



ASIAN PRODUCTIVITY ORGANIZATION

Project Implementation Plan Addendum

27 August 2013

1. **Project Code** 13-IN-04-GE-DMP-C
2. **Title** Development of Demonstration Companies Program
(Material Flow Cost Accounting, Thailand)
3. **Addendum No.** 1
4. **Reference** 13-IN-04-GE-DMP-C: Project Implementation Plan dated
1 August 2013
5. **Details** **Item No.9. "Collaborating Partners"**

c) The name of one of the collaborating parties has been changed from Siam Sanitary Ware Industry Co., Ltd. (SSI) to Thai Ceramic Co., Ltd.

Other terms and conditions remain the same.

Ryuichiro Yamazaki
Secretary-General



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PROJECT IMPLEMENTATION PLAN

1 August 2013

1. **Project Code** 13-IN-04-GE-DMP-C
2. **Project Title** Development of Demonstration Companies
(Material Flow Cost Accounting, Thailand)
3. **Reference** Project Notification 13-IN-04-GE-DMP-C dated 10 December 2012
4. **Timing and Duration** The duration for the implementation of the project will be from 12 to 18 months including the dissemination period. The commencement date is scheduled for August 2013. Tentative details of the implementation schedules will be indicated later.
5. **Implementing Organization** Thailand Productivity Institute (FTPI)
6. **Mission** The mission of an APO Productivity Demonstration Company is to convey success stories on the development and implementation of productivity improvement initiatives undertaken by all stakeholders. An APO Productivity Demonstration Company should epitomize an enterprisewide productivity movement that achieves business expansion, increases profits and customer satisfaction, reduces waste, enables energy saving, and leads to fair, equitable, and mutually satisfying productivity gain-sharing for both management and workers.
7. **Objectives**

Under an APO Productivity Demonstration Company project, the designated National Productivity Organization (NPO) is expected to:

- a) Showcase how a company can successfully design and implement productivity improvement initiatives with the commitment and active participation of all productivity stakeholders;
- b) Demonstrate visibly and tangibly how productivity improvement initiatives lead to outstanding results for the company;

- c) Illustrate the benefits of productivity gain-sharing in boosting the motivation, morale, welfare, and overall achievements of the workers; and
- d) Disseminate results of the model company to inspire other enterprises, workers, and all stakeholders to promote productivity more vigorously in their workplaces.

8. Background

In response to the project notification for the development of demonstration companies dated 10 December 2012, the FTPI submitted a proposal for a demonstration company project on material flow cost accounting (MFCA). MFCA is an environmental management tool that promotes the efficient use of materials more effectively, contributing to reductions in waste, emissions, and nonproducts. MFCA increases the transparency of material flow, which is a key to successful problem solving and improvement resulting in cost reductions and increased productivity. This is in line with the Green Productivity (GP) concept and can be implemented in organizations and factories. The APO has been organizing MFCA-related projects including training courses since 2010.

After attending the APO projects on MFCA, some companies in Thailand conducted trials on MFCA adoption and generated interest in its full-scale implementation. The FTPI and Department of Industrial Engineering of Chiang Mai University have been actively involved in promoting MFCA in Thailand and several efforts have been made in SCG Group companies to apply MFCA. Based on their findings, the FTPI is confident that MFCA can help reduce resource consumption and increase monetary benefits to companies.

The FTPI expects that this demonstration project will expand implementation of MFCA in Thailand, create success stories that can be utilized as case studies in subsequent APO projects, and establish MFCA as a powerful GP tool.

9. Collaborating Partners

This project is to be implemented in close collaboration with the following parties:

- a) The APO Secretariat (hereafter referred to as the APO);
- b) The FTPI (hereafter referred to as the NPO); and
- c) Chiang Mai University; Siam Sanitary Ware Industry Co., Ltd. (SSI); Thai Paper Co., Ltd. (TPC); Rayong Olefins Co., Ltd.; and Pin Interwood Co., Ltd. (hereafter referred to as the demonstration companies).

10. Roles & Responsibilities

The collaborating parties will perform the following duties:

- a) **The APO**
 - 1) Coordinate communication among the international expert(s), NPO, and demonstration companies to ensure smooth implementation of the project;

- 2) Identify, select, and assign the appropriate international technical expert(s) to the demonstration companies to implement productivity improvement plans and activities;
- 3) Create and maintain a page on the APO website to detail the processes and progress of the demonstration company projects for dissemination to the public; and
- 4) Advise the NPO and demonstration companies on planning and organizing a dissemination workshop for local participants and, if applicable, a multicountry observational mission for overseas participants enabling them to learn directly from the demonstration company experiences.

b) The NPO

- 1) Appoint a coordinator from the NPO office/NPO branch office who will serve as the focal point for communication and coordinate the overall schedule for implementation of the project in the country;
- 2) Provide, in addition to a coordinator, the necessary number of technical experts from the NPO to work as counterparts to the overseas expert(s) to be assigned by the APO;
- 3) Monitor closely the process of implementation, particularly the key performance areas;
- 4) Measure the productivity improvement progress at the demonstration companies using quantitative data and analyses;
- 5) Coordinate and supervise the companies in the production of a video/DVD on the demonstration company experience;
- 6) Assist and supervise the demonstration companies in preparing an interim report and comprehensive final report for submission to the APO;
- 7) Organize a dissemination workshop upon completion of the project to enable experience sharing and learning by the local public and/or international participants following the advice of the APO;
- 8) Compile the overall activities of the project in a practical, easy-to-follow manual/guidelines so that similar exercises can be replicated by other enterprises in the country; and
- 9) Prepare a final report, stressing analyses of the impact of the demonstration projects on NPO activities and productivity promotion in the region in general, as well as suggestions/recommendations for replication in the country with emphases on the utilization of local talent, local networks, and local resources.

