



**Preparation Guide**

Edition 201606

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# 1. Overview

EXIN Green IT Citizen (GRITC.EN)

## Summary

Green IT Citizen provides every IT user the means to participate to a greener way of working. In the end a significant number of Green IT users will lead to a contribution towards a better environment, and to cost reductions for companies and individuals.

A Green IT Citizen will become aware of issues as:

- How to reduce energy use
- How to work more efficiently
- How to reduce travel costs
- How to purchase IT components
- How to handle IT waste

The emphasis is on how to apply Green concepts at work and at home.

The Green IT Citizen fits perfectly into existing or newly developed sustainability policies of companies, organizations and governments.

An assessment of 20 questions tests the participants' ability to understand Green IT concepts. Passing the exam leads to a certificate that validates the candidate's awareness and knowledge of a smart and green use of IT.

Companies will be able to demonstrate further Corporate Social Responsibility by showing that they invest in Green IT awareness of their staff.

## Context

The EXIN Green IT Citizen certification is part of the EXIN Green IT qualification program.

## Target Group

Everyone in the organization.

## Requirements for Certification

- Successful completion of the EXIN Green IT Citizen exam.

## Examination Details

Examination type:	Multiple-choice Questions
Number of questions:	20
Pass mark:	65%
Open book/notes:	No
Electronic equipment/aides permitted:	No
Exam duration:	30 minutes

The Rules and Regulations for EXIN's examinations apply to this exam.

## Training

### Contact Hours

The recommended number of contact hours for this training course is 6. This includes group assignments, exam preparation and short breaks. This number of hours does not include lunch breaks, homework and the exam.

### Indication Study Effort

30 hours, depending on existing knowledge.

### Training Organization

You can find a list of our Accredited Training Organizations at [www.exin.com](http://www.exin.com).

## 2. Exam Requirements

The exam requirements are specified in the exam specifications. The following table lists the topics of the module (exam requirements) and the subtopics (exam specifications).

Exam Requirement	Exam Specification	Weight
<b>1. Understanding the World of Green IT</b>		<b>40%</b>
	1.1 Background of Green IT	
	1.2 Drivers for Green IT	
	1.3 Green IT Winnings	
<b>2. Green measures for IT components</b>		<b>40%</b>
	2.1 Green Screens and Computing Machines	
	2.2 Desktop Energy waste reduction	
	2.3 Less-Paper use	
<b>3. Organizational measures on Green IT</b>		<b>20%</b>
	3.1 Greening the facility	
	3.2 e-Waste prevention	
	3.3 Collaboration technologies	
	<b>Total</b>	<b>100%</b>

## Exam Specifications

### 1. Understanding the World of Green IT

#### 1.1 Background of Green IT

The candidate can:

- 1.1.1 Name the Basic Green Concepts
- 1.1.2 Explain why Green fits IT
- 1.1.3 Describe the IT Ecosystem

#### 1.2 Drivers for Green IT

The candidate can:

- 1.2.1 Name business drivers
- 1.2.2 Name environmental drivers
- 1.2.3 Name governmental pressures

#### 1.3 Green IT winnings

The candidate can:

- 1.3.1 Describe the profits from the Green Practice
- 1.3.2 Describe the effects on customers
- 1.3.3 Describe the winnings of efficiency and effectiveness

### 2. Green measures for IT components

#### 2.1 Green screens and computing machines

The candidate can:

- 2.1.1 Name greener ways to purchase computers
- 2.1.2 Recall the way computers consume power
- 2.1.3 Name the most important standards on energy use and environmental performance
- 2.1.4 Recall what makes monitors Green

#### 2.2 Desktop energy waste reduction

The candidate can:

- 2.2.1 Name practices to put on the sleep function
- 2.2.2 Recognize the differences between the use of PCs vs. terminals, stateless clients and thin clients

#### 2.3 Less-paper use

The candidate can:

- 2.3.1 Name Green practices to apply on printers and paper use
- 2.3.2 Name Green practices to apply to printing habits
- 2.3.3 Name practices to switch to digital documents

### 3. Organizational measures on Green IT

#### 3.1 Greening the facility

The candidate can:

- 3.1.1 Name practices to apply to lower the consumption of lighting's energy
- 3.1.2 Name practices to apply to improve the indoor environment
- 3.1.3 Name practices to recycle

