JICA

【Online & In Japan】
Knowledge Co-Creation Program
(Group & Region Focus)

GENERAL INFORMATION ON
RENEWABLE ENERGY IN GRID
-MAINLY ON PHOTOVOLTAIC- (B)

課題別研修「再生可能エネルギー導入計画
‐ 太陽光発電を例として‐(B)」(遠隔+本邦研修分)

JFY 2020
NO. 201905863J001
Total Period: From January 11th, 2021, to December 16th 2021
★**Remote training period:**
A group: From January 11th, 2021 to January 22nd 2021
B group: From January 25th, 2021 to February 5th 2021
Tentative Period of training in Japan:
From October 30th, 2021 to December 16th 2021
In the context of the COVID-19 pandemic, please note that there is still a possibility the course period will be changed, shortened, or the course itself will be cancelled."

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 Program (KCCP)' as a New Start

In the Development Cooperation Charter which was 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

Effective use of renewable energy has become a global issue from the viewpoint of global environmental issues. Furthermore, the importance of energy diversification is increasing from the viewpoint of energy security. Among renewable energies, photovoltaic power generation has improved its performance due to recent technological development, and its price has dropped significantly. Demand is growing as one of the major energy sources in a low-carbon society.

Solar power is a very attractive source for developing countries because it is a low-carbon, clean power source, with a short development lead-time and low running costs. On the other hand, if it is introduced into the grid beyond a certain percentage, grid system stabilization measures and the addition of a power storage function are required, and the overall economic efficiency may be degraded. At the time of introduction, it is necessary to make appropriate judgments in comparison with other power supply options.

In order to respond to today's issues, such as the instability of the grid due to the introduction of large amounts of solar light, JICA is required to use Japan's technological capabilities to contribute to the sustainable development of developing countries.

Based on this background, the Knowledge Co-Creation Program was based on the basic principles and characteristics of renewable energy, centering on Implemented for proposing an action plan for the spread of photovoltaic power generation that is suitable for the circumstances of each country.

For what?

This program aims at learning necessary knowledge technologies, and policies to properly introduce promote and manage photovoltaic power generation for the effective use of solar energy, especially local grid system and local or national grid connected system for power source diversity.

For whom?

This program is for those who have been engaged in renewable energy-related business centering on solar power for more than two years in the central government, local governments and public corporations, and will continue to spread solar power generation after returning to Japan.

How?

In remote training, participants and instructors connect in real time to give lectures, discussions and presentations, and mainly learn the basics and theory parts. In addition, homework (submission of assignments) and short test will improve your understanding.

Participants for the training in Japan will be selected from among those who have completed remote training.

In Japan, you can attend lectures, participate in experiments, practice, visit private companies, discuss technologies such as solar power generation, storage, control, power consumption and give presentations.

In this program, you not only learn Japanese technology, but also learn from each other's experiences. Through these activities, participants will learn the systematic techniques of photovoltaics and understand the perspectives and issues regarding the effective use of solar energy in their countries.

II. Description

1. Title (Course No.)
Renewable Energy in Grid -Mainly on Photovoltaic-(B) (No. 201905863J001)

2. Period of program
Total Period: From January 11th, 2021, to December 16th 2021

（1）. Remote training
A group: From January 11th, 2021 to January 22nd 2021
B group: From January 25th, 2021 to Feburary 5th 2021

（2）. Training in Japan: From October 30th , 2021 to December 16th 2021

*In the context of the COVID-19 pandemic, please note that there is still a possibility the course period will be changed, shortened, or the course itself will be cancelled."

