



**Government of Ontario IT Standard (GO-ITS)**

**GO-ITS Number 90**

**Acquisition of Electronic Equipment**

**Version #: 1.0**

**Status: Approved**

Prepared for the Information Technology Standards Council (ITSC) under the delegated authority of the Management Board of Cabinet

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## 1. Foreword

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Government of Ontario Information Technology Standards (GO-ITS) are the official publications on the guidelines, preferred practices, standards and technical reports adopted by the Information Technology Standards Council (ITSC) under delegated authority of the Management Board of Cabinet (MBC). These publications support the responsibilities of the Ministry of Government Services (MGS) for coordinating standardization of Information & Information Technology (I&IT) in the Government of Ontario. Publications that set new or revised standards provide enterprise architecture guidance, policy guidance and administrative information for their implementation. In particular, GO-ITS describe where the application of a standard is mandatory and specify any qualifications governing the implementation of standards.

## 2. Introduction

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### 2.1. Background

*Ontario's Action Plan (Go Green)* on climate change sets ambitious and realistic targets to produce real reductions in greenhouse gases to help Canada address climate change and establish a green, competitive economy.

The *Beyond e-Ontario: Strategic Plan 2009-2014* outlines the top priorities of *Ontario's Five Year Corporate I&IT Plan*. Among the top priorities listed in the strategic plan, there is a focus on providing “more reliable, cost effective IT solutions” through the “increased reliability & cost effectiveness of technology solutions and services”. One of the major strategies for achieving this is to “develop and implement a Green Ontario I&IT strategy” that includes:

1. Implementing a Green I&IT strategy to support a Green Ontario.
2. Using I&IT to reduce the paper burden on small business

Members of the *Information Technology Executive Leadership Council (ITELC)* identified suitable Key Performance Indicators (KPIs) and Green Champions for the above listed strategies to help define and measure Ontario's progress towards reaching its I&IT environmental goals including:

1. All IT hardware to meet I&IT equipment Energy Star standard, and be disposed in an ecological manner.
2. Complete an energy audit of all Ontario Public Service (OPS) IT equipment by 2009, and implement an energy reduction plan by 2014.

The *Climate Change Secretariat*, *OPS Green Office* and the *Greenhouse Gas (GHG) Initiative* project are working together to reduce energy consumption, foster conservation efforts and address climate change. The *OPS Green Office* is coordinating many exciting initiatives involved in “greening” the OPS including the development and implementation of a *Green I&IT Strategy* with actionable and measurable results. The current action plan supports the KPIs and strategies underpinning the *Beyond e-Ontario Strategic Plan* and focuses on four pillars:

1. Procuring Green I&IT Products
  - (a) I&IT products purchased will use less energy and avoid more carbon emissions. In addition, new Green certification standards recognize efforts by manufacturers to reduce the environmental impact of their I&IT products.
2. Running Green Data Centres and Equipment
  - (a) An opportunity exists to Green our data centres and the I&IT equipment used on a daily basis. The new data centre planned in Guelph, and the introduction of multifunctional devices and power-down software will assist in reducing energy consumption.
3. Supporting Green Work Practices
  - (a) A reduction in the amount of travel and carbon emissions from airplanes and automobiles can be accomplished through the use of videoconferencing, telecommuting, and increased broadband access.
4. Ensuring Green Disposal of I&IT Equipment

## 2.2. Purpose

The main purpose of this GO-ITS document is to foster a sustainable *Green Computing* environment within the OPS by helping clusters and ministries reduce GHG emissions associated with Information Technology.

This GO-ITS document mandates a set of certifiable directives, eco-labels and standards that will position the OPS to acquire energy efficient and environmentally friendly IT hardware through the establishment and management of government-wide Vendor of Record (VOR) arrangements.

The proper implementation, monitoring and reporting of energy efficient and environmentally friendly IT hardware including the e-waste management of electronic equipment will result in energy and cost savings and proactively enable the OPS to meet the requirements of future energy and waste audits.

