



# TRAINING AND DIALOGUE PROGRAMS

## GENERAL INFORMATION ON

**Cleaner Production through Productive Maintenance (A)**

集団研修「生産保全によるクリーナープロダクション(A)」

**JFY 2010**

**<Type: Solution Creation / 類型：課題解決促進型>**

**NO. J1000932 / ID. 1080885**

**Phase in Japan : From Aug. 2010 to Nov. 2010**

This information pertains to one of the Training and Dialogue Programs of the Japan International Cooperation Agency (JICA), which shall be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

# **I. Concept**

## **Background**

Sustained and stable economic development is one of the priority issues for developing countries. However, emphasis on economic development often brings various social problems, including industrial pollution and waste of resources, and global warming is recognized as one of the biggest challenges of the world today. In a view of such circumstances, the "1992 United Nations Conference on Environment and Development (Earth Summit)" addressed the promotion of "Cleaner Production" (hereinafter, "CP"), which aims to minimize waste and emissions, and maximize product output.

A fascinating aspect of CP is its Win-Win approach, which intends not only to reduce environmental loads, but also to serve as an economic engine for business operations. Kitakyushu City, where this training program will be conducted, faced serious industrial pollution besides its rapid economic growth in the 60s. However, cooperating with government, community and research institutes, industries have successfully developed technologies of CP and End-of-Pipe technologies, which realized both environmental regeneration and economic development.

Among various CP technologies, this program focuses on productive maintenance, since it requires less financial resources, but contributes directly to efficient production, human skill development, and safety in working places.

## **For what?**

This program aims to realize promotion of CP based on productive maintenance at national / local level by introducing how Japan has been working in the area.

## **For whom?**

This program is offered to central / local governmental organizations which are engaged in promotion of CP.

## **How?**

Participants shall have opportunities in Japan to learn techniques regarding productive maintenance through lectures, practices and site visits. Participants will also formulate an action plan which aims to implement policies to promote CP, applying the knowledge and ideas acquired through the course.

## ***II. Description***

**1. Title (J-No.)**

Cleaner Production through Productive Maintenance (A) (J1000932)

**2. Period of program**

**Duration of whole program:** August 2010 to February 2011

**Core Phase in Japan:** August 1, 2010 to November 20, 2010

**Finalization Phase:** November 2010 to February 2011

(in a participant's home country)

**3. Target Countries**

Argentina, Chile, Bosnia and Herzegovina, Mexico, Philippines, and Serbia

**4. Eligible / Target Organization**

This program is offered to engineers engaged in facility maintenance management in energy-related facilities or institutions related to promotion of CP.

**5. Total Number of Participants**

9 participants

**6. Language to be used in this program**

English

**7. Program Objective**

Integrated plan to introduce CP based on productive maintenance will be formulated, and proposed to target organizations.

**8. Overall Goal**

Target organization will promote the introduction of CP technology on facility maintenance management to improve energy efficiency.

## 9. Expected Module Output and Contents

This program consists of the following components. Details on each component are given below:

<b>(1) Core Phase in Japan</b> (August 1, 2010 to November 20, 2010) <i>Participants dispatched by the organizations attend the Program implemented in Japan.</i>		
Expected Module Output	Subjects	Methodology
1) Participants will be able to explain the basic concept of CP technology for productivity improvement and energy conservation in Japan.	<ul style="list-style-type: none"> <li>Basic knowledge of global environmental issues and CP</li> <li>History and present state of environment management in Eco Town Kitakyushu</li> <li>Quality of facility maintenance that determines CP, energy-savings, and productivity improvements</li> </ul>	Lecture Observation
2) Participants will be able to explain the management measures for effective maintenance site and prevention of occupational and maintenance accident.	<ul style="list-style-type: none"> <li>Management and operation method for the facility maintenance site</li> <li>How to advance facility management element works and improvement methods</li> <li>Measures for preventing work injuries and facility accidents, and risk management methods</li> <li>Efforts of major companies to address issues related to CP and maintenance management</li> </ul>	Lecture Practice Observation
3) Participants will be able to explain maintenance technology and training methodology for energy conservation and productivity improvement in Japan.	<ul style="list-style-type: none"> <li>Facility maintenance and management technologies, methodologies, and support tools</li> <li>Technologies and skills concerning facility maintenance and management and training methods</li> </ul>	Lecture Practice Observation
4) Participants will be able to formulate action plan for introduction of CP technology.	<ul style="list-style-type: none"> <li>Job report presentation</li> <li>Issue analysis sheet preparation</li> <li>Action plan presentation</li> </ul>	Lecture Practice

