with provisions of EU Battery Directive	1
4.1.9.1	IEC 62474 declarable substances	1
4.4.2.4	Battery replacement and information	1
4.5.1.1	Conformance to current ENERGY STAR® program requirements	1
4.5.1.2	Lowest power mode limit	2
4.5.1.4	Energy efficiency for external power supplies exceeding International External Power Supply Efficiency Level VI	2
4.6.2.1	Provision of a removable rechargeable battery take-back program	1
4.6.3.1	End-of-life processing	3
4.7.1.1	Elimination of intentionally added heavy metals in packaging	2
4.8.2.2	Greenhouse gas emissions from product transport	1
4.9.1.1	Third party certified environmental management system (EMS) for design and manufacturing organizations	2
4.9.2.1	Corporate environmental performance reporting by manufacturer	1
4.9.3.1	Energy management system/energy performance improvement - manufacturers	1

Figure 2 provides a further breakdown by the underlying reason for the nonconformances.

Figure 2: Underlying Reason for Nonconformances in CD-2022-03
(shown as a percentage of total nonconformances)



4.1 Minor Errors Versus Nonconformances

All nonconformances must be categorized as either a minor error, nonconformance, or nonconformance due to CAB inaction or delay not attributable to the Participating Manufacturer. Minor errors are non-critical or

clerical in nature and do not materially affect the validity of conformance with EPEAT Criteria. All nonconformances that do not meet the definition of minor errors are categorized as nonconformances (unless they are due to CAB inaction or delay). One minor error was identified in Continuous Monitoring Round CD-2022-03.

4.2 Minor Errors

For Level 1 Investigations, nonconformances may be categorized as minor errors for the following reasons:

- Minor human error in data entry (e.g., value cited for EPEAT-product registration is insignificantly above or below the actual value).
- Minor administrative errors (e.g., broken URLs, reports/certificates marginally outdated).
- No documentation provided by a Participating Manufacturer where the Participating Manufacturer indicated the product has reached end-of-life and is no longer available on the market.

One minor error was identified in Continuous Monitoring Round CD-2022-03, and it was a demonstrated nonconformance.

4.3 Nonconformances

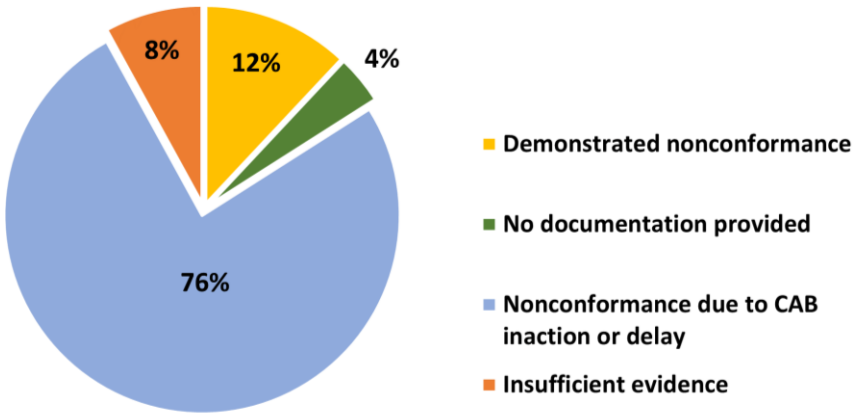
Nonconformances may be due to a demonstrated nonconformance, insufficient evidence provided to demonstrate conformance, because no documentation was provided, or due to CAB inaction. All but one nonconformance in CD-2022-03 were nonconformances, as opposed to minor errors. 19 of the nonconformances were due to CAB inaction or delay not attributable to the Participating Manufacturer.

Since this was a random Round, the Criteria found nonconformant varied. Demonstrated nonconformances were found for 4.4.2.4 Battery replacement and information, 4.8.2.2 Greenhouse gas emissions from product transport, and 4.9.2.1 Corporate environmental performance reporting by manufacturer. Nonconformances due to insufficient evidence were found for 4.6.3.1 End-of-life processing and 4.7.1.1 Elimination of intentionally added heavy metals in packaging. No documentation was provided for one 4.5.1.4 Energy efficiency for external power supplies exceeding International External Power Supply Efficiency Level VI investigation.

See Section 6 for more information on key findings identified in this Round.

Figure 3 provides a breakdown of the nonconformances found in Round CD-2022-03.

