



Knowledge Co-Creation Program (Group & Region Focus)

GENERAL INFORMATION ON

Geothermal Development Policy -for Executives-
課題別研修「地熱エグゼクティブプログラム」
JFY 2016

NO. J16-04264 / ID. 1684853

Course Period in Japan: From November 13, 2016 to November 19, 2016

This information pertains to one of the JICA Knowledge Co-Creation Program (Group & Region Focus) 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.

'JICA Knowledge Co-Creation (KCC) Program' as a New Start

In the Development Cooperation Charter which is released from the Japanese Cabinet on February 2015, it is clearly pointed out that *"In its development cooperation, Japan has maintained the spirit of jointly creating things that suit partner countries while respecting ownership, intentions and intrinsic characteristics of the country concerned based on a field-oriented approach through dialogue and collaboration. It has also maintained the approach of building reciprocal relationships with developing countries in which both sides learn from each other and grow and develop together."* We believe that this 'Knowledge Co-Creation Program' will serve as a center of mutual learning process.

I. Concept

Background

Geothermal energy resources accompany a risk of development because of its nature as underground resources. Therefore, many developing countries having a large potential of geothermal energy are to take this risk as private sectors hesitate taking this risk for development and consequently it leads to stagnant state of the development.

Under this kind of circumstance, these countries are considering the demarcation between public and private investment in a series of development processes such as; surface survey, exploratory drilling, resources assessment, steam development, plant construction and plant O&M.

In order to tackle these issues and accommodating requests from developing countries having geothermal resources, JICA will provide training to participants to acquire planning and management knowledge of geothermal development policy and strategy.

For what?

This program is designed to train managerial officers for geothermal development to learn the geothermal law around the world, the project economic evaluation model and the track records by public and private investment.

For whom?

This program is offered to managerial officers who are currently engaged in managing and administrative field in geothermal development.

How?

Participants shall have opportunities in Japan to learn the knowledge required to improve the geothermal policy and strategy. Partners will discuss the role of public and private sectors, the climate attracting private investment, etc. based on the country reports from partners and the latest research by JICA. In addition, Japanese executives of industry, government and academia will join the discussion and do networking with partners.

II. Description

- 1. Title (J-No.):**
Geothermal Development Policy -for Executives- (J1604264)
- 2. Course Period in JAPAN:**
November 13 to November 19, 2016
- 3. Target Regions or Countries:**
Colombia, Ecuador, El Salvador, Ethiopia, Peru, and Tanzania
- 4. Eligible / Target Organization:**
This program is offered to governmental organization in charge of geothermal development
- 5. Course Capacity (Upper limit of Participants):**
9 participants
- 6. Language to be used in this project:**
English
- 7. Overall Goal:**
Action plan will be formulated to improve the geothermal policy and strategy.
- 8. Course Objective:**
This program will train executive officers in geothermal resource development to improve the geothermal policy and strategy.
 - i. To achieve this program objective, participants are expected to achieve the followings in Japan;
 - (1) To reconsider geothermal policy, public and private investment and appropriate institutional framework
 - (2) To understand the current status and issues of geothermal policy and strategy of participating countries and Japan
 - (3) To do networking with executives participating countries and Japan
 - ii. In participants' home country, it is also expected that the action plan written during the Core Phase in Japan is approved by the organization concerned.

9. Expected Module Output and Contents:

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

Expected Module Output	Subjects/Agendas	Methodology
1) To reconsider geothermal policy, public and private investment and appropriate institutional framework	<ul style="list-style-type: none">- geothermal law around the world- barriers of geothermal development- project economic evaluation model- track records by public and private investment around the world- role of state-owned enterprise- appropriate institutional framework	Lecture
2) To understand the current status and issues of geothermal policy and strategy of participating countries and Japan	<ul style="list-style-type: none">- policy and barriers for geothermal development in participating countries and Japan- geothermal development technology	Lecture Field Visit
3) To do networking with executives participating countries and Japan	<ul style="list-style-type: none">- networking with executives participating countries and Japan	Social gathering

<Structure of the program>

1. Preliminary phase (activities in your home country):
Preparation of the Country Report
2. Core Phase (activities in Japan):
Refer page 3 and tentative schedule as next page

Formulation of Action Plan

Participants are required to develop an Action Plan (AP) based on the knowledge and skills acquired during the course. The AP should be practical and applicable to one's own professional activity/career from the viewpoint of geothermal development.

