

Fujitsu Group's Activities for Green Procurement

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The harmonious coexistence of economic and environmental activities is essential for realizing a sustainable society. For this reason, businesses must advance their environmental activities that result in economic development. Given the RoHS directive and REACH regulation enacted in the EU, as well as worldwide trends toward stricter legislation governing hazardous chemical substances, businesses must also enhance the management of chemical substances included in products throughout the entire gamut of the supply chain. In view of this situation, the Fujitsu Group devised an “Environmental Protection Program (Stage V)” in April 2007 and also initiated the fifth stage of green procurement activities according to this program. Two major goals have been set for these activities: 1) helping suppliers achieve a more sophisticated Environmental Management System (EMS) and 2) helping suppliers establish a Chemical substances Management System (CMS). This paper gives an overall picture and describes the current status of the Fujitsu Group's green procurement activities.

1. Introduction

The Fujitsu Group has been promoting environmental activities under the slogan, “We make every activity green”.¹⁾ To promote these activities, we promote green procurement, which prioritizes the purchase of environmentally-friendly parts, materials and products under tie-ups with suppliers.

In the green procurement activities (Stage IV) (FY2004–FY2006), we placed emphasis on the establishment of an Environment Management System (EMS) in each supplier's organization, with the purpose of promoting a further decrease of environmental burdens. In this stage, the scope of suppliers that could request establishment of EMS was expanded to include those suppliers related to a comprehensive range of procurements, such as those related to software services, equipment and constructions.

In the green procurement activities (Stage V)

(FY2007–FY2009), aiming to reinforce environmental activities of the supply chain as a whole, we have set two major goals for these activities, as shown below.

- 1) Helping suppliers achieve a more sophisticated EMS

In this initiative, suppliers related to product manufacturing are encouraged to obtain a higher level of EMS accreditation to reinforce their activities for reducing environmental burdens.

- 2) Helping suppliers establish a Chemical substances Management System (CMS)

Giving consideration to the global trend of increased stringency of environmental regulations for products, suppliers are being asked to establish CMS including source management. This initiative has the objective of enhancing the management levels of chemical substances included in the products in the supply chain as a whole, from the standpoint of compliance.

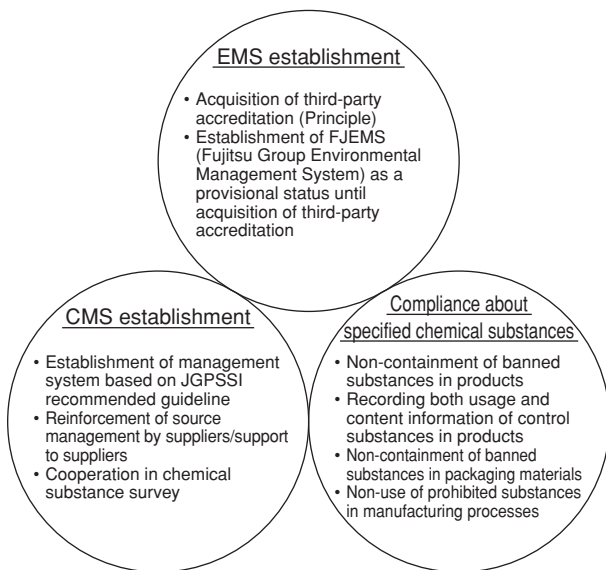


Figure 1
Three main points of Fujitsu Group Green Procurement Direction.

To promote these activities, in May 2007 we issued Version 4.0 of the “Fujitsu Group Green Procurement Direction”,²⁾ in which specific requirement standards for the green procurement activities (Stage V) are clearly stated (**Figure 1**). We explained the details of this revision in suppliers meetings (in May and June 2007, attended by 1200 suppliers) and we asked the suppliers to comply with these green procurement requirements.

This paper gives an overall picture and describes the Fujitsu Group's current and future approaches to green procurement activities.

2. Request to establish EMS by Fujitsu Group

From the green procurement activities (Stage IV), Fujitsu asked suppliers related to a comprehensive range of procurements, such as those related to software services, equipment and constructions, to establish EMS in addition to our conventional request made to parts and material suppliers. All the suppliers had established EMS by the end of November 2006.

