

TECHNOLOGY AND ARCHITECTURE STANDARDS

Standard ID:	SY-GRE-001
Title:	Green IT Guideline
Revision Number:	0
Domain:	System Management
Discipline:	Green IT
Effective:	01/13/2023
Reviewed:	01/11/2024
Approved By:	Chief Operating Officer
Sponsor:	Chief Operating Officer

I. Authority, Applicability and Purpose

- A. <u>Authority: Title 29</u> Chapter 90C Delaware Code, §9004C General Powers, duties and functions of DTI "2) Create, implement and enforce statewide and agency technology solutions, policies, standards and guidelines, including as recommended by the Technology Investment Council on an ongoing basis and the CIO"
- **B.** <u>Applicability</u>: Applies to all State of Delaware communications and computing resources. The Department of Technology and Information (DTI) is an Executive Branch Agency and has no authority over the customers in Legislative and Judicial Branches, as well as Local Education Agencies, and other Federal and Local Government entities that use these resources. However, all users, including these entities, must agree to abide by all policies, standards promulgated by DTI as a condition of funding, access and continued use of these resources.
- C. <u>Purpose</u>: This guideline addresses the purchase, use, and disposal of Information and Communication Technology (ICT) in an efficient and effective manner with minimal or no impact on the environment. The goal is to guide State organizations in their efforts to comply with Delaware and Federal mandates and guidelines regarding The Federal Electronics Challenge (FEC).¹ This guideline introduces the concept of establishing and following an <u>Environmental</u> <u>Management System (EMS)</u>.

¹ <u>https://www.epa.gov/fec</u>

These guidelines are adopted by the Department of Technology and Information (DTI), through the Technology and Architecture Standards Committee (TASC), and are applicable to all Information Technology use throughout the State of Delaware. Any questions or comments should be directed to <u>dti tasc@delaware.gov</u>.



DELAWARE STATE-WIDE INFORMATION

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The concept of green information technology (Green IT) applies environmental principles to the world of computer technologies, printers, office equipment, and optical and imaging equipment. Green IT encompasses incorporating fewer pollutants in manufacturing, shipping, using, and disposing of information technology hardware.²

Environmental attributes to look for;

- a. Reduced or no toxic constituents
- b. Recycled-content
- c. Designed for recycling
- d. Reduced materials use
- e. Efficient energy usage
- f. Extended product life, upgradeable
- g. Reduced packaging
- h. Recyclable packaging
- i. Environmentally sound take-back and recycling options.

II. Scope

- A. <u>Areas Covered</u>: All IT areas
- B. Environments: All environments

III. Process

- A. <u>Adoption</u>: These guidelines have been adopted by the Department of Technology and Information (DTI) through the Technology and Architecture Standards Committee (TASC) and are applicable to all Information Technology use throughout the State of Delaware.
- **B.** <u>**Revision:**</u> Technology is constantly evolving; therefore the guidelines will need to be regularly reviewed. It is the intent of the TASC to review this guideline annually. The TASC is open to suggestions and comments from knowledgeable individuals within the state, although we ask that they be channeled through your Information Resource Manager (IRM).
- C. <u>Contractors</u>: Contractors or other third parties are required to comply with these guidelines when proposing technology solutions to DTI or other state entities. Failure to do so could result in rejection by the Delaware Technology Investment Council. For further guidance, or to seek review of a component that is not rated below, contact the TASC at <u>dti_tasc@delaware.gov</u>.

² <u>IEEE Standard for Environmental Assessment of Personal Computer Products, Including Laptop</u> Personal Computers, Desktop Personal Computers, and Personal Computer Monitors

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- **D.** <u>Implementation responsibility</u>: DTI and/or the organization's technical staff will implement these guidelines during the course of normal business activities, including business case review, architectural review, project execution and the design, development, or support of systems.
- E. <u>Enforcement</u>: DTI will enforce these guidelines during the course of normal business activities, including business case and architectural review of proposed projects and during the design, development, or support of systems. These guidelines may also be enforced by others during the course of their normal business activities, including audits and design reviews.
- F. <u>Contact us</u>: Any questions or comments should be directed to <u>dti_tasc@delaware.gov</u>.

IV. Definitions/Declarations

A. Definitions

- 1. Green IT It is reducing energy consumption, reducing waste, and minimizing environmental impacts to the greatest extent practicable.
- 2. End of Life Management A focus on IT asset management strategies, including solutions for addressing e-waste, recycling, and end of life management.
- 3. Sustainability Manager The person within each agency that is responsible for coordinating their agencies activities associated with the Governor's <u>Executive Order</u>.

B. Declarations

- 1. Establish a Green IT charter and manage the organization's environmental IT impact.
 - Measure and report office power consumption as granular as possible. Begin by taking a baseline measurement of power usage, paper usage, equipment purchases and disposal.
 - Purchase in accordance with EPEAT guidelines.
 - o Utilize server and desktop virtualization wherever possible.
 - Ensure that End of Life Management complies with environmental guidelines; excess electronic products must be refurbished for reuse, disposed of through statewide electronic recycling contracts or returned to manufacturers through contract "buyback" provisions for ultimate disposition in a manner that prevents hazardous materials from entering the waste stream.
 - By leveraging current computer chip technology centrally managed PC's are placed in a low power state when not in use.
 - Purchase components with the highest Energy Star ratings when feasible.
 - Discontinue the use of screen savers
 - o Continually educate the staff on Green IT

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- Reduce the consumption of paper, office supplies, and disposable supplies
- Use software agents and schedulers to automate Green IT settings such as enforcing a low-power state (standby), for PCs and monitors after a sustained period of inactivity
- o Utilize Video Conferencing whenever possible
- Institute Asset Life Cycle Management to take advantage of more energy efficient newer technologies
- Implement rack placement and air flow strategies to maximize cooling and other efficiencies in data centers and telecom closets
- Printing:
- Reduce document printing and copying to reduce paper consumption and decrease energy consumption by printers, copiers and fax machines.
- Print on 100% post-consumer recycled content paper.
- Set printer defaults to duplex printing and narrow the default margins on the paper.
 Go here for further information Change the Margins
- Track the amount of printing by IP address
- 2. The <u>sustainability manager</u> will be responsible for working within the organization to bring about compliance with the Green IT Charter.
- 3. The Green IT charter will include the following actions:
 - Implement and maintain an energy management program that seeks to reduce energy consumption and encourage and utilize sustainable energy solutions;
 - Establish, maintain and make available to the organization appropriate policies and procedures that from a technology standpoint, improve efficiency, reduce energy, and reduce waste.
 - Ensure compliance with industry environmental standards as appropriate and applicable to our activities;
 - Assure that employees of the organization receive training and are fully engaged in the departmental goals of improving efficiency, reducing energy consumption and recycling materials;
 - Communicate the management practices and compliance requirements to contractors, vendors, partners and other participants in the organization's Green IT goals;
 - o Consistently review indicators as a basis to improve the Department's performance
 - Submit reports on Green IT initiatives and progress towards goals semi-annually to the State CIO.

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V. Development and Revision History

Date	Revision
1/13/2023	Rev 0 – Initial version based on prior policy

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