## 2.3. Scope

### 2.3.1. In Scope

Adoption of industry directives, eco-labels and standards are included in this GO-ITS document to help address the following environmental issues:

- (a) **GO-ITS 90:** Power consumption of Electronic Equipment that increases GHG emissions (i.e., energy efficiency standards)
- (b) **GO-ITS 90:** Hazardous chemicals & toxins that pose environmental and health risks (i.e., hazardous materials restrictions)
- (c) **GO-ITS 90:** Electronic waste in landfill sites and water supplies that increase pollution (i.e., hazardous materials restrictions)

The types of equipment covered by industry standards in this GO-ITS include desktops, integrated desktop computers, monitors, notebooks, workstations, multifunctional devices, printers, copiers, faxes and mailing machines.

### 2.3.2. Out of Scope

Adoption of industry directives and standards to be included in other GO-ITS documents to help address the following issues:

- (a) **GO-ITS 91:** E-waste policies, processes & procedures for electrical and electronic equipment
- (b) **GO-ITS 92:** Configuration standards for Multi Function Devices (MFDs) and Power Management
- (c) **GO-ITS 93:** Power consumption of Electronic Equipment that increases GHG emissions and Computer Servers to support Green Data Centre initiatives (i.e., power management)
- (d) **GO-ITS 94:** Extended Life, Re-use and Recycling of electrical and electronic equipment
- (e) **GO-ITS 95 & 96:** Green policies, processes & procedures for Buildings, Telecommuting & Procurement

All other equipment not specified as “In Scope” including Enterprise Servers and other devices such as disk arrays, tape libraries, etc. are not covered by industry standards in this GO-ITS.

## 2.4. Applicability Statements

### 2.4.1. Organization

Government of Ontario IT Standards and Enterprise Solutions and Services apply (are mandatory) for use by all ministries/clusters and to all former Schedule I and IV provincial government agencies under their present classification (Advisory, Regulatory, Adjudicative, Operational Service, Operational Enterprise, Trust or Crown Foundation) according to the current agency classification system.

Additionally, this applies to any other new or existing agencies designated by Management Board of Cabinet as being subject to such publications, i.e. the GO-ITS publications and enterprise solutions and services - and particularly applies to Advisory, Regulatory, and Adjudicative Agencies (see also procurement link, OPS paragraph). Further included is any agency which, under the terms of its Memorandum of Understanding with its responsible Minister, is required to satisfy the mandatory requirements set out in any of the Management Board of Cabinet Directives (cf. Operational Service, Operational Enterprise, Trust, or Crown Foundation Agencies).

As new GO-IT standards are approved, they are deemed mandatory on a go-forward basis (Go-forward basis means at the next available project development or procurement opportunity).

When implementing or adopting any Government of Ontario IT standards or IT standards updates, ministries and I&IT Cluster must follow their organization's pre-approved policies and practices for ensuring that adequate change control, change management and risk mitigation mechanisms are in place and employed.

For the purposes of this document, any reference to ministries or the Government includes applicable agencies.

### 2.4.2. IT Hardware Deployments

The following GO-ITS apply (are **mandatory**) to IT hardware deployed within or operated on behalf of the Government of Ontario within the scope of the EPEAT and EcoLogo categories listed in Section 3 of this GO-ITS document:

- (a) Environmentally friendly disposal **must** be implemented according to the requirements specified by *GO-ITS 91.0 – Disposal of Electronic Equipment*.
- (b) Device settings governing the use of multifunction devices **must** be implemented according to the requirements specified by *GO-ITS 92.0 – Multifunctional Devices*.
- (c) Power management **must** be implemented according to the requirements specified by *GO-ITS 93.0 – Power Management for Electronic Equipment*.