<b>(2) Finalization Phase in a participant's home country</b> <i>Participating organizations produce final outputs by making use of results brought back by participants. This phase marks the end of the Program.</i>	
Expected Module Output	Activities
Implementation of the Action Plan	After returning within the due date of submission of the final report, the proposal (Action plan) created by participants is shared in the organization and discussed towards the realization and implementation.

### <Schedule of the program>

Please refer to the attached schedule (Annex IV). The schedule is subject to minor changes.

### **III. Conditions and Procedures for Application**

#### **1. Expectations for the Participating Organizations**

- (1) This program is designed primarily for organizations that intend to address specific issues or problems identified in their operation. Participating organizations are expected to use the project for those specific purposes.
- (2) This program is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These special features enable the project to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.
- (3) As this program is designed to facilitate organizations to come up with concrete solutions for their issues, participating organizations are expected to make due preparation before dispatching their participants to Japan by carrying out the activities of the Preliminary Phase described in section II.
- (4) Participating organizations are also expected to make the best use of the results achieved by their participants in Japan by carrying out the activities of the Finalization Phase described in section II.

#### **2. Nominee Qualifications**

Applying Organizations are expected to select nominees who meet the following qualifications.

##### **Essential Qualifications**

- 1) Current Duties: be an engineer engaged in facility maintenance management at energy-related facilities, private enterprises or CP centers.
- 2) Experience in the relevant field: have more than 5 years' experience in the field mentioned above 1).
- 3) Educational Background: be a graduate of university or equivalent level.
- 4) Language: have a competent command of spoken and written English which is equal to TOEFL CBT 250 or more. There will be many opportunities of discussion between Japanese experts and participants during this training course. The lack of English proficiency is regarded as a disqualifying condition for participation
- 5) Age: be under 50 years of age
- 6) Must not be serving any form of military service.
- 7) Health: must be in good health, both physically and mentally, to participate in the Program in Japan.

There is higher risk for pregnant women and people with chronic diseases to cause serious medical consequences when infected with the new Influenza A (H1N1) virus according to the past cases.

Under the pandemic situations of the new Influenza, pregnant applicants shall not be accepted for the time being. And applicants who suffer from chronic diseases such as respiratory illness, cardiac disease, metabolic disease (diabetes, etc), renal dysfunction and immune insufficiency (systemic steroid administration, etc) shall not be accepted in principle. However, for those applicants with the chronic diseases, if they and their organizations express strong interest in participating in training programs, JICA shall accept them as an exceptional case after receiving a letter of consent from themselves and their organizations.

Please ask national staffs in JICA office for the details.

### **3. Required Documents for Application**

#### **(1) Application Form**

The Application Form is attached to this General Information.

#### **(2) Job Report, Questionnaire and Issue Analysis Sheet (I.A.S.)**

To be submitted with the application form. Fill in Annex I, II and III of this General Information, and submit it along with the Nomination Form. **Job report, Questionnaire and IAS are necessary documents for screening of an applicant.** Each participant will be required to present his/her Job report and IAS in approx. 10 minutes in an early stage of the course. Visual materials such as Power Point and pictures may be helpful for your presentation if you bring them. When you use Power Point, it is preferable to use letters more than 24-point and not to use pictures on the background. **An applicant should submit his/her IAS with approval of his/her superior and an IAS without approval of an applicant's superior is not accepted.**

### **4. Procedure for Application and Selection**

#### **(1) Submitting the Application Documents**

Closing date for application to the JICA Center in JAPAN: **June 1, 2010**

**Note: Please confirm the closing date set by the respective country's JICA office or Embassy of Japan of your country to meet the final date in Japan.**