	A Group	B Group		
-14 hours		Panama		7:00-10:00
-13 hours				8:00~11:00
-12 hours				9:00-12:00
-11 hours				10:00-13:00
-10 hours				11:00-14:00
-9 hours		Burkina Faso	5:00-8:00	12:00-15:00
-8 hours		Niger	6:00-9:00	13:00-16:00
-7 hours		Bosnia Herzegovina	7:00-10:00	14:00-17:00
-6 hours	Lebanon		8:00-11:00	15:00 -18:00
-5 hours	Armenia, Azerbaijan		9:00-12:00	16:00-19:00
-4 hours			10:00-13:00	17:00-20:00
-3 hours			11:00-14:00	18:00-21:00
-2 hours			12:00-15:00	19:00-22:00
-1 hour			13:00-16:00	20:00- 23:00
Japan			14:00-17:00	21:00-24:00
+1 hour	Papua New Guinea,		15:00-17:00	
+2 hours	Solomon		16:00-18:00	

3. Target Regions or Countries

Armenia**,** Azerbaijan, Bosnia Herzegovina, Burkina Faso, Lebanon, Niger, Panama, Papua New Guinea, Solomon

4. Eligible /Target Organization

This program is intended for Energy policy departments or the Power Authority of the central and local government in charge of introduction, promotion, maintenance and management of PV generation.

5. Course Capacity (Upper limit of Participants)

Remote Traning   : 18 participants or less
Training in Japan   :   9 participants

6. Language to be Used in This Program

English

7. Course Objective

Participants will be able to understand the theory and practice of photovoltaic generation and apply them to business for the introduction, promotion, maintenance and management of photovoltaic generation systems.

Remote Course Objective:
Participants will acquire the basics of the introduction, promotion, maintenance and management of photovoltaic generation systems, which are indispensable for achieving the course objectives, as a pre-training of training in Japan.

8. Overall Goal

Photovoltaic generation will be adequately introduced, promoted, maintained and managed for the effective use of solar energy.
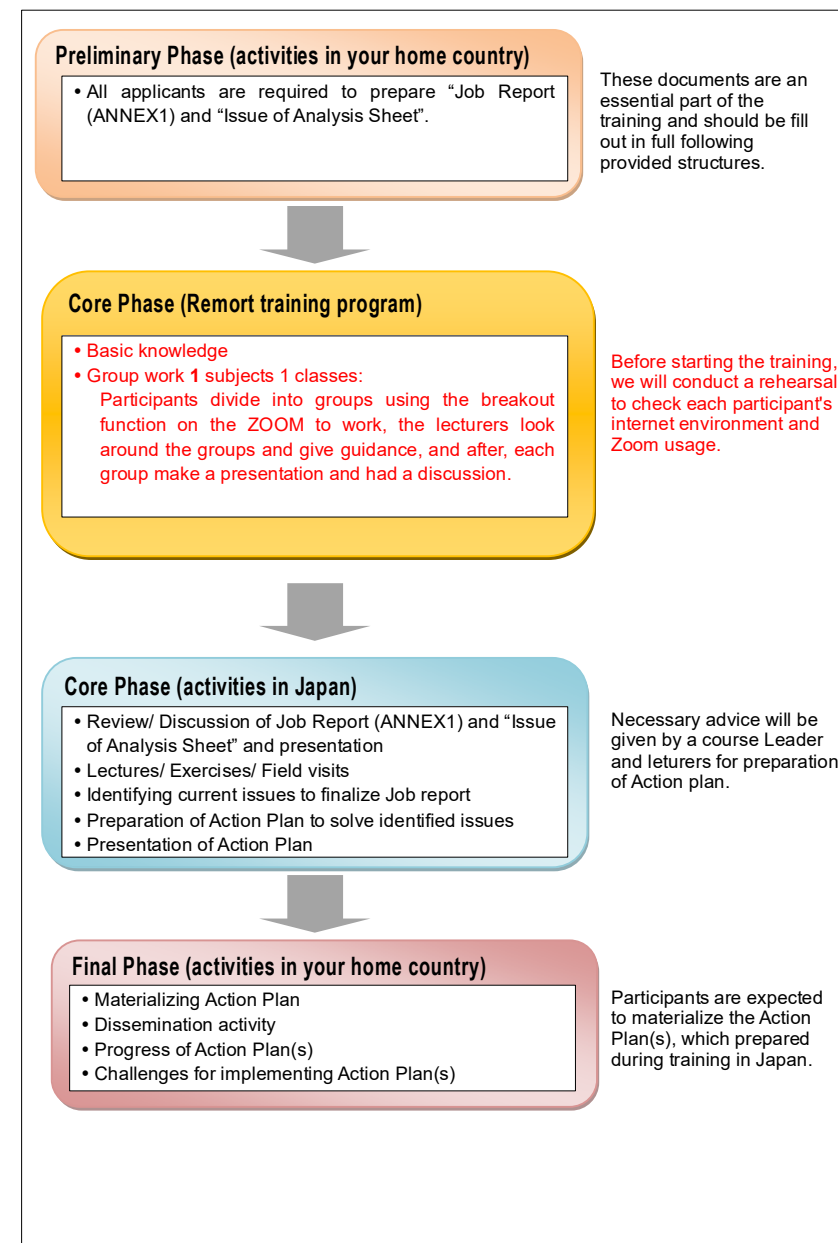
9. Expected Module Output and Contents:

This program consists of the following components. Details on each component are given below: *Items in red are for remote training

Objective	Subject	Contents	Methodology
To be able to explain basics of PV generation technology	Part I PV generation technology	(1) Basics of PV System (2) Fundamentals of Renewable Energy Technology (3) Outline of photovoltaic generation technology (4) Verification Test Results in Mega Solar Project (5) Exercise of solar radiation & generation quantities calculation (6) Exercise of PV System Designing (7) Practice of PV system Installation (8) Maintenance for PV Array & System (9) Maintenance Technology of Lead Storage Battery (10) Introduction to Circuit Simulation (11) Chopper and Inverter (12) Economic Evaluation for PV Generation (13) Four key points for sustainable solar PV systems (14) Visit to • Large scale Mega sola generation plant • Mega Solar System Demonstration Equipment	Online lesson Lectures, Field Study
To be able to explain grid system technology	Part II Power system technology	(15) Basics of grid & Grid connection (16) Basics of mini Grid (17) Practice for understanding Power Grid (18) Outlines of Japanese Grid-Interconnection Code (19) Design for PV Storage System (20) Example of Micro Grid projects (21) Design of Micro-Grid (22) Project of Smart Community (23) Visit to •NAS Battery •Load dispatching center in Tokyo Power •Central Research Institute of Electric Power Industry	Online lesson Lectures, Practice, Field Study
To be able to explain policy and operation of renewable energy, especially photovoltaic generation	Part III Japan's policy & measures on renewable energy	(24) Global trends in Solar PV Deployment and its Support Scheme (25) Issue Identification by Analyzing SHS Problem (26) Examples of PV system Introduction (27) Policy for PV Generation Spread in Japan (28) Conditions to Promote Photovoltaic Technologies and its Policy with a Case (29) Current Situation and Issues of PV Generation Systems in Developing Countries (30) Approaches to Renewable Energy by KEPCO (31) Visit to • Eco-Town • Environment Museum	Online lesson Lectures, Practice, Field Study

To be able to make action plan and improve skills of policy planning	Part IV Practical training to draw up an action plan	(32) Presentation of job report (33) Guidance on recognition of issues (34) Training Theme discussion (35) Review of lecture contents (36) Preparation of action plan (37) Presentation of action plan	Online lesson Lectures, Practice

<Structure of the program>

Preliminary Phase (activities in your home country)

- All applicants are required to prepare "Job Report (ANNEX1) and "Issue of Analysis Sheet".

These documents are an essential part of the training and should be fill out in full following provided structures.

Core Phase (Remort training program)

- Basic knowledge
- Group work **1** subjects 1 classes:
  Participants divide into groups using the breakout function on the ZOOM to work, the lecturers look around the groups and give guidance, and after, each group make a presentation and had a discussion.

Before starting the training, we will conduct a rehearsal to check each participant's internet environment and Zoom usage.

Core Phase (activities in Japan)

- Review/ Discussion of Job Report (ANNEX1) and "Issue of Analysis Sheet" and presentation
- Lectures/ Exercises/ Field visits
- Identifying current issues to finalize Job report
- Preparation of Action Plan to solve identified issues
- Presentation of Action Plan

Necessary advice will be given by a course Leader and leturers for preparation of Action plan.