## 2.5. Requirements Levels

Within this document, certain wording conventions are followed. There are precise requirements and obligations associated with the following terms:

<b>Must</b>	This word, or the terms "REQUIRED" or "SHALL", means that the statement is an absolute requirement.
<b>Should</b>	This word, or the adjective "RECOMMENDED", means that there may exist valid reasons in particular circumstances to ignore the recommendation, but the full implications (e.g., business functionality, security, cost) must be understood and carefully weighed before

## 2.6. Contact Information

### 2.6.1. Roles and Responsibilities

Provide the following information:

#### Accountable Role Definition

The individual ultimately accountable for the process of developing this standard. There must be exactly one accountable role identified. The accountable person also signs off as the initial approver of the proposed standard before it is submitted for formal approval to ITSC and ARB. (Note: in the OPS this role is at a CIO/Chief or other senior executive level)

#### Accountable Role:

Ministry/Cluster: Government Services

Division: OPS Green Office

Job Title: Assistant Deputy Minister

Name: Neil Sentance

Phone: 416-327-3536

E-mail: [neil.sentance@ontario.ca](mailto:neil.sentance@ontario.ca)

#### Responsible Role Definition

The organization responsible for the development of this standard, There may be more than one responsible organization identified if it is a partnership/joint effort. (Note: the responsible organization provides the resource(s) to develop the standard)

#### Responsible Role:

Ministry/Cluster: Government Services

Division: OPS Green Office

Job Title: Director, Strategy

Name: Ruth Bayne

Phone: 416-327-7644

Email: [ruth.bayne@ontario.ca](mailto:ruth.bayne@ontario.ca)

#### Support Role Definition

The support role is the resource(s) to whom the responsibility for actually completing the work and developing the standard has been assigned. There may be more than one support role identified. If there is more than one support role identified, the following contact information must be provided for each of them. If there is more than one support role, the first role identified should be that of the editor – the resource responsible for coordinating the overall effort.

#### Support Role (Editor):

Ministry/Cluster: Government Services

Division: Office of the Corporate Chief Technology Officer

Branch: Technology Adoption

Job Title: Technical Standards Coordinator

Name: Brian Bisailon

Phone: 416-212-0940

Email: [brian.bisailon@ontario.ca](mailto:brian.bisailon@ontario.ca)

*The above individual will be contacted by the OPS Green Office once a year as required, to discuss and determine potential changes and/or updates to the standard (including version upgrades and/or whether the standard is still relevant and current).*

#### Consulted

Please indicate who was consulted as part of the development of this standard. Include individuals (by role and organization) and committees, councils and/or working groups.

(Note: consulted means those whose opinions are sought, generally characterized by two-way communications such as workshops):

<b>Consulted Organizational Areas</b>	<b>Date</b>
<b>Executives</b>	
Chief Technology Officer (CTO) – Green IT Standards Framework	2008-12-09
<b>Ministry of Government Services</b>	
Office of the Corporate Chief Technology Officer (OCCTO) – Technical Lead	2008-12-09
Infrastructure Technology Services (ITS) – DMSP Procurement	2009-04-22
OPS Green Office – Green Strategy	2009-04-15

### **Informed**

Please indicate who was informed during the development of this standard. Include individuals (by role and organization) and committees, councils and/or working groups.

(Note: informed means those who are kept up-to-date on progress, generally characterized by one-way communication such as presentations):

<b>Informed Organizational Areas</b>	<b>Date</b>
<b>Executives</b>	
Chief Information Officers (CIO) – Progress of Green Strategy	2009-05-15
<b>Ministry of Government Services</b>	
Infrastructure Technology Services (ITS) – DMSP Procurement	2009-04-22
Infrastructure Technology Services (ITS) – Infrastructure Support	2009-05-05
OPS Green Office – Green Strategy	2009-04-15
Office of the Corporate Chief Strategist (OCCS) – I&IT Strategy Policy & Planning	2008-12-09
Supply Chain Management (SCM) – IT Procurement	2009-04-24

## 2.7. Recommended Versioning and/or Change Management

Changes (i.e. all revisions, updates, versioning) to the standard require authorization from the “responsible” organization.

Once a determination has been made by the responsible organization to proceed with changes, the Standards Section, Technology Adoption Branch, OCCTO, will coordinate and provide assistance with respect to the approvals process.

