



ASIAN PRODUCTIVITY ORGANIZATION

## PROJECT IMPLEMENTATION PLAN

6 June 2017

1. **Project Code:** 17-IN-06-GE-DLN-A-05
2. **Project Title:** Self-learning e-Course on Material Flow Cost Accounting (ISO 14051)
3. **Reference:** Project Notification 17-IN-06-GE-DLN-A dated 22 December 2016
4. **Timing:** 1 July–31 December 2017 (six months)
5. **Implementing Organizations:** APO Secretariat and National Productivity Organizations (NPOs)
6. **Number of Participants:** Minimum 400 participants
7. **Self-Registration:** Self-registration opens from 10:00 AM Japan Standard Time on 1 July 2017 on the eAPO web portal: <http://eAPO-tokyo.org>

Note: Participants can register directly from this portal on the APO website. Those who are already registered can access the course by using the assigned username and password. If you have forgotten your username and password, please refer to the help page on the home page of the portal.

### 8. Objective:

To impart knowledge to participants on the basic concept and principles of material flow cost accounting (MFCA) and enhance their understanding of ISO 14051.

### 9. Background

The concept of MFCA, developed in Germany in the late 1990s and since adopted widely in Japan, focuses on tracing waste, emissions, and nonproducts and can help boost an organization's economic and environmental performance. It is one of the major tools of environmental management accounting (EMA). EMA is a set of procedures used within corporations and other organizations for linking environmental considerations with economic objectives. Today, organizations cannot ignore the environmental aspects of their activities and consequently seek management tools to link concern for the environment with economic considerations. MFCA is a 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.

To standardize MFCA practices, a working group of the ISO Technical Committee ISO/TC 207, Environmental Management, developed ISO 14051, which complements the ISO 14000 family of environmental management system standards, including life cycle assessment (ISO 14040, ISO 14044) and environmental performance evaluation (ISO 14031). The standard was published in the second half of 2011. This course will cover the basic concept of MFCA and enhance understanding of ISO 14051.

## **10. Scope and Methodology**

### **Scope**

The course will cover the following modules:

- Module 1: General Concept of MFCA
- Module 2: Background to the MFCA Standard ISO 14051 (Standardization History and Dissemination of MFCA)
- Module 3: Understanding the MFCA Standard ISO 14051 I (Scope, Terms, and Definition) and Quiz
- Module 4: Understanding the MFCA Standard ISO 14051 II (Objectives and Principles of MFCA)
- Module 5: Understanding the MFCA Standard ISO 14051 III (Fundamental Elements of MFCA) and Quiz
- Module 6: Understanding the MFCA Standard ISO 14051 IV (MFCA Implementation Steps)
- Module 7: Final Exam

### **Methodology**

Self-learning e-modules, additional study material for participants, intermittent quizzes for self-assessment, and a final examination to qualify for the APO e-certificate.

## **11. Qualifications of Candidates**

The target groups are environment/Green Productivity/energy management personnel, trainers or consultants, and senior/mid-level managerial and technical personnel from industry in the environmental field.

## **12. Eligibility for e-Certificate**

A minimum score of 70% on the final examination is required to qualify for the APO e-certificate.

Note: Participants from nonmember countries are welcome to take the course for self-development, although APO e-certificates will not be provided.



Santhi Kanoktanaporn  
Secretary-General