Tentative Schedule (JFY 2016)

		Morning	Afternoon
Nov.	13 Sun	Arrival in Japan	
	14 Mon	Briefing / Program Orientation	Geothermal law around the world, truck records by public and private investment and appropriate institutional framework
	15 Tue	Field trip to geothermal power plant	
	16 Wed	Field trip to geothermal related sites	Visit geothermal turbine company
	17 Thu	Geothermal development policy in Japan Geothermal development technology in Japan JICA's cooperation for geothermal development	Country report presentation Social gathering with industry, government and academia in Japan
	18 Fri	Project economic evaluation model	Action Plan Presentation / Evaluation Meeting / Closing Ceremony / Farewell Party
	19 Sat	Leave Japan for Home Countries	

*This schedule is subject to change.

III. Conditions and Procedures for Application

1. Expectations from 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) In this connection, applying organizations are expected to nominate the most qualified candidates to address the said issues or problems, carefully referring to the qualifications described in section III-2 below.
- (3) Participating organizations are also expected to be prepared to make use of knowledge acquired by the nominees for the said purpose.
- (4) 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.

2. Nominee Qualifications:

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

(1) Essential Qualifications

- 1) Current Duties: managerial official or equivalent and currently engaged in geothermal development.
- 2) Experience in the relevant field: have more than ten (10) years working experience in the above mentioned field.
- 3) Educational background: be a graduate of university or equivalent level, preferably with a background of engineering or science.
- 4) Language: have a competent command of spoken and written English which is equal to TOEFL iBT 100 or more (This workshop includes active participation in discussions, which requires high competence of English ability. Please attach an official certificate for English ability such as TOEFL, TOEIC, etc., if possible).
- 5) Health: must be in good health, both physically and mentally, to participate in the program in Japan. Pregnant applicants are not recommended to apply due to the potential risk of health and life issues of mother and fetus.

(2) Recommendable Qualifications

Below the age of fifty (50) years

3. Required Documents for Application

(1) **Application Form:** The Application Form is available at the JICA office (or the Embassy of Japan).

(2) **Country Report:** to be submitted with the application form.

(3) **Photocopy of passport:** to be submitted with the application form, if you possess your passport which you will carry when entering Japan for this program. If not, you are requested to submit its photocopy as soon as you obtain it.

*Photocopy should include the followings:

Name, Date of birth, Nationality, Sex, Passport number and Expire date.

(4) **Nominee's English Score Sheet:** to be submitted with the application form. If you have any official documentation of English ability. (e.g., TOEFL, TOEIC, IELTS)

4. Procedures for Application and Selection:

(1) Submission of the Application Documents:

Closing date for applications: **Please inquire to the JICA office (or the Embassy of Japan).**

After receiving applications, the JICA office (or the Embassy of Japan) will send them to the JICA Center in JAPAN by **September 16, 2016**.

(2) Selection:

After receiving the documents through proper channels from your government, the JICA office (or the embassy of Japan) will conduct screenings, and then forward the documents to the JICA Center in Japan. Selection will be made by the JICA Center in consultation with concerned organizations in Japan. The applying organization with the best intention to utilize the opportunity of this program will be highly valued in the selection. Qualifications of applicants who belong to the military or other military-related organizations and/or who are enlisted in the military will be examined by the Government of Japan on a case-by-case basis, consistent with the Development Cooperation Charter of Japan, taking into consideration their duties, positions in the organization, and other relevant information in a comprehensive manner.

(3) Notice of Acceptance:

Notification of results will be made by the JICA office (or the Embassy of Japan) not later than **October 11, 2016**.

5. Document(s) to be submitted by accepted candidates:

None.

Soft (data) and hard copy of Country Report should be brought to Japan along with participants.

6. Conditions for Attendance:

- (1) to strictly adhere to the program schedule.
- (2) not to change the program topics.
- (3) not to extend the period of stay in Japan.
- (4) not to be accompanied by family members during the program.
- (5) to return to home countries at the end of the program in accordance with the travel schedule designated by JICA.
- (6) to refrain from engaging in any political activities, or any form of employment for profit or gain.
- (7) to observe Japanese laws and ordinances. If there is any violation of said laws and ordinances, participants may be required to return part or all of the training expenditure depending on the severity of said violation.
- (8) to observe the rules and regulations of the accommodation and not to change the accommodation designated by JICA.

