

Green IT Maturity Model Integration (GMMI)



MINISTRY OF
PUBLIC ADMINISTRATION
AND SECURITY



NATIONAL
INFORMATION SOCIETY
AGENCY

Green IT is the key to ensuring low-carbon green growth!

‘Green IT’ is a composite term made up of ‘green’ meaning the environment and ‘information technology (IT)’. It refers to the transition to a low-carbon society by reducing the energy consumption of diverse IT devices and using them in an eco-friendly way.

The shortcut to a green society is to accelerate Green IT

IT is responsible for more than 2% of global CO₂ emissions. In other words, it is equivalent to the total CO₂ emissions of the airline industry. Conversely, IT is also a key solution in the creation of a low-carbon society because IT can help maximize the efficiency of energy use.

Assessing Green IT Maturity is the first step to promoting Green IT

In order to effectively attain the goal of Green IT, we must first accurately assess the current level of green IT maturity and establish improvement strategies. Recently, governmental agencies and firms in developed countries have been trying to assess their current level of green IT maturity.

Background to GMMI

As you are well aware, climate change is the most urgent problem facing mankind, and we must strive to resolve it immediately. IT is the key solution to this problem.

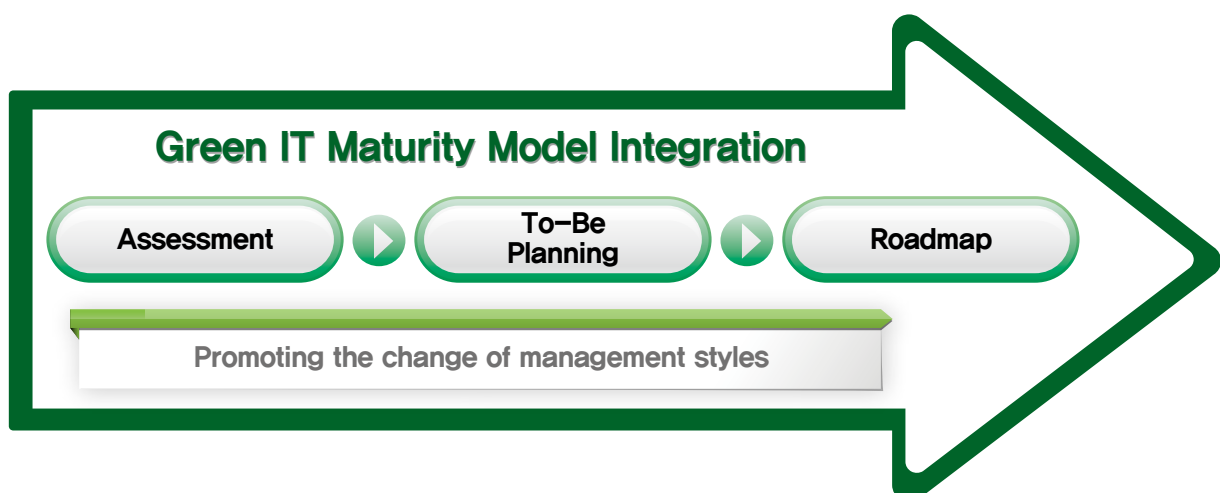
 **GO Green**



Many enterprise executives and policy makers agree that green IT is important for achieving sustainable growth, but only a few truly understand concrete methods of implementation.

Energy Saving	Cost Reduction	Enabled Workforce	Sustainable Growth
			

Based on this understanding, we have developed Green IT Maturity Model Integration (GMMI) to assess the current status of and support for green IT in order to build a roadmap and an effective action plan for the promotion of green IT.