(2) **Selection**

After receiving the document(s) through due administrative procedures in the respective government, the respective country's JICA office (or Japanese Embassy) shall conduct screenings, and send the documents to the JICA Center in charge in Japan, which organizes this program. Selection shall be made by the JICA Center in consultation with the organizations concerned in Japan based on submitted documents according to qualifications. *The organization with intention to utilize the opportunity of this program will be highly valued in the selection.*

(3) **Notice of Acceptance**

Notification of results shall be made by the respective country's JICA office (or Embassy of Japan) to the respective Government by **not later than July 1, 2010.**

**5. Conditions for Attendance**

- (1) to observe the schedule of the program,
- (2) not to change the program subjects or extend the period of stay in Japan,
- (3) not to bring any members of their family,
- (4) to return to their home countries at the end of the program in Japan according to the travel schedule designated by JICA,
- (5) to refrain from engaging in political activities, or any form of employment for profit or gain, and
- (6) to observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA.

## ***IV. Administrative Arrangements***

**1. Organizer**

- (1) **Name:** JICA Kyushu
- (2) **Contact:** Mr. KODAMA Akihiko (Kodama.Akihiko@jica.go.jp)

**2. Travel to Japan**

- (1) **Air Ticket:** The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.
- (2) **Travel Insurance:** Term of Insurance: From arrival to departure in Japan. \*the traveling time outside Japan shall not be covered.

### 3. Accommodation in Japan

JICA will arrange the following accommodations for the participants in Japan:

**JICA Kyushu International Center (JICA Kyushu)**  
Address: 2-2-1 Hirano, Yahata Higashi-ku, Kitakyushu-shi,  
Fukuoka, 805-8505 JAPAN  
TEL: 81-93-671-6311    FAX: 81-93-671-0979  
(81: country code for Japan, 93: area code)

If there is no vacancy at JICA Kyushu, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of JICA Kyushu at its URL,

<http://www.jica.go.jp/english/contact/domestic/> .

### 4. Expenses

The following expenses will be provided for the participants by JICA:

- (1) Allowances for accommodation, living expenses, outfit, and shipping
- (2) Expenses for study tours (basically in the form of train tickets.
- (3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included)
- (4) Expenses for program implementation, including materials

For more details, please see p. 9-16 of the brochure for participants titled "KENSU-IN GUIDE BOOK," which will be given to the selected participants before (or at the time of) the pre-departure orientation.

### 5. Pre-departure Orientation

A pre-departure orientation will be held at the respective country's JICA office (or Japanese Embassy), to provide participants with details on travel to Japan, conditions of the workshop, and other matters.

## ***V. Other Information***

### **1. Japanese Language Course**

Intensive Japanese language course will be conducted prior to the technical training program

### **2. Reports Presentation**

#### **(1) Job Report, Questionnaire and Issue Analysis Sheet (I.A.S.)**

As written in the previous page, each nominee is required to submit his/her own Job Report, Questionnaire and Issue Analysis Sheet following the instruction. Accepted participant will have a presentation of his/her Job Report, Questionnaire and Issue Analysis Sheet up to 10 minutes at the earlier stage of the training program in order to share knowledge and background with other participants as well as the course leader and lectures. Visual materials such as Power Point and pictures may be helpful for your presentation if you bring them with you. When you use Power Point, it is preferable to use letters more than 24 points and not to use pictures on the background.

#### **(2) Action Plan**

Accepted participants are required to formulate an action plan at the end of the training program in Japan to show your ideas and plans, which you carry out after return home, reflecting the knowledge and method acquired from the training. Each participant will have 10 minutes for presentation.

### **3. International Exchange Program with local communities**

JICA encourages international exchange between JICA participants and local communities. Participants will have a chance to visit elementary schools or junior high schools. Therefore, participants are recommended to bring their national costumes or crafts and materials such as CDs and photographs that will make the exchange program more fruitful.

### **4. Remarks**

JICA training is implemented for the purpose of development of human resources who will promote the advancement of the countries, but not for the enrichment of individuals or private companies. Matters of a trade secret and patent techniques will remain confidential and inaccessible during the training.