As a rule, we ask suppliers to acquire

third-party accreditations such as ISO14001 to demonstrate their status of EMS establishment. However, depending on the situations at individual suppliers (such as costs and number of processes), we defined the minimum requirement as compliance to any of the following three levels (**Figure 2**), where both Level II and I EMS provide Fujitsu's original EMS aiming to support suppliers who have difficulty in establishing the EMS based on a third-party accreditation in the short term:

- 1) Level III: Establishment of the third-party accreditation EMS (ISO14001, Eco Stage, Eco Action 21, KES, etc.)
- 2) Level II: Establishment of FJEMS
Requirements of suppliers are focused on the basic requirements of ISO14001 (nine items). By ensuring that the PDCA management cycle runs smoothly, it helps environmental conservation activities take root. In this level, on-site audits to check its operation status and follow-ups are implemented.
- 3) Level I: Establishment of EMS based on self-declaration

We urge those suppliers that are new entrants to environmental conservation activities to set an “Environment Action Target” from their intra-company activities as an introductory phase of EMS (the status of establishment is confirmed based on an environmental countermeasure questionnaire) to promote their environmental actions. This is a simplified version of EMS.

3. Promotion of sophistication of suppliers' EMS

To promote green procurement activities (Stage V), we promote sophistication of suppliers' EMS with the purpose of further decreasing environmental burdens. To be specific, the following activities are planned:

- 1) Holding meetings to give details of the acquisition of third-party accreditations
 - Improvement of contents: Support to suppliers is reinforced through case studies such

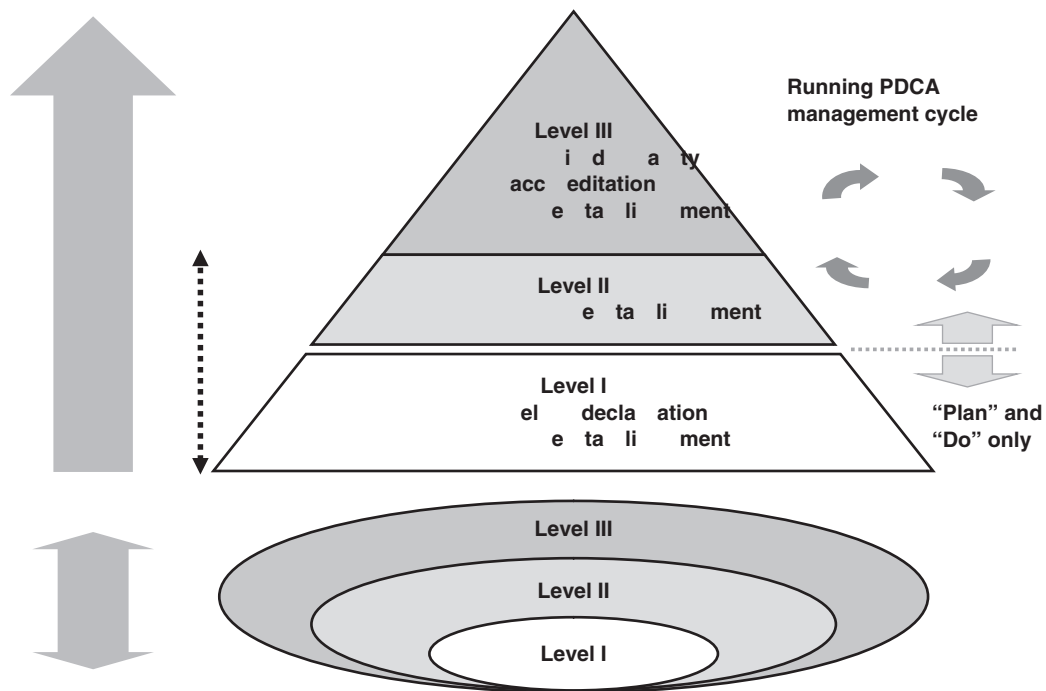


Figure 2
Three EMS levels of Fujitsu Group's requirements.

as introduction of actual examples of EMS establishment.

- Holding meetings in local regions: Efforts are made to call for stronger awareness of the need to establish EMS by directly calling on top management and chief environment officers of the suppliers located in the countryside.
 - 2) Promotion of establishing sophisticated FJEMS
 - FJEMS requirements are increased from six items to nine items (three items have been added)
 - Reinforcement of on-site audits on FJEMS operation
 - Holding of meetings for giving details on FJEMS establishment: Targeted for Level I
- Through these activities, Fujitsu is planning to promote the establishment of an EMS suitable for the current status of individual suppliers, based on close mutual communication with

suppliers.

4. CMS that Fujitsu Group strives for

In recent years, companies have been asked to manage hazardous substances included in electric and electronic devices and equipment accompanying the reinforcement of the related laws and regulations such as the RoHS directive in the EU,^{note 1)} REACH regulations,^{note 2)} "Management Methods for the Control of Pollution from Electronic Information Products" (China RoHS)

note 1) Abbreviation of "Restriction of the use of certain hazardous substances in electrical and electronic equipment". EU directive to restrict certain hazardous substances in electrical and electronic equipment.

note 2) Abbreviation of "Registration, evaluation, authorization and restriction of chemicals". EU regulations to make preliminary registration and evaluation of chemicals mandatory for operations that manufacture and/or import them.