Final Phase (activities in your home country)

- Materializing Action Plan
- Dissemination activity
- Progress of Action Plan(s)
- Challenges for implementing Action Plan(s)

Participants are expected to materialize the Action Plan(s), which prepared during training in Japan.

Please also refer to Annex III sample course schedule.

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) Target Organization:

      Department of energy policy of central government, local government organization and Public Service Corporation.

   2) Target personnel:

      <Position> Applicants in charge of introduction, promotion, maintenance and management of photovoltaic generation systems at the Target organizations mentioned above.

      *Persons engaged in research on renewable energy at universities etc. are not included.

      <Experience> Applicants are engaged in photovoltaic generation systems for more than 2 years.

      <Education Background> Applicants must have a background of engineering.

      <Language> Applicants must 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).

      <Health> Applicants 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. Please note that this training course includes site visits, therefore many physical exercises will be required.

* Participant who came to Japan making any false declaration for Medical History of Application from will terminate the training program and return home.

3) **Remote** training implementation requirements:
   - Stable network environment
   - To be able to access to 2-**3GB** of data every day.
     * Please consider daily consumption under the same internet environment
   - Install Zoom   https://zoom.us/download
   - To be able to attend a Zoom Meeting every day at a designated time.
   - Preparation of PC with camera and earphone with microphone
   - **Please refer to the following for PC specifications.**
     8 GB memory; 250 GB External Storage, Microsoft Office (Excel, Word, PowerPoint)
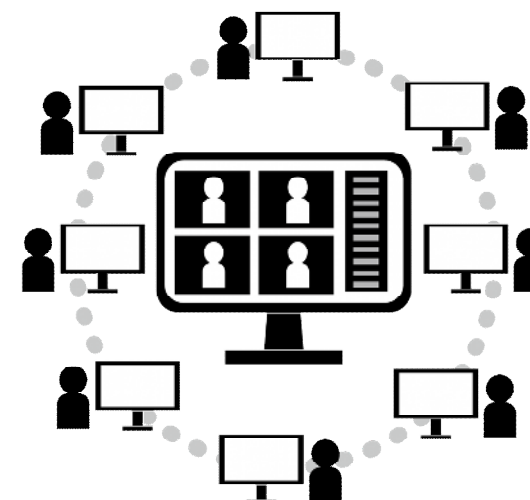
Recommendable Qualifications

1) <Experience>   Applicants are engaged in photovoltaic generation systems for more than 3 years and must have minimum knowledge of engineering such as PV generation, PV system, PV generation facilities and electrical power network system and micro-grid.

2) Expectations for the participants: Preferably, be in relation with past or on-going JICA projects targeting energy efficiency and conservation.

3) Age: be between the ages of thirty and fifty years old.

4) Gender Consideration:

   JICA is promoting Gender equality. Women are encouraged to apply for the program.

3. Required Documents for Application

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

*If you have any difficulties/disabilities, which require assistance, please specify necessary assistances in the Medical History of the application form. It may allow us (people concerned in this course) to prepare better logistics or alternatives.

(2) Job Report and Issue Analysis Sheet (IAS) (ANNEX I & II)

- To be submitted with application form. Job Report and IAS are necessary documents for screening of applicants.
- Each participant will be required to present IAS in approx. 10 minutes in an early stage of the course. Visual materials such as PowerPoint and pictures may be helpful for your presentation if you bring them.
- When you use PowerPoint, it is preferable to use letters more than 24-point and not to use pictures on the background.
- An applicant should submit an IAS with approval of his/her superior and an IAS without approval of an applicant's superior is not accepted.
- The purpose of an IAS is to logically organize relationships between challenges of an applicant's organization and contents of fields to be covered in a training course.
- The sheet is to be utilized as a logical process control sheet to draw on improvement plans for challenges by filling out the sheet in phase from prior to a participant's arrival in Japan through the end of training.
- Participants accepted to the course are requested to bring this IAS in electronic file when coming to Japan.