Figure 3: Reasons for Nonconformances for CD-2022-03
(shown as a percentage of total nonconformances)



5.0 Actions to Restore Conformance

Where the final conformity decision is nonconformance (including minor errors and those due to CAB inaction or delay), Participating Manufacturers must make corrections to restore the accuracy of the EPEAT Registry during the Corrective Action Phase. These activities may include providing additional evidence to demonstrate conformance with the criterion or unselecting the criteria in the EPEAT Registry. Where the product was found nonconformant and is no longer available in the marketplace, the product must be archived.

During the Corrective Action Phase, Participating Manufacturers must also develop Corrective Action Plans for other EPEAT-registered products that may be affected by the same underlying issue causing the nonconformance but were not the subject of investigation (called "similarly affected products").

The following actions were taken to restore accuracy to the EPEAT Registry as a result of Continuous Monitoring Round CD-2022-03:

- **3** investigations — Additional data provided by Participating Manufacturers, bringing the products into conformance with the Criterion
- **1** investigation — Criterion unselected by the CAB or by the EPEAT Program
- **1** investigation — Product archived by the CAB or by the EPEAT Program
- **19** investigations — CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance

Table 3 in Section 7 identifies the Participating Manufacturers and products that received nonconformances in Continuous Monitoring Round CD-2022-03.

6.0 Key Findings

6.1 Required Information in Test Reports

All laboratory reports, including those from internal laboratories and accredited third-party laboratories must contain the following information: laboratory name and location; date testing; identification of product, component or material evaluated; test method(s) used and if applicable, detection limits; evaluation results;

sign off from an appropriate party at the laboratory; and if applicable, identification of relevant laboratory accreditations.

6.2 Criterion 4.1.5.1—Reduction of bromine and chlorine content in plastic parts > 25 g

Criterion 4.1.5.1 excludes printed circuit boards, cables and wiring, fans, and electronic components. Optical components are not excluded by the criterion and are in scope.

6.3 Conformance with all Elements of a Conformance Assurance Process

A conformance assurance process is defined as:

Process used by the manufacturer to manage compliance of the product to a restricted substance requirement. The process includes:

a) A description of how suppliers, materials, parts, and/or subassemblies risk factors are evaluated and allocated.
b) The utilization of risk rating (or high-risk status) to determine what evidence is required for suppliers, materials, parts, and/or subassemblies, as determined to be applicable by the manufacturer.
c) The collection and evaluation of the evidence determined necessary for applicability, quality and accuracy, and associated action taken for a negative result.
d) A procedure to refresh the evidence as appropriate based on the manufacturer's evaluation of risk.

Participating Manufacturers are reminded to provide evidence for all four elements of a CAP.

6.4 Criterion 4.6.3.1—Conformity Against all Elements of a Criterion

Criterion 4.6.3.1 has multiple elements against which conformance must be shown, including verification requirement d), which applies to the following programs operated by the manufacturer (or their contractual agent):

- Management of leased products where the manufacturer (or their contractual agent) retains legal ownership.
- Trade-in/exchange programs where the customer surrenders the product to the manufacturer (or their contractual agent) in return for compensation or replacement product.
- Product servicing and/or warranty programs, operated by the manufacturer, or their contractual agent, where a product (or similar product) is returned to a customer.

7.0 Identification of Nonconformances and Corrections Made by Participating Manufacturers

In the interest of transparency, the EPEAT Program identifies the Participating Manufacturers and products that received nonconformances and the actions taken to restore accuracy of the EPEAT Registry. Minor errors are generally clerical in nature and do not materially affect the validity of products in the EPEAT Registry. As such, these are not identified in the table below.

Table 3: Summary of Nonconformances and Corrections Made by Participating Manufacturers