The approval process for changes to standards will be determined based on the degree and impact of the change. The degree and impact of changes fall into one of two categories:

**Minor changes** - requiring communication to stakeholders. No presentations required. No ITSC or ARB approvals required. Changes are noted in the “Document History” section of the standard;

**Major changes** - requiring a presentation to ITSC for approval and ARB for approval (Note: ARB reserves the right to delegate their approval to ITSC)

Below are guidelines for differentiating between minor and major changes:

### Major:

- represents a major version change to one or more specifications
- impacts procurement
- requires configuration changes to current solutions
- impacts other standards
- responds to legislative, policy or procurement changes

### Minor:

- represents incremental version changes to one or more specifications
- does not impact procurement (other than informational)
- does not require configuration changes to current solutions
- does not impact other standards
- is not related to legislative, policy, or procurement changes

## 2.8. Publication Details

All approved Government of Ontario IT Standards (GO-ITS) are published on the ITSC Intranet web site. Please indicate with a checkmark below if this standard is also to be published on the public, GO-ITS Internet Site.

Standard to be published on both the OPS Intranet and the GO-ITS Internet web site (available to the public, vendors etc.)	<input checked="" type="checkbox"/>
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## 2.9. Compliance Reporting Templates

Compliance reports will help clusters and ministries to establish baselines, track Green IT hardware acquisitions, and show progress towards compliance with OPS Green policies and standards.

The compliance reporting templates below **should** be used by *all clusters and ministries* to report the status of Green I&IT improvement on an ongoing basis. *All clusters/ministries should* clearly identify the individual(s) *responsible for submitting compliance reports* including the individual(s) that will *certify the accuracy of the information* contained in those reports.

The individual(s) responsible for submitting compliance reports after the accuracy of the information contained in those reports has been certified **must** submit reports to the OPS Green Office.

<b><u>Green Desktop Technologies</u></b>				
<b>EPEAT Compliance</b>				
<b>Product Type/Class</b>	<b>Level of Compliance</b>	<b>Date of Inception</b>	<b>Quantity (Compliant)</b>	<b>Quantity (Non-Compliant)</b>
<b>Standard Desktop</b>	e.g., EPEAT Gold	e.g., 2009-06-03	e.g., 96	e.g., 59
<b>Performance Desktop</b>	e.g., EPEAT Silver	e.g., 2009-06-03	e.g., 59	e.g., 15
<b>Power Desktop</b>	e.g., EPEAT Bronze	e.g., 2009-06-03	e.g., 15	e.g., 5
<b>Standard Notebook</b>				
<b>Lightweight Notebook</b>				
<b>Performance Notebook</b>				
<b>Tablet PC Notebook</b>				
<b>Semi-Rugged Notebook</b>				
<b>Rugged Notebook</b>				
<b>19" Widescreen Monitor</b>				
<b>22" Widescreen Monitor</b>				
<b>24" Widescreen Monitor</b>				
<b>Integrated Desktop Computer</b>				
<b>Workstation</b>				

### Green Print Imaging Technologies

#### EcoLogo Compliance

Product Type/Class	Level of Compliance	Date of Inception	Quantity (Compliant)	Quantity (Non-Compliant)
<b>Multifunctional Device</b>	e.g., Compliant	2009-06-03	e.g., 65	e.g., 65
<b>Printer</b>	e.g., Non-Compliant	2009-06-03	e.g., 22	e.g., 22
<b>Copier</b>				
<b>Fax</b>				
<b>Mailing Machine</b>				

### 3. Technical Specification

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#### 3.1. Acquisition Requirements

Acquisitions of certain categories of IT hardware within or on behalf of the Government of Ontario by way of Requests for Proposals (RFPs) in the Government of Ontario **must** comply with the following requirements before manufacturers can become qualified VORs:

##### 3.1.1. Acquisition of EPEAT Registered Electronic Equipment

All organizations **must** procure:

- (a) Registered *desktop, integrated desktop computer, monitor, notebook and workstation* IT hardware chosen from the rapidly growing EPEAT registry that complies with the *EPEAT Gold Tier* (manufacturers that meet all 23 required criteria plus at least 75% of the optional criteria specified in *IEEE Standard 1680 – Section 4 – Environmental Performance Criteria*).
- (b) IT hardware that complies with *ENERGY STAR Version 4.0 Computer Specification* for the above-mentioned EPEAT categories.