1. Policy
2. Definition of Management Criteria
3. Definition of Scope of Management
4. Establishment of Objectives & Planning for Implemented Process
5. Definition of Organizational System, Responsibility and Authority
6. Design and development
7. Acquisition and Verification of Information of Chemical Substances in Products
8. Purchase Management
9. Acceptance Verification
10. Process Management
11. Shipping Verification
12. Traceability
13. Change Control
14. Non-conformity Response
15. Training
16. Management of Documentation and Records
17. Communication (Provision of Information)
18. Performance (State of Implementation) Evaluation and Improvement
19. Management Review (Correction by Management)

Figure 3
Requirements of Fujitsu Group CMS.

and J-Moss^{note 3)} in Japan. Each company that belongs to a supply chain is requested to implement “appropriate and virtually effective management” of hazardous substances in products as a part of its risk management.

The Fujitsu Group has formulated and operates the “CMS Checklist: Fujitsu Version” in which requirements to suppliers on CMS are summarized.

This checklist is based on the “Guideline for Management of Chemical Substances in Products” stipulated by the Japan Green Procurement Survey Standardization Initiative (JGPSSI). In this checklist, the specific requirements to be implemented by suppliers are described in detail, while keeping the basic requirements in the guideline as they are (Figure 3).

note 3) JIS C 0950 with the formal name “the marking for presence of the specific chemical substances for electrical and electronic equipment”, which is also abbreviated as “J-Moss” by combining the initials of its English name and “J” which represents Japan.

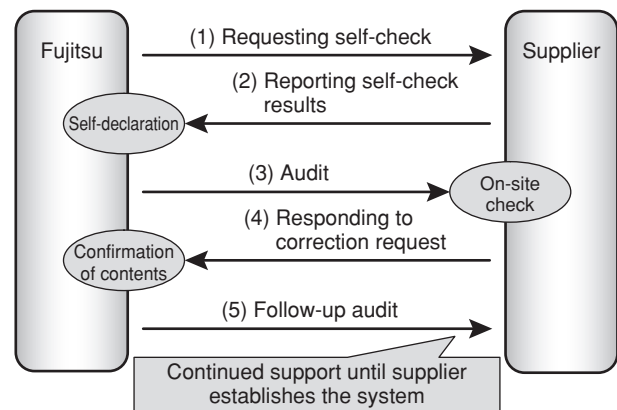


Figure 4
Flowchart of CMS establishment.

5. Procedure of establishing CMS

The Fujitsu Group is asking those suppliers who supply components and materials for Fujitsu Group products, as well as the suppliers who supply OEM products, to establish the CMS. The procedure of establishing CMS is as follows. First, suppliers are requested to perform a self-check based on “CMS Checklist: Fujitsu Version”. Then, an audit is conducted to confirm the status of CMS establishment based mainly on on-site audits by auditors from the Fujitsu Group.

If the audit results show that the status of CMS establishment is insufficient, suppliers are requested to make improvements. As a rule, Fujitsu provides appropriate follow-up including support until the supplier concerned is able to duly complete the establishment of CMS (i.e., can conform to all follow-up items) (Figure 4).

Further, these activities are carried out not only by Fujitsu Limited, but also within the framework of the activities of the whole Fujitsu Group, where responsibility for each supplier in scope is assigned to each organization (manufacturing-based group companies in most cases) inside the Fujitsu Group including overseas sites.

6. Future approaches

To date, the Fujitsu Group has focused its

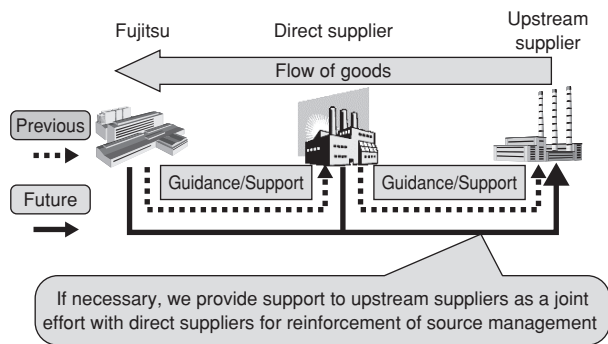


Figure 5
Promotion of CMS establishment in collaboration with suppliers.

efforts on CMS establishment activities in our direct suppliers. In future, the company is planning to promote establishment of CMS in the upstream suppliers as part of the reinforcement of supply source management.