(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)

3. Procedure for Application and Selection

(1) Submitting the Application Documents

Closing date for applications: Please inquire at 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 Kyushu in JAPAN by **November 11th, 2020**.

(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 of Remote Training

Notification of results shall be made by the respective country's JICA office (or the Embassy of Japan) to the respective Government not later than **December 11th, 2020.**

(4) Remote Training Environment Check

After issuing notification, we will contact Participants to confirm the ZOOM environment, required equipment status and training location

(5) Notice of Acceptance of Training in Japan

Participants for the training in Japan will be selected from among those who have completed remote training.

Notification of results shall be made by the respective country's JICA office to the respective Government not later than **March 27th, 2021.**

4. Conditions for Attendance

(1) to strictly adhere to the program schedule.

(2) not to change the program topics.

(3) Participants must understand the following data teaching materials handling and sign a pledge before starting remote training.

- ✓ Respect for copyright, protection,
- ✓ Sharing without permission on SNS,
- ✓ Unauthorized upload prohibition,
- ✓ Unauthorized modification,
- ✓ Prohibition of redistribution,
- ✓ Approval required for recording
- ✓ Prohibition of unauthorized citation

<For the Training in Japan>

(4) not to extend the period of stay in Japan.

(5) not to be accompanied by family members during the program.

(6) to return to home countries at the end of the program in accordance with the travel schedule designated by JICA.

(7) to refrain from engaging in any political activities, or any form of employment for profit or gain.

(8) 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.

(9) 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 (Training Program Division)
   ② **Contact**: kicttp@jica.go.jp

2   Implementing Partner:
   ① Name: Kitakyushu International Techno-cooperative Association
   ② URL: http://www.kita.or.jp/english/

Remote Training:
A group: From January 11th, 2021 to January 22nd 2021
B group: From January 25th, 2021 to Feburary 5th 2021

(6)	Restraint time	:3 hours daily (Monday to Friday)
		* See table below
(7)	Number of Participants	: Less than 18 people
(8)	Online method	:Zoom is used. mainly in live online learning.
(9)	Exchanging Homework	: Create and use the mailing list.
(10)	Participants Comrades	: Using WhatsApp or Line.
(11)	Training place	: Participants' Workplace or home
(12)	Check Wi-Fi environment	: We will check in advance whether Zoom can be used.

Training in Japan:From October 30th, 2021 to December 16th 2021 (Tentative)

*In the context of the COVID-19 pandemic, please note that there is still a possibility the course period will be changed, shortened, or the course itself will be cancelled."

(13)   Number of Participants   :9 people
(14)   Notice of Acceptance

Participants for the training in Japan will be selected from among those who have completed remote training.

Notification of results shall be made by the respective country's JICA office to the respective Government not later than **March 27th, 2021.**

✧ **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.

Accommodation in Japan:

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

1. JICA Kyushu 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

2. JICA Tokyo Center (JICA Tokyo)
Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan
TEL: 81-3-3485-7051   FAX: 81-3-3485-7904
("81": country code for Japan, "93" and "3": local area code)

If there is no vacancy at JICA Center, JICA will arrange alternative accommodations
for the participants. Please refer to facility guide of KIC/TIC at,
http://www.jica.go.jp/english/about/organization/domestic/pdf/kyushu01.pdf
https://www.youtube.com/watch?v=ZgbdfsaEGi4&feature=youtu.be
https://www.youtube.com/watch?v=jWyCOMj3IjE&feature=youtu.be

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 "**KENSHU-IN GUIDE BOOK**," which will be given before departure for
   Japan.