**Cleaner Production through Productive Maintenance (A)  
(JFY 2010)**

**Job Report**

Name:

Country:

Organization and present post:

E-mail:

FAX:

Remarks 1: The Report should be typewritten in English (12-point font, A4 size paper), and total pages of the report should be limited to 3 pages (not including organization chart).

Remarks 2: Each participant is required to have presentation in 10 minutes based on this Job Report at the early stage of the training for the purpose of making the training more effective and fruitful by comprehending the situations and problems of the participants each other.

Remarks 3: Please itemize your answer and make them specific.

1. Organization and main tasks (up to 1 page)

(1) Main tasks of the organization

(Please include annual turnover or product amount, name of products and number of employees.)

(2) Organization chart

Please draw a chart of your organization including the department (section) names with the number of staffs in it and mark where you are positioned. (The chart should be attached and not be counted in this page limit.)

(3) Brief description of your assignments

2. Existing problems in your section (up to 1 page)

(1) Problems and issues you are facing

(2) Countermeasures for these problems

(3) Obstacles in the process of solving those problems

3. Expectations for the training course (up to 1 page)

(1) Most interesting subjects or topics in the training course

(2) How do you expect to apply skills and knowledge for your problem solving according to listed items in curriculum (in section II) after you return to your home country?

(3) Other matters you are expecting for this course

**Cleaner Production through Productive Maintenance (A)  
(JFY 2010)**

**Questionnaire**

Name:

Country:

E-mail:

FAX:

1. Please answer if you have ever learned the following subjects. If you have, write when it was and whether you have applied it to your job.

Subjects	Yes	No	If yes		Application		
			At the Univ.	After graduation	Past use	Present use	No
CP							
Management by Objectives & PDCA							
TPM (Total Productive Maintenance)							
TBM (Time Based M.) & CBM (Condition Based M.)							
CDT (Condition Diagnostic Technology)							
Maintenance Management (Computer) System							

Supplementary explanations, if any, should be briefly given below.

2. Please describe any official technical qualifications you have.

## **Issue Analysis Sheet (IAS) Guidelines**

### **1. What is IAS?**

- (1) IAS is a tool to logically organize relationships between issues or problems that the nominee's organization is facing and the subjects to be covered in the training program in Japan.
- (2) IAS will help the nominee to clarify his/her issues or problems to be covered in each expected module output and to formulate solutions to them.
- (3) The sheet is to be utilized as a logical process control sheet to draw up improvement plans for the issues by filling out the sheet in phases from prior to the nominee's arrival in Japan through to the end of the training.
- (4) In addition, it is used for the course leader and lecturers to understand the issues that each participant is facing, and provide him/her with technical advice, useful references and solutions through the training program in Japan.

### **2. How to fill out IAS?**

- (1) Please refer to Item 2 "Purpose of Application" of Part A in the Application Form, and describe the issues or problems that your department is facing in column "A" and "B" in each "Expected Module Output" of the IAS. You will formulate practical solutions to these issues/problems through the training program in Japan. If you write cross-cutting issues related to two or more "Expected Module Outputs,, you can enter them between the Outputs.
- (2) Please leave column C and D blank. These columns are filled out during the training program in Japan.
- (3) If your organization has many issues/problems to be solved, you can submit two or more sheets.

### **3. Remarks**

- (1) IAS without approval of a nominee's superior is not accepted.
- (2) IAS is a key material for the screening of the nominees. The Japan side puts emphasize on its contents and then proceeds with the screening.
- (3) Accepted participants will make a presentation on the IAS and the job report at the beginning of the training program in Japan
- (4) Accepted participants are requested to bring this IAS in electronic file when coming to Japan.