All EPEAT registered IT hardware **must** transition to *ENERGY STAR 5.0 Computer Specification* according to the **six month grace period** in addition to the **Energy Star transition period** specified by the IEEE 1680 required criterion.

Note: At the time of writing, the IEEE 1680 standard is in the process of being revised to remove the **six month grace period** in EPEAT. Therefore, only the Energy Star transition period would apply for EPEAT registered products. This may necessitate a future amendment to this GO-ITS document.

- (c) IT hardware that complies with *Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)* for the above-mentioned EPEAT categories.

##### 3.1.2. Acquisition of EcoLogo Certified Electronic Equipment

All organizations **should** procure:

- (a) **Certified multifunctional device, printer, copier, fax and mailing machine** IT hardware chosen from the EcoLogo Program site that complies with the CCD-035-NEW: Office Machines standard (certification criteria for office machines) effective **March 1, 2009** and replaces the previous criteria documents, CCD-035 (photocopiers), CCD-036 (facsimile machines) and CCD-037 (laser printers).
- (b) IT hardware that complies with the *ENERGY STAR Program Requirements for Imaging Equipment Version 1.0* for the above-mentioned EcoLogo categories.

Tier I shall commence on **April 1, 2007**. Tier I applies to all products described in Section 2 of this specification.

Tier II shall commence on **April 1, 2009**. Tier II will apply to the maximum TEC levels for all TEC products, as well as to Standby levels for Large-format OM products and mailing machines. In addition, the definitions, products addressed, the manner in which they are

addressed, and levels included for all products under the Version 1.0 specification may be reconsidered. EPA will inform stakeholders of plans to make such changes at most **six months following the effective date of Tier I.**

Tier I of the Version 1.0 specification becomes effective for digital duplicators **upon finalization of the agreement between the European Commission and the US EPA.**

- (c) IT hardware that complies with *Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)* for the above-mentioned EcoLogo categories.

## 4. Related Standards

### 4.1. Impacts to Existing Standards

Identify any Standards that reference or are referenced by this Standard and describe the impact.

GO-IT Standard	Impact	Recommended Action
GO-ITS 90.1 Acquisition of Electronic Equipment – Enterprise Servers	<p>Feedback suggests that a separate GO-ITS 90.1 standard should be developed to address idle power requirements for OPS enterprise servers since this topic is out of scope for GO-ITS 90.</p> <p>The United States Environmental Protection Agency (EPA) has developed Draft 4 Energy Star Version 1.0 Computer Server specification to address power requirements for servers with greater than two sockets (&gt;2S). The EPA intends to include requirements for Blade Servers to ensure the goal of broad market coverage.</p>	<p>Draft 4 Energy Star Version 1.0 Computer Server specification proposes the tier 1 effective date of <b>May 1, 2009</b> and the proposed tier 2 effective date of <b>October 1, 2010</b>.</p> <p>It is highly recommended that the Government of Ontario consider adding support for this standard to the GO-ITS 90 series to ensure that OPS enterprise servers are energy efficient and support current &amp; future Green data centre initiatives.</p>

### 4.2. Impacts to Existing Environment

Impacted Infrastructure	Impact	Recommended Action
Desktops, integrated desktop computers, monitors, notebooks and workstations.	IT hardware <b>must</b> conform to EPEAT Gold (IEEE Standard 1680) criteria available at the EPEAT registry site on the Internet.	EPEAT Gold is <b>mandatory</b> for product categories listed under Impacted Infrastructure.
Multifunctional devices, printers, copiers, faxes and mailing machines.	IT hardware <b>should</b> conform to EcoLogo criteria available at the EcoLogo Program site on the Internet.	EcoLogo is <b>optional</b> for product categories listed under Impacted Infrastructure.
Electrical and electronic equipment.	IT hardware <b>must</b> conform to the Energy Star Computer Specification and <b>should</b> conform to the Program Requirements for Imaging Equipment available at the	Energy Star Computer Specification is <b>mandatory</b> for EPEAT product categories.  Energy Star Program Requirements for Imaging