Introduction of GMMI

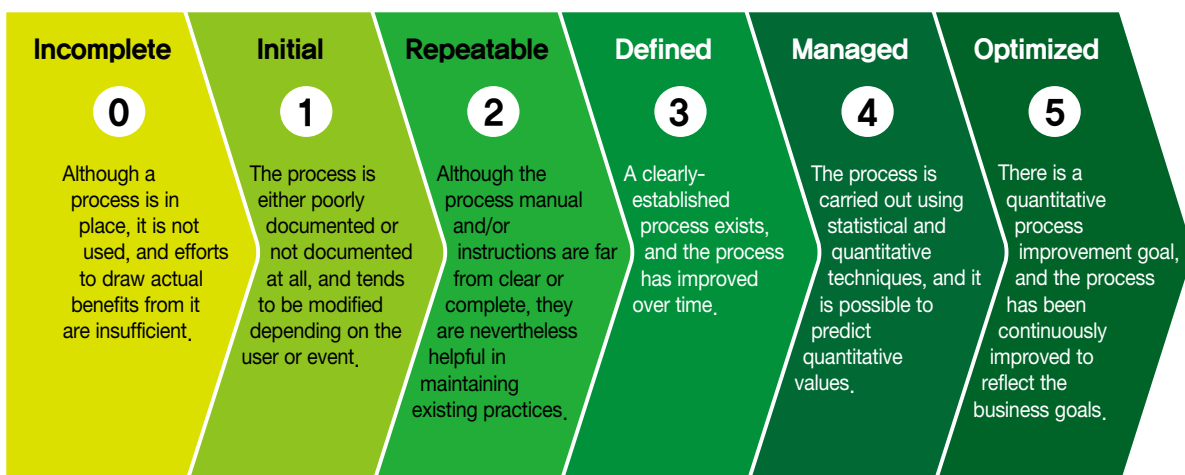
The GMMI consists of five main categories, namely, Leadership, Work Practice, Office Environment, IT Asset Management, and Data Center.

Areas of Assessment and Concept

Area	Concept and Indexing
Leadership	Capabilities and the intention to promote green IT ; it comprises the following factors : vision, strategy, implementation capability, and change management.
Work Practice	Way of performing work including the business process ; it comprises administrative informatization, business innovation, and smart work.
Office Environment	Level of environmental-friendliness of the computing environment and equipment in an office ; it comprises PCs/monitors, printers, OA equipment, and office facilities.
IT Asset Management	Level of environmental-friendliness of information asset purchases and management ; it is composed of purchase operation, reuse, and disposal.
Data Center	Eco-friendliness of the data center or computer room configuration and operation ; it comprises server assets, support infrastructure, and buildings.

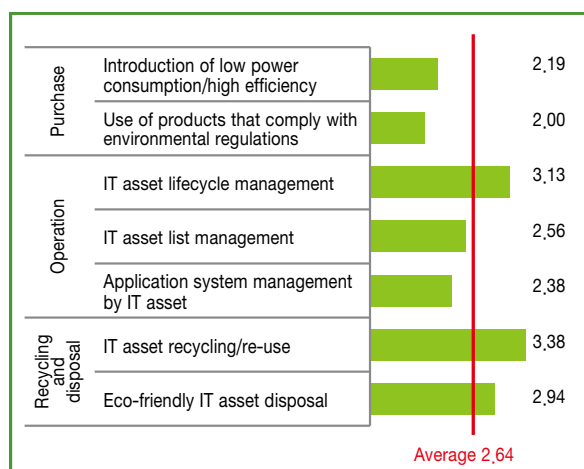
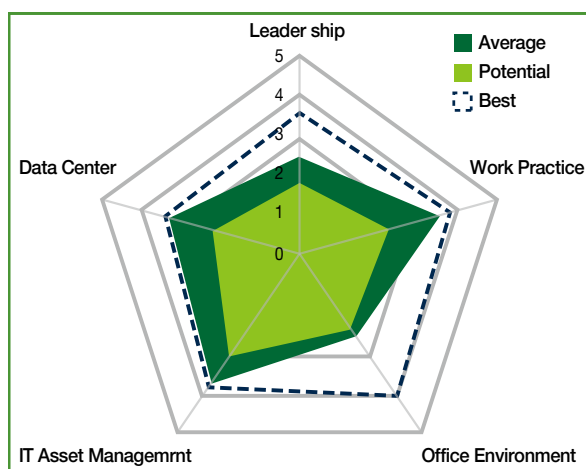
An organization's level of green IT maturity is assessed based on the maturity stage model, which consists of six stages (0 to 5) for each indicator. An indicator-specific weight is applied to calculate the overall score.