**Annex-III: Cleaner Production through Productive Maintenance (A) (JFY 2010)**

**Issue Analysis Sheet**

<b>Expected Module Output</b>	<b>Subject</b>	<b>A: Problems in your country or organization</b>	<b>B: Backgrounds that cause the problems</b>	<b>C: Measures taken in Japan</b>	<b>D: Proposal to your country</b>
1) Participants will be able to explain the basic concept of CP technology for productivity improvement and energy conservation in Japan.	<ul style="list-style-type: none"> <li>• Basic knowledge of global environmental issues and CP</li> <li>• History and present state of environment management in Eco Town Kitakyushu</li> <li>• Quality of facility maintenance that determines CP, energy-savings, and productivity improvements</li> </ul>				
2) Participants will be able to explain the management measures for effective maintenance site and prevention of occupational and maintenance accident.	<ul style="list-style-type: none"> <li>• Management and operation method for the facility maintenance site</li> <li>• How to advance facility management element works and improvement methods</li> <li>• Measures for preventing work injuries and facility accidents, and risk management methods</li> <li>• Efforts of major companies to address issues related to CP and maintenance management</li> </ul>				
3) Participants will be able to explain maintenance technology and training methodology for energy conservation and productivity improvement in Japan.	<ul style="list-style-type: none"> <li>• Facility maintenance and management technologies, methodologies, and support tools</li> <li>• Technologies and skills concerning facility maintenance and management and training methods</li> </ul>				

**Name of Superior Officer** \_\_\_\_\_

**Designation/Position of superior officer** \_\_\_\_\_ **Signature** \_\_\_\_\_

## Annex-IV: Tentative Schedule

Date	Trainig Subject	Place
Aug. 1 Sun	Arrival in Japan	
2 Mon	Briefing	KIC
3 Tue	Japanese training Job report guidance(17h 19h)	KIC
4 Wed	Exchange program / Japanese training Job report guidance(17h 19h)	KIC
5 Thu	General Orientation Job report guidance(17h 19h)	KIC
6 Fri	General Orientation Job report guidance(17h 19h)	KIC
7 Sat	Holiday	
8 Sun	Holiday	
9 Mon	Orientation Job report presentation	KIC
10 Tue	Course guide & pre-training questionnaire and simple test	KIC
11 Wed	Cleaner production (Global envirnmental issues and CP)	KIC
12 Thu	Cleaner production (Facility management and CP) Environmental Museum	KIC E. Museum
13 Fri	Routine site management for CP (5s,PDCA,KIZEN,TPM,Training)	KIC
14 Sat	Holiday	
15 Sun	Holiday	

Date	Trainig Subject	Place
Aug. 16 Mon	Introduction to plant maintenance management (Technical innovation in facility management)	KIC
17 Tue	Introduction to plant maintenance management (Latest trends and future issues)	KIC
18 Wed	Mechanical element Bacic knowledge of electric machine	KIC
19 Thu	Facility maintenance practice (Inspection and fault management)	KIC
20 Fri	Facility maintenance practice (Inspection and repair plan)	KIC
21 Sat	Holiday	
22 Sun	Holiday	
23 Mon	Facility maintenance practice (Technology / Skills required)	KIC
24 Tue	Kitakyusyu Eco-town History of Kitakyusyu Eco-town Project and relevant issues	Eco-Town KIC
25 Wed	Facility maintenance practice (Construction management and PERT)	KIC
26 Thu	Facility maintenance practice (Spare parts / repair cost control)	KIC
27 Fri	History of overcoming industrial pollutionin in Kitakyusyu City and its basic environmental technologies / facilities	KIC
28 Sat	Holiday	
29 Sun	Holiday	
30 Mon	Introduction to Industrial waste treatment	KIC

## Annex-IV: Tentative Schedule

Date		Trainig Subject	Place
Aug.	31 Tue	Industrial wastewater treatment Industrial waste oil treatment	KIC Kiraku kougyo
Sept.	1 Wed	Facility maintenance management at steel works	NSC Tobata
	2 Thu	Old and new Seven Tools as facility improvement technique	KIC
	3 Fri	Old and new Seven Tools as facility improvement technique	KIC
	4 Sat	Holiday	
	5 Sun	Holiday	
	6 Mon	Facility diagnosis technology	KIC
	7 Tue	Lubricating oil analytical technique	KIC NS Chemical Co.,
	8 Wed	Facility diagnosis practice for rotating machines	KIC
	9 Thu	Non-destructive testing technology	KIC
	10 Fri	Non-destructive testing technology Steel failure mechanism fractography	KIC
	11 Sat	Holiday	
	12 Sun	Holiday	
	13 Mon	Sensor technology and information monitoring for CP	Kitakyusyu Science and Research Park
	14 Tue	Maintenance of electric motors (Insulation diagnosis)	NS-Elex Yahata Branch