IV. Administrative Arrangements

1. Organizer:

- (1) **Name:** JICA KYUSHU
- (2) **Contact:** kictp@jica.go.jp

2. Implementing Partner:

- (1) West Japan Engineering Consultants, Inc. (West JEC)
- (2) **URL:** <http://www.wjec.co.jp/root/english/>

3. 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:** Coverage is from time of arrival up to departure in Japan. Thus traveling time outside Japan will not be covered.

4. Accommodation in Japan:

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

1. JICA Kyushu International Center (JICA Kyushu / KIC)

Address: 2-2-1 Hirano, Yahatahigashi-ku, Kitakyushu-shi, Fukuoka, 805-8505, Japan
TEL: 81-93-671-6311 FAX: 81-93-671-0979

2. Hotel in Tokyo and other places

("81": country code for Japan, "93": local area code)

If there is no vacancy at JICA Kyushu, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of KIC at,
<http://www.jica.go.jp/english/contact/domestic/>

5. Expenses:

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

- (1) Allowances for accommodation, meals, 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 "III. ALLOWANCES" of the brochure for participants titled "KENSU-IN GUIDE BOOK," which will be given before departure for Japan.

6. 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, living conditions in Japan, and other matters.

V. Other Information

1. Reports and presentation:

(1) Country Report

As written in the previous page, each applicant is required to submit his/her own Country Report. Participants will have a presentation of his/her Country Report about 15 minutes in order to share knowledge and background with other participants as well as instructors. When you use Power Point in the presentation, it is preferable to use letters more than 24 points and not to use pictures on the background.

(2) Action Plan

Participants are required to write an Action Plan by the end of the training to express your idea and plan, which you carry out after your return, reflecting the knowledge and method you acquire from the training. Each participant will have about 15 minutes for presentation.

(3) Laptop PC

Participants are strongly recommended to bring their own laptops and USB flash memory with them. They will be useful to take notes, modify reports, and prepare for presentations. If one does not bring their own PC, then s/he can check out from KIC library, but please be reminded the only English OS is available. Adapter is necessary to use electric device in Japan.

2. 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.

VII. ANNEX I:

Geothermal Development Policy -for Executives- (JFY 2016)

Country Report

Name of applicant:

Country:

Organization and present post:

E-mail:

Remarks 1: The Report should be typewritten in English (12-point font, A4 size paper), and total pages of the report must be limited to 3 pages.

Remarks 2: Each participant is required to have presentation in 15 minutes based on this Country Report for the purpose of making the training more effective and fruitful by comprehending the situations and problems of the participants each other.

Remarks 3: At Country Report presentation, your explanations will preferably be desired with visual aids such as Power Point, slide films and other materials.

Remarks 4: Please itemize your answer and make them specific.

- 1. Role and Significance of Geothermal Energy in the National Energy Mix:**
(Why do you think your country need to develop geothermal energy? What are the pros and cons of geothermal development in your country?)
- 2. Present situation of geothermal development in your country:**
 - (1) Describe the situation of the power sector of your country in terms of total installed capacity and the contribution of geothermal power plants to the Power (MW) and Energy (GWh) markets.
 - (2) Development of geothermal power in the last 10 years.
 - (3) Describe the geothermal promotional surveys conducted or being conducted in your country.
 - (4) Describe any policies your government has to increase the utilization of renewable energy and what is in special for geothermal energy.

3. Describe the barriers affecting geothermal development for example:

- Generation cost
- Leading time
- Location of geothermal sites in national parks or protected areas
- Environmental limitations
- Allocation of risk money for exploration

4. Existing challenges in your section

- (1) Challenges you are facing in your section (Please describe concrete details).
- (2) Countermeasures for these challenges.
- (3) Obstacles in the process of solving those challenges.

5. Expectations for the training course

- (1) How do you expect to apply skills and knowledge after you return to your home country?
- (2) Other matters you are expecting for this course, if any.
(Basically this training program is fixed and cannot be changed upon your request.)

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 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:

JICA Kyushu International Center (JICA KYUSHU)

Address: 2-2-1 Hirano, Yahatahigashi-ku, Kitakyushu-shi, Fukuoka, 805-8505, Japan

TEL: +81-93-671-6311 FAX: +81-93-671-0979