Participating Manufacturer	Product	Product Type	Country	Criterion Number	Criterion Title	Required or Optional	Underlying Reason for Nonconformance	Corrective Action Taken
Ace Computers	Ace Vision X4B560STM	Desktop	United States	4.7.1.1	Elimination of intentionally added heavy metals in packaging	Required	Insufficient evidence to demonstrate conformance	Participating Manufacturer provided evidence demonstrating conformance
Positivo Tecnologia S.A.	MASTER C6300 MINIPRO	Desktop	Brazil	4.9.2.1	Corporate environmental performance reporting by manufacturer	Required	Demonstrated nonconformance	Participating Manufacturer provided evidence demonstrating conformance
ASUSTeK Computer Inc.	ASUS B3302FE(Series:B5302FE)	Notebook	India	4.8.2.2	Greenhouse gas emissions from product transport	Optional	Demonstrated nonconformance	EPEAT unselected the Criterion
BenQ	BL2780 (GW2780-T)	Monitor	United States	4.6.3.1	End-of-life processing	Required	Insufficient evidence to demonstrate conformance	EPEAT archived all products
Acer	B277	Monitor	United States	4.1.10.2	Reduce fluorinated greenhouse gas emissions from semiconductor production	Optional	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Acer	Veriton Z4870G	Integrated Desktop Computer	Italy	4.5.1.2	Lowest power mode limit	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Acer	VS4680G	Desktop	Taiwan	4.1.5.1	Reduction of bromine and chlorine content in plastic parts >25 g	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Apple	Apple 24-inch iMac	Integrated Desktop Computer	Canada	4.5.1.4	Energy efficiency for external power supplies exceeding International External Power Supply Efficiency Level VI	Optional	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Apple	Apple iPad mini Wi-Fi + Cellular	Tablet / Slate	United States	4.1.4.1	Restriction of the use of beryllium	Optional	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Google	Google Pixelbook Go Model G021A	Notebook	United States	4.1.10.1	Reduce fluorinated gas emissions from flat panel display manufacturing	Optional	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Google	Google Pixelbook Go Model G021A	Notebook	United States	4.1.7.1	Compliance with provisions of EU Battery Directive	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance

Lenovo	ThinkCentre M80q (CTO EPEAT Gold Model)	Desktop	Canada	4.9.1.1	Third party certified environmental management system (EMS) for design and manufacturing organizations	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Lenovo	ThinkStation P340 SFF	Workstation	United States	4.1.9.1	IEC 62474 declarable substances	Optional	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Lenovo	ThinkVision T23i-20	Monitor	Canada	4.1.1.1	Conformance with European Union RoHS Directive substance restrictions	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Microsoft	Surface Go 2 (model 1901, 1926, 1927)	Tablet / slate	Sweden	4.6.3.1	End-of-life processing	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Microsoft	Surface Laptop Go (model 1943)	Notebook	Croatia	4.9.3.1	Energy management system/energy performance improvement - manufacturers	Optional	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Microsoft	Surface Pro X (model 1876, 2010)	Tablet / slate	Latvia	4.9.1.1	Third party certified environmental management system (EMS) for design and manufacturing organizations	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Panasonic	TOUGHBOOK 33	Notebook	United States	4.5.1.2	Lowest power mode limit	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Panasonic	TOUGHBOOK A3	Tablet / slate	United States	4.1.5.1	Reduction of bromine and chlorine content in plastic parts >25 g	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Panasonic	TOUGHPAD M1	Tablet / slate	United States	4.6.3.1	End-of-life processing	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Samsung	F24T454GY*	Monitor	Australia	4.7.1.1	Elimination of intentionally added heavy metals in packaging	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Samsung	S22E450D	Monitor	United Kingdom	4.6.2.1	Provision of a removable rechargeable battery take-back program	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
Samsung	S24A608NWN	Monitor	Switzerland	4.5.1.1	Conformance to current ENERGY STAR® program requirements	Required	CAB inaction or delay not attributable to the Participating Manufacturer	CAB reviewed evidence originally submitted by Participating Manufacturers, which demonstrated conformance
IGEL Technology GmbH	UD3 M350C	Thin Client	United States	4.5.1.4	Energy efficiency for external power supplies exceeding International External Power Supply Efficiency Level VI	Optional	No documentation provided	Participating Manufacturer unselected the Criterion

Document Control and Change History						
Issue	***Revision***	***Owner***	***Approver***	***Description***	***Approval Date***	***Effective Date***
1	*0*	*EPEAT Conformity Assurance Manager*	*Director, EPEAT Program*	*Initial release*		
1	*1*	*EPEAT Conformity Assurance Manager*	*Director, EPEAT Program*		*2018 Dec 11*	*2018 Dec 11*
2	*0*	*Senior Manager, Ecolabels and Resources*	*Senior Director, Ecolabels and Manufacturer Resources*	*Reformatting of document. Addition of standardized text.*	*2021 Mar 25*	*2021 Mar 30*
2	*1*	*Senior Manager, Ecolabels and Resources*	*Vice President, Ecolabels and Manufacturer Resources*	*Updated terminology for nonconformances to include "nonconformances" and "minor errors", in alignment with revisions to P66.*	*2022 Sep 15*	*2022 Sep 30*
2	*2*	*Senior Manager, Ecolabels and Resources*	*Vice President, Ecolabels and Manufacturer Resources*	*Updated to reflect new nonconformance category for CAB inaction or delay*	*2023 Mar 9*	*2022 Mar 13*