Date		Trainig Subject	Place
Sept.	15 Wed	Lubrication management	KIC
	16 Thu	Maintenance of bearings	KIC
	17 Fri	Rust preventing technology Spill prevention (sealing) technology	Mitsubishi C. KIC
	18 Sat	Holiday	
	19 Sun	Holiday	
	20 Mon	Holiday	
	21 Tue	Facility maintenance management at chemical plant	Mitsubishi Chemical
	22 Wed	Plant maintenance management in thermal power plant	Sinkokura Power Station
	23 Thu	Holiday	
	24 Fri	Introduction to industrial waste treatment	Hukuoka West
	25 Sat	Holiday	
	26 Sun	Holiday	
	27 Mon	Waste incinerator and sewage disposal	Hiagari
	28 Tue	Waste heat utilization and heat exchanger / heat pump	KIC
29 Wed	Energy-saving equipment and inverter	Yaskawa Electric	

### Annex-IV: Tentative Schedule

Date		Trainig Subject	Place
Sept.	30 Thu	Energy-saving equipment and inverter	Yaskawa Electric
Oct.	1 Fri	Shirasima oil-strage facility exhibition hall Clean energy power generation facilities	Wakamatsu L.F. JCFC
	2 Sat	Holiday	
	3 Sun	Holiday	
	4 Mon	Study tour to Hakata and Nagasaki Kirin Brewery / Power generation from solid waste	KIC Karatsu
	5 Tue	Genkai Nuclear Power Station Huis ten bosch	Karatsu Nagasaki
	6 Wed	Mitsubishi Heavy Industries Atomic Bomb Museum	Nagasaki Kumamoto
	7 Thu	Hachobaru Geothermal Power Station	Kumamoto Kuju KIC
	8 Fri	Introduction to facility maintenance systems	KIC
	9 Sat	Holiday	
	10 Sun	Holiday	
	11 Mon	Holiday	
	12 Tue	Midterm action plan guidance,etc.	KIC
	13 Wed	Welding technology and applications	Takada Training Center
	14 Thu	Repair/improvement of machineparts (Thermal spraying,overlay welding) Repair/improvement of machineparts (Heattreatment,welding,reproduction)	Hujikikousan Kurate Machi

Date		Trainig Subject	Place
Oct.	15 Fri	Machine skill traning system and machine skill practice	Yawata nishiku Tsukiji
	16 Sat	Holiday	
	17 Sun	Holiday	
	18 Mon	Maintenance of oil pressure equipment (including troubleshooting)	KIC
	19 Tue	Requiaments for operating sequence control and its sequencer	KIC
	20 Wed	Maintenance of electrical control units (including troubleshooting)	NS-Elex Co.,Ltd.
	21 Thu	Action plan guidance Issues on CP to be addressed by Kitakyusyu Science and Research Park	KIC Kitakyusyu S&R Park
	22 Fri	Eco-friendly Products mnufacturing Company Food-processing industry	Simonoseki
	23 Sat	Holiday	
	24 Sun	Holiday	
	25 Mon	How to advance TPM in the production site and its examples	Kokura First Plant
	26 Tue	Facility maintenance management at steel works (2)	Kokura Plant
	27 Wed	Facility maintenance management in the automobile industry	Kyusyu Plant
	28 Thu	Examples of general-purpose maintenance system Cast and forged steel products and maintenance of their facilities	KIC JCFC
	29 Fri	Plant engineering and reliability / mainteability design	KIC