To be more specific, aiming to reinforce the management of upstream supply sources used by direct suppliers, Fujitsu will provide upstream suppliers with know-how and tools such as check sheets to establish CMS. If necessary, we will give positive guidance and support to help those upstream organizations establish the system, based on collaborations with the direct suppliers concerned (Figure 5).

7. Future challenges

Two possible challenges considered important in conducting corporate green procurement are described below.

The first challenge is the accurate and speedy response to ever increasing regulations on chemical substances. In addition to the standpoint of compliance, prompt responses will help to create an advantageous environment for product competitiveness. For instance, if a company can respond to a regulation faster than its competitors, or if it develops a new product without using exempted items most commonly stipulated by the regulations concerned, that company will be placed in a more advantageous position in the

market. To overcome this challenge, it is essential to establish an organized and flexible intra-company system that makes it possible to acquire the latest information about new regulations, formulate countermeasures and implement countermeasures in a timely manner.

The second challenge is the coordinated approach to activities based on mutual cooperation with procurement suppliers. To address the restriction of specific substances in the own products, the components and materials in those products also need to comply with the restrictions. Therefore, it is critical for the company to make its suppliers understand the company policy on those regulations, in addition to communicating with suppliers about the details of the regulations. Particularly, in the case of overseas suppliers, it is sometimes very difficult to communicate the company policy to them because of differences in business customs and languages. Therefore, nurturing reliable relationships with suppliers through regular communication is very important.

In addressing the restriction of chemical substances, the exchange of chemical substance information with suppliers is essential. To decrease the workload of the suppliers and to facilitate efficient information exchange, we recommend the active use of industry guidelines and standard survey formats. As a member company of some industry organizations, including JGPSSI and the Japan Article Management Promotion-consortium (JAMP), Fujitsu is promoting such standardization.

8. Conclusion

This paper described the achievement and challenges in the area of green procurement activities within the framework of the “Environmental Protection Program (Stage IV)” (FY2004–FY2006). The facts that the Fujitsu Group has expanded its scope to include suppliers related to a comprehensive range of procurements, such as those related to software services and equipment, and having

all the suppliers of the Fujitsu Group establish their EMS are outstanding achievements.

This paper also introduced the details of the green procurement activities within the framework of current "Environmental Protection Program (Stage V)" (FY2007–FY2009). To address a global reinforcement of regulations related to chemical substances in products, we revised the green procurement direction in May 2007. In this revision, the establishment of CMS in suppliers' organizations was added as a procurement-related requirement, in addition to the conventional establishment of EMS and restrictions of chemical substances. We have developed an original checklist for CMS based on the concept of the JGPSSI guideline to facilitate the efforts of suppliers. Currently, we are carrying out on-site audits upon receiving self-check records from suppliers and, if improvement is necessary, we provide support to the suppliers.



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Mr. Hosogai joined Fujitsu Ltd., Kanagawa, Japan in 1973, where he was engaged in development of electric components for telecommunication devices. Since 2001, he has devoted himself to promoting green procurement activities such as helping suppliers establish environment management systems (EMS), and ensuring compliance

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Mr. Tomotani joined Fujitsu Laboratories Ltd., Kanagawa, Japan in 1989, where he was engaged in material analyses regarding new products under development by means of analytical equipment. He also participated in some cutting-edge projects, such as development of Ferroelectric Random Access Memory (FeRAM) devices. In 2003, he

moved to the Green Procurement Department, and since then he has devoted himself to promoting green procurement activities such as ensuring compliance with the EU's RoHS Directive. He is currently the Manager of the Green Procurement Department.

In future, we think there will be an increase of requirements for management of chemical substances in products because of a predicted increase in the number of restricted chemical substances, based on the REACH regulation and the revision of the Japanese Chemical Substances Control Law (CSCL). While this situation increases the workload for companies, the Fujitsu Group is committed to continue promoting green procurement activities under close tie-ups with suppliers, so as to promote conservation of the global environment and to supply safe and reliable products to customers.

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<http://www.fujitsu.com/global/about/procurement/green/>



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Mr. Oheda joined Fujitsu Ltd., Kanagawa, Japan in 1984, where he was engaged in receiving inspection and reliability assurance for semiconductor devices, as well as quality audits of suppliers. In 2001, he moved to the Green Procurement Department, and was in charge of Suppliers Performance Review (SPR), which is a kind of benchmark comparison of suppliers. Since 2005, he has devoted himself to promoting green procurement activities, especially helping suppliers establish Chemical substances Management System (CMS).

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