	<p>Energy Star site on the Internet.</p> <p>IT hardware <b>must</b> conform to RoHS available at the European Union site on the Internet within the scope of EPEAT and <b>should</b> conform to RoHS within the scope of EcoLogo.</p>	<p>Equipment is optional for EcoLogo product categories.</p> <p>RoHS is <b>mandatory</b> for EPEAT and <b>optional</b> for EcoLogo product categories.</p>
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## 5. Appendices

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### 5.1. Mandatory Technical Standards and Specifications

#### 5.1.1. EPEAT Gold Tier of Environmental Performance

<b>Title</b>	IEEE Standard 1680 – Section 4 – Environmental performance criteria for desktop personal computers, notebook personal computers and personal computer monitors
<b>Description</b>	Standard for Environmental Assessment of Personal Computer Products, Including Laptop & Desktop Computers & Monitors
<b>Version</b>	1680-2006
<b>Sponsor</b>	IEEE
<b>Resources</b>	The Detailed Criteria List includes 51 total environmental criteria available at: <a href="http://www.epeat.net/Docs/Summary%20of%20EPEAT%20Criteria.pdf">http://www.epeat.net/Docs/Summary%20of%20EPEAT%20Criteria.pdf</a> .  The Criteria Reference Documents and Links that are included in IEEE 1680 and are essential for conformance with the Standard are available at: <a href="http://www.epeat.net/References.aspx">http://www.epeat.net/References.aspx</a> .
<b>Applicability</b>	Section 4 of IEEE Standard 1680 paraphrases the environmental criteria included in IEEE standard 1680 and provides the foundation for the EPEAT program. It summarizes the content of the standard but does not provide all the information needed by a manufacturer to assess or declare a product's conformance with the Standard. Copies of the full IEEE 1680 standard must be purchased by a manufacturer from IEEE. To purchase a copy of IEEE 1680 visit < <a href="http://shop.ieee.org/ieeestore">http://shop.ieee.org/ieeestore</a> >. Simply search for 1680. Required criteria have the criteria number in bold for ease of reference.
<b>Qualification</b>	As mentioned earlier in section 7 of this document, EPEAT Gold requires manufacturers to meet all 23 required criteria plus at least 75% of the optional criteria in order to qualify for registration. For information on how to qualify, see <a href="http://www.epeat.net/Criteria.aspx">http://www.epeat.net/Criteria.aspx</a> that includes information on Criteria, Standard Interpretations and Clarifications, Additional Resources and a printer-friendly web-based version of the EPEAT Criteria.

#### 5.1.2. Energy Star 4.0 and 5.0 Computer Specifications

<b>Title</b>	ENERGY STAR Program Requirements for Computers
<b>Description</b>	Energy Efficiency, Performance, Power Management Criteria and Testing Procedures
<b>Version</b>	4.0 (Current); 5.0 (Effective July 1, 2009)
<b>Sponsor</b>	U.S. Environmental Protection Agency (EPA), ENERGY STAR Program
<b>Resources</b>	Download the latest version of the ENERGY STAR Computer Specification at: <a href="http://www.energystar.gov/index.cfm?c=revisions.computer_spec">http://www.energystar.gov/index.cfm?c=revisions.computer_spec</a> .
<b>Applicability</b>	Current ENERGY STAR Eligibility Criteria define the performance criteria that must be met for use of the ENERGY STAR certification mark on computers and specifying the

testing criteria for computers. ENERGY STAR Identity Guidelines describe how the ENERGY STAR marks and name may be used.

**Compliance** EPA may, at its discretion, conduct tests on products that are referred to as ENERGY STAR qualified. These products may be obtained on the open market, or voluntarily supplied by the Partner at EPA's request. The Partner is responsible for adhering to ENERGY STAR Identity Guidelines and for ensuring that its authorized representatives, such as advertising agencies, dealers, and distributors, are also in compliance.