Green IT Maturity Stage Model

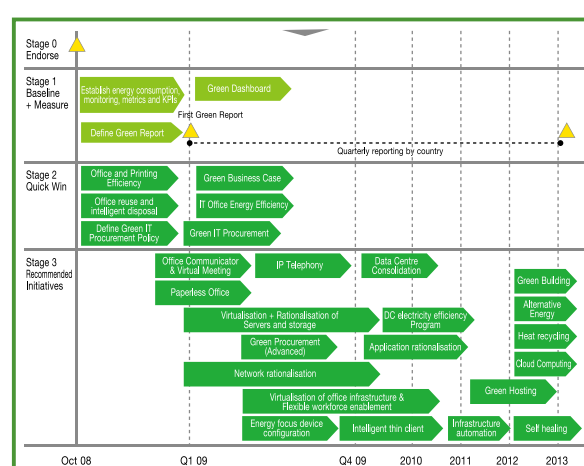


Examples of Practice

Overall & Sector Analysis



Area	Best	Average
GMMI Level	3.69	2.22
Leadership	3.55	1.94
Work Practice	3.85	2.60
Office Environment	4.08	2.20
IT Asset Management	3.70	2.64
Data Center	3.50	2.10



Strategic Recommendations

Area	Recommendations
Leadership	Establishment of the green IT vision and strategy, and promotion of an informatization project that provides high GHG reduction effects.
Work Practice	Business system development for business links with affiliated agencies, and increased business links with the private sector.
Office Environment	Introduction of a PC/monitor power-saving management system and prohibition of the use of screensavers.
IT Asset Management	Establishment of the IT asset lifecycle management system based on power efficiency, by preparing processing in the early days in order to monitor power consumption by IT asset continuously and to replace inefficient equipment quickly.
Data Center	Advancement of the management solution to measure power efficiency of data center periodically, including power consumption by item of equipment, and to improve operation efficiency by item of equipment.

Case Studies of GMMI

Case 1 Private Sector

Assessment of green IT maturity and provision of a consulting service to 50 companies selected from major industries, after developing GMMI version 1.0 in 2010 together with Accenture.

<http://eng.nia.or.kr>



Provision of a free consulting service by opening a website that assesses green IT maturity conveniently.

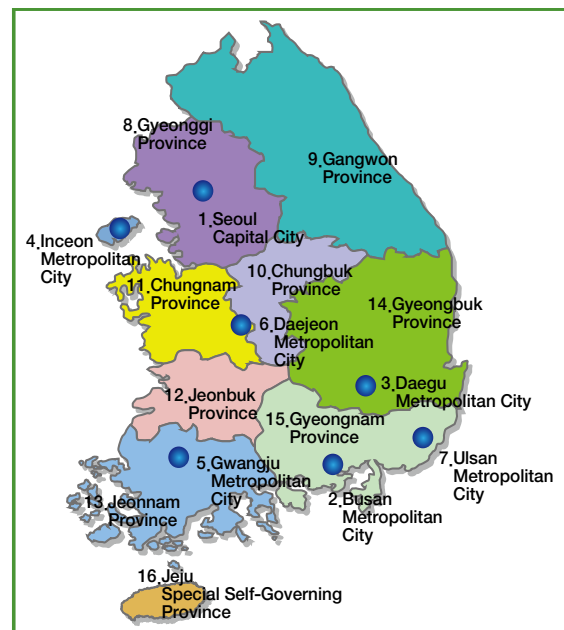
<http://kgmm.or.kr/test/survey.php>



Case 2 Public Sector

Developed GMMI version 2.0 in 2011 independently to assess green IT maturity in the public sector.

Assessed green IT maturity and supported the establishment of improvement policies for 16 metropolitan local governments in conjunction with the green competitiveness evaluation policy for local governments, which was implemented by the Ministry of Public Administration and Security.



Case 3 Global Cooperation

Studied green IT policies and conducted the standardization project jointly with international organizations such as the OECD, APEC TEL, and ITU.

Assessed the green IT maturity of overseas governmental agencies and executed global consulting projects.



Green IT Guidelines



<http://www.nia.or.kr/files/ko/e-catalogue/eng/>

Buy



- Choose eco-friendly IT products
- Check the certificate on energy efficiency
- Check your equipment for the appropriate capacity
- Purchase multifunctional equipment over other options

Use



- Turn off power when not in use
- Make a habit of using the power sleep mode
- Regularly delete unnecessary data from your PCs
- Print in an eco-friendly way
- Clean your IT equipment regularly
- Use online e-government services
- Make your office paperless and implement smart work practices
- Check the amount of CO₂ emissions related to IT devices
- Designate Green IT practitioners

Recycle



- Recycle as many IT devices as possible
- Donate used PCs
- Dispose of devices in an eco-friendly way



Assessing Green IT Maturity is the First Step Towards Creating a Green Society

● ● ● ● **Contact Points** ● ● ● ●

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