c) The Demonstration Companies

- 1) Accept and facilitate consultancy services conducted by the experts assigned by the APO and counterpart experts from the NPO;
- 2) Designate a coordinator and the necessary team members to work closely with the APO and NPO team of experts;
- 3) Arrange for all logistical requirements relating to the project (e.g., local transportation, discussion rooms, etc.) for both the APO experts and counterpart experts from the NPO;
- 4) Prepare monthly updates (including photos) for uploading on the homepage;
- 5) Submit an interim report at the midterm to review the progress of implementation and identify corrections and adjustments as necessary;
- 6) Videorecord from the start the process of implementation activities to produce a video/DVD upon completion of the project in association and consultation with the NPO;
- 7) Announce, publicize, and prominently display the APO's presence and involvement in the demonstration companies throughout the duration of the project;
- 8) Share the experiences of the companies with local and overseas parties who are interested in learning about productivity improvement;
- 9) Present the experiences in a dissemination workshop to be organized upon completion of the project; and
- 10) Prepare a comprehensive final report for submission to the APO explaining the initiatives and technical details of the projects, overall analyses of the benefits, impact of productivity improvements, and competitiveness gained by the companies upon completion of the project.

11. Expense Sharing

a) The APO

- 1) All expenses for assignment of the international expert(s), covering the airfare, daily subsistence allowances, and overseas travel insurance;
- 2) Expenses* for producing a practical manual for replication of the experience (to be prepared by the NPO) of up to US\$2,000;
- 3) Expenses* for the production of a video/DVD (to be prepared by the NPO) of up to US\$3,000; and

- 4) Expenses* for conducting a dissemination workshop for the local public (to be arranged by the NPO) of up to US\$5,000.

*Expenses will be disbursed at the appropriate time corresponding with the specific activities undertaken and following submission of the necessary supporting documents under the applicable APO rules and regulations for the disbursement of project expenses.

b) The NPO

- 1) Expenses relating to the assignment of a coordinator and NPO expert(s) involved in this project.

c) The Demonstration Companies

- 1) Expenses for logistical arrangements related to the implementation of the project, including the local travel costs of the APO international expert(s), as well as for NPO experts when required due to the distance and/or location of the demonstration companies from the NPO office/branch office;
- 2) Costs associated with the purchase and installation of equipment and/or fixtures relating to the implementation of the project, if any; and
- 3) All other expenses for the implementation of the project not covered by the APO and/or NPO.

12. Methodology

The project will be conducted in the following three stages:

- Planning;
- Implementation; and
- Dissemination.

The planning stage consists of a diagnostic survey with regard to the application of MFCA. It includes understanding company operations and manufacturing process, collecting data and related information, and assessing the preparedness of the company for implementing MFCA. This stage will also include capacity building of all stakeholders involved in implementation. It is expected to be completed within two to three months.

The implementation stage involves the design and development of action plans for MFCA implementation in the demonstration companies. This stage includes preparation of detailed process flow; identification of inputs, outputs, and material loss at each step of the process; material balance; and assignment of costs for material loss. Based on the identified material loss and associated costs, action plans will be prepared and implemented to eliminate and/or reduce material losses. This stage refers to practical, action-oriented, on-site activities, with the involvement of international experts, counterparts from the NPO, and all other stakeholders from the demonstration companies. The implementation will be carried out by the demonstration companies under the supervision and guidance of the expert. This stage should be completed in eight to 10 months.

The dissemination stage evaluates the improvement efforts and initiatives implemented and extracts the main lessons learned to provide a practical guide and encourage other enterprises to emulate them in the future. Among the main activities expected in this stage are finalization and production of a practical manual and a video/DVD and organization of a national dissemination workshop. This stage should be completed in one to two months.

13. Project Schedule

It is envisaged that five to six visits of the APO expert(s) will be required for this project, although the actual number and duration will be determined by the expert(s) after the first visit in August 2013. Subsequent visits should tentatively be scheduled at intervals of two or three months in October and December 2013 and March, May, and July 2014. The duration of each visit should be approximately five to seven days subject to the availability of the expert(s) and approval by the APO.

14. Accounting Procedures

- a) In regard to the expenses for video and training manual production, 50% of the APO share will be advanced soon after the Project Implementation Plan is signed.
- b) The remaining 50% will be paid in exchange for the video/DVD, training manual, and final project report together with the documents supporting the expenses (receipts).
- c) If a local seminar/workshop is held, 50% of the APO share will be advanced before program implementation and the remaining 50% will be paid after implementation based on supporting documents.

15. Final Project Outputs

The Demonstration Company Project will be completed with the submission of the following:

- a) Final reports prepared by the NPO and demonstration companies;
- b) Practical manual for replication (in video/DVD and/or printed hard copy) prepared by the NPO; and
- c) A video/DVD of the demonstration company experience to be prepared by the demonstration companies.

The APO will issue certificates of completion and present them to the demonstration companies upon completion of the project.



Ryuichiro Yamazaki
Secretary-General