#### 3.2 e-Waste prevention

The candidate can:

- 3.2.1 Describe wise buying procedures
- 3.2.2 Describe ways aiming to extend the IT equipment lifecycle
- 3.2.3 Describe recycling procedures

#### 3.3 Collaboration technologies

The candidate can:

- 3.3.1 Name practices to a greener use of email and file transfer
- 3.3.2 Recognize situations when web and video conferencing should be used
- 3.3.3 Name practices of Green document management
- 3.3.4 Describe Green advantages of telecommuting

## 3. List of Basic Concepts

This chapter contains the terms and abbreviations with which candidates should be familiar. The expressions are listed by exam requirement.

Please note that knowledge of these terms alone does not suffice for the exam; the candidate must understand the concepts and be able to provide examples.

### 1. Understanding the World of Green IT

#### 1.1 Background of Green IT

- Environmental responsibility
- Global climate change
- Sustainable development
- Corporate (social) responsibility
- Greening of IT
- Triple bottom line (people, planet, profit)
- Green IT eco system

#### 1.2 Drivers for Green IT

- Green business drivers
- Environmental drivers
  - Carbon emissions
  - E-waste
- Green regulations
  - Cap and trade Legislation
  - Carbon offsets
  - Green washing
- Conserving natural resources

#### 1.3 Green IT Winnings

- Energy savings
- Reduced printing and ink costs
  - Electronics substitutes for paper based processes
  - Two sided printing
  - Recycled paper
- Reduced travel expenses
  - Conference calls
  - Web presentations
  - Telepresence
  - Instant messaging
  - Social networking environments
  - Web collaboration
- Optimized performance
- Enhanced employee attraction and retention
- Greater appeal to customers and business partners
- Green sheen



## 2. Green measures for IT components

### 2.1 Moving to Green Screens and Computing Machines

- Green equipment
  - IEEE 1680 standard
  - EPEAT tool
  - Energy Star rating
- Power supply efficiency
- Power consumption
- LED screens

### 2.2 Desktop Energy reduction

- Power management
  - Sleep mode
  - Standby mode
- Desktop virtualization
- Terminals
- Thin clients
- Portable desktop technology

### 2.3 Less-paper use

- Printer's duty cycle
- Recycling ink cartridges
- Recycling toner cartridges
- Expected cost of operation
- Greener Paper
  - Forest Stewardship Council (FSC)
- Printing habits
  - Duplex printing
  - Printer consolidation
  - Use of digital documents

## 3. Greening the Organization

### 3.1 Greening the facility

- Office lighting
  - Incandescent bulbs
  - Fluorescent bulbs (lighting)
  - LED bulbs (lighting)
  - Green switches
- Indoor environmental quality
  - Indoor air quality
  - Water quality
- Office recycling

### 3.2 e-Waste prevention

- Take-back program
- Green recycler
- Data security and recycling
  - Disk encryption
  - Destroying disk drives
- Extending lifecycles

### 3.3 Collaboration technologies

- Handling e-mail
- Secure/managed file transfer
- Web/video conferencing
- Cloud computing
- Telework

## 4. Literature

### Exam Literature

The knowledge required for the exam is covered in the following literature:

- A** Carol Baroudi, Jeffrey Hill, Arnold Reinhold, Jhana Senxian  
**Green IT for Dummies**  
 Wiley Publishing, Inc.  
 ISBN: 978-0-470-38688-0
  
- B** **The seven sins of Greenwashing**  
 Terrachoice  
[sinsofgreenwashing.org/findings/the-seven-sins/](http://sinsofgreenwashing.org/findings/the-seven-sins/)

### Literature Matrix

Exam specification	Reference
1.1	<b>A:</b> pages 11-18
1.2	<b>A:</b> pages 18-21; 46-48
1.2	<b>B:</b> web page <i>the 7 sins</i>
1.3	<b>A:</b> pages 36-46
2.1	<b>A:</b> pages 219-221 and 224-228
2.2	<b>A:</b> pages 229-241
2.3	<b>A:</b> pages 243-254
3.1	<b>A:</b> pages 275-283
3.2	<b>A:</b> pages: 285-304
3.3	<b>A:</b> pages: 305-318



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