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. Report and Presentation
   (1) Job Report & Issue Analysis Sheet (IAS)
   Each applicant is required to submit his/her own Job Report & Issue Analysis Sheet
   following the instruction. Participants will have a presentation of his/her Job Report &
   Issue Analysis Sheet up to 10 minutes at the earlier stage of the training in Japan in
   order to share knowledge and background with other participants as well as
   instructors. Visual materials such as Power Point and pictures may be helpful for your
   presentation if you bring them with you.
   (2) Action Plan
   Participants are required to make an Action Plan at the end of the training to express
   your idea and plan that you carry out after your return, reflecting the knowledge and
   method you acquire in the training. Each person will have 10 minutes for
   presentation.
   In addition, participants are required to complete IAS by the end of the training and
   present it at the Action Plan Presentation.

2. Participants who have successfully completed the program including the training in
   Japan will be awarded a **certificate by JICA**.

3. Participants must understand the following **data teaching materials handling** and
   sign a pledge before starting distance training.
   ✓ Respect for copyright, protection,
   ✓ Sharing without permission on SNS,
   ✓ Unauthorized upload prohibition,
   ✓ Unauthorized modification,
   ✓ Prohibition of redistribution,
   ✓ Approval required for recording
   ✓ Prohibition of unauthorized citation

4. [Rules for attending online classes]
   In this course, Zoom is used for live online learning. In an online class, unexpected
   problems may occur, such as outsiders entering the room or leaking information on
   classes and participants to the outside.
   In order to prevent such troubles and not to infringe copyright or portrait rights, please
   follow the rules below.
   ✓ The meeting ID and password should not be given to anyone.
   ✓ Be sure to turn on the camera and show the participants the face.
   ✓ When you enter the room, mute the microphone (mike off) to facilitate
      communication through the screen.
   ✓ Let's use the reaction function with "applause" and "like" marks
   ✓ Use the "chat" or "raised hand" marks to request a question.

<For the Training in Japan>

5. For the promotion of mutual friendship, JICA Kyushu encourages **international exchange between JICA participants and local communities**, including school and university students as a part of development education program. JICA participants are expected to contribute by attending such activities and will possibly be asked to make presentations on the society, economy and culture of their home country.

6. Participants are recommended to bring **laptop computers** for your convenience. During the program, participants are required to work on the computers,   including preparation of Action Plans, finalizing Country report etc.

7. Allowances will be deposited to your temporary bank account in Japan after 2 to 5 days after your arrival to Japan. It is highly advised to **bring some cash** in order to spend necessary money for the first 2 to 5 days stays after your arrival.

8. It is very important that your currency must **be exchanged to Japanese Yen** at any transit airport, Narita International Airport in Tokyo. It is quite difficult to exchange money after that, due to no facility or time during the training program.

9. The field trip is arranged during the training program. It would be convenient if you **bring small bag**.

10. **The General orientation** is programed to provide basic knowledge of Japanese general situation to Participants and to promote technical training before the start of technical training.

11. **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.

VI. ANNEX

I.   Job Report
II.   Issue Analysis Sheet
III.   Issue Analysis Sheet (IAS) Guidelines
IV.   Sample Training Schedule (for reference)

Name of Training Course	Renewable Energy in Grid -Mainly on Photovoltaic-(B)
Name of Applicant	
Name of Country	
Organization and present post:	
E-mail:	

Annex I

Job Report

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 will have a meeting with course leader based on this Job Report and IAS at the early stage of the training in order to make training more effective and fruitful by comprehending each participant's situations and problems.

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

1. **Energy Situation in your country (up to 1 page)**
   - Primary energy consumption rate (circle graph)
   - Energy self-sufficient rate
   - Electric power consumption rate (circle graph)
   - Electrification cover rate
   - Gap between electric power supply & demand
   - Electricity charges (for residence & Industry), Coke charge (for 350 ml can)
   - Enactment & enforcement situation of renewable energy law and/or regulation

2. **Organization and main tasks (up to 1 page)**
   (1) Main tasks of the organization
   (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.) Please describe a duty of each department (section) briefly.
   (3) Brief description of your assignments
   (4) Problems in your job

3. **Expectations for the training course (up to 1 page)**
   (1) Your purpose of participating in this course

(2) Subjects of the course which you are interested in the most
(3) How do you expect to apply skills and knowledge that you will gain through the module (refer to Annex III) to tackle problems in your home country?
(4