### Annex-IV: Tentative Schedule

Date	Trainig Subject	Place
Oct. 30 Sat	Holiday	
31 Sun	Study ture for Tokyo / Kyoto Study tour to ANA Maintenance Center (haneda)	Transfer KIC Tokyo
Nov. 1 Mon	Study tour to National Museum of Emerging Science / Innovation Study tour to other spots in Tokyo	Odaiba
2 Tue	Study tour to Yuken Industry Co.,Ltd. Sagami Factory	Chogo
3 Wed	Transfer Tokyo Kyoto	Tokyo Kyoto
4 Thu	Study tour to Shimadzu Corp. Sanjo works Study tour to see Kyocera's environmental products	Kyoto Sanjo Kyoto Takeda
5 Fri	Bus tour in Kyoto City Study tour to other spots in Kyoto	Kyoto
6 Sat	Transfer Kyoto Hiroshima KIC Study tour to Hiroshima Atomic Bomb Museum and Mivaiima	Kyoto Hirosima
7 Sun	Holiday	
8 Mon	Safety management in maintenance field	KIC
9 Tue	Serious plant accident and the way to recovery	KIC

Date	Trainig Subject	Place
Nov. 10 Wed	Plant engineering and reliability / mainteability design	KIC
11 Thu	General evaluation meeting Final test / Action guidance	KIC
12 Fri	Action Plan presentation Closing ceremony and Farewell party	KIC
13 Sat	Holiday	
14 Sun	Holiday	
15 Mon	Preparation for action plan presentation	KIC
16 Tue	Preparation for action plan presentation	KIC
17 Wed	Preparation for action plan presentation	KIC
18 Thu	General evaluation meeting Final test / Action plan guidance	KIC
19 Fri	Action Plan presentation Closing ceremony and Farewell party	KIC
20 Sat	Returning to home countries	

## ***For Your Reference***

### **JICA and Capacity Development**

The key concept underpinning JICA operations since its establishment in 1974 has been the conviction that “capacity development” is central to the socioeconomic development of any country, regardless of the specific operational scheme one may be undertaking, i.e. expert assignments, development projects, development study projects, training programs, JOCV programs, etc.

Within this wide range of programs, Training Programs have long occupied an important place in JICA operations. Conducted in Japan, they provide partner countries with opportunities to acquire practical knowledge accumulated in Japanese society. Participants dispatched by partner countries might find useful knowledge and re-create their own knowledge for enhancement of their own capacity or that of the organization and society to which they belong.

About 460 pre-organized programs cover a wide range of professional fields, ranging from education, health, infrastructure, energy, trade and finance, to agriculture, rural development, gender mainstreaming, and environmental protection. A variety of programs and are being customized to address the specific needs of different target organizations, such as policy-making organizations, service provision organizations, as well as research and academic institutions. Some programs are organized to target a certain group of countries with similar developmental challenges.

### **Japanese Development Experience**

Japan was the first non-Western country to successfully modernize its society and industrialize its economy. At the core of this process, which started more than 140 years ago, was the “*adopt and adapt*” concept by which a wide range of appropriate skills and knowledge have been imported from developed countries; these skills and knowledge have been adapted and/or improved using local skills, knowledge and initiatives. They finally became internalized in Japanese society to suit its local needs and conditions.

From engineering technology to production management methods, most of the know-how that has enabled Japan to become what it is today has emanated from this “*adoption and adaptation*” process, which, of course, has been accompanied by countless failures and errors behind the success stories. We presume that such experiences, both successful and unsuccessful, will be useful to our partners who are trying to address the challenges currently faced by developing countries.

However, it is rather challenging to share with our partners this whole body of Japan’s developmental experience. This difficulty has to do, in part, with the challenge of explaining a body of “tacit knowledge,” a type of knowledge that cannot fully be expressed in words or numbers. Adding to this difficulty are the social and cultural systems of Japan that vastly differ from those of other Western industrialized countries, and hence still remain unfamiliar to many partner countries. Simply stated, coming to Japan might be one way of overcoming such a cultural gap.

JICA, therefore, would like to invite as many leaders of partner countries as possible to come and visit us, to mingle with the Japanese people, and witness the advantages as well as the disadvantages of Japanese systems, so that integration of their findings might help them reach their developmental objectives.



***CORRESPONDENCE***

For enquiries and further information, please contact the JICA office or the Embassy of Japan. Further, address correspondence to:

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**Fukuoka Prefecture 805-8505, Japan**

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