### 5.1.3. Energy Star 1.0 Imaging Equipment Specification

**Title** ENERGY STAR Program Requirements for Imaging Equipment

**Description** Energy Efficiency, Marking Technologies, Operational Modes, Activities and Power States, Product Size Formats, Test Procedures, User Interface

**Version** 1.0 (Current)

**Sponsor** U.S. Environmental Protection Agency (EPA), ENERGY STAR Program

**Resources** Download the latest version of the ENERGY STAR Imaging Equipment Specification at: [http://www.energystar.gov/ia/products/fap/IE\\_Prog\\_Req.pdf](http://www.energystar.gov/ia/products/fap/IE_Prog_Req.pdf).

**Applicability** Current ENERGY STAR Eligibility Criteria defining the performance criteria that must be met for use of the ENERGY STAR certification mark on imaging equipment and specifying the testing criteria for imaging equipment.

**Compliance** EPA may, at its discretion, conduct tests on products that are referred to as ENERGY STAR qualified. These products may be obtained on the open market, or voluntarily supplied by Partner at EPA's request. The Partner is responsible for adhering to these guidelines and for ensuring that its authorized representatives, such as advertising agencies, dealers, and distributors, are also in compliance.

### 5.1.4. RoHS Directive

**Title** DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

**Description** Restricts the use of six hazardous materials in the manufacture of various types of electrical and electronic equipment and is closely linked with WEEE that sets collection, recycling and recovery targets.

**Version** 2002/95/EC

**Sponsor** European Union, European Parliament and of the Council

**Resources** Download the RoHS directive available at the following web site: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:037:0019:0023:EN:PDF>.

**Applicability** WEEE and RoHS must be considered together in setting collection, recycling and recovery targets to avoid human exposure to toxic e-waste.

**Compliance** For more information, please see the European Commission WEEE page: [http://ec.europa.eu/environment/waste/weee/index\\_en.htm](http://ec.europa.eu/environment/waste/weee/index_en.htm).

## 5.2. Optional Technical Standards and Specifications

### 5.2.1. EcoLogo Program Certification Criteria

<b>Title</b>	Office Machines
<b>Description</b>	Office machines are widely used in both office and home working environments and fulfill the basic needs of most offices today. They consume significant quantities of energy and paper, typically contain hazardous metals and flame-retardants, and release emissions in the form of noise and chemical substances, such as ozone, dust and volatile organic compounds. The EcoLogo Program addresses these challenges by establishing strict requirements for hazardous substances, energy and paper savings, and design for extended life, reuse and recycling. The net environmental benefit will be reduced human health impacts, less potential for smog formation and ozone layer depletion, improved use of resources, improved energy efficiency and reduced waste generation.
<b>Version</b>	CCD-035-NEW
<b>Sponsor</b>	EcoLogo
<b>Resources</b>	This newly published/reviewed standard is available at the following web site: <a href="http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=408">http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=408</a> .
<b>Applicability</b>	Note: The certification criteria for office machines (printers, copiers, faxes, multifunctional devices, mailing machines) have been revised. The new criteria document (Office Machines, CCD-035-NEW) becomes effective March 1, 2009, and will replace the previous criteria documents CCD-035 (photocopiers), CCD-036 (facsimile machines), CCD-037 (laser printers). Until the effective date, some clients may still be listed under the original criteria documents, the new document or both. To view the previous criteria documents for CCD-035 (photocopiers), CCD-036 (facsimile machines), CCD-037 (laser printers) please visit the following web site: <a href="http://www.ecologo.org/">http://www.ecologo.org/</a> .
<b>Qualification</b>	For more information on Verification and Conditions for EcoLogo Use, please see the criteria document at: <a href="http://www.ecologo.org/common/assets/criterias/ccd-035officemachines(nov282008).pdf">http://www.ecologo.org/common/assets/criterias/ccd-035officemachines(nov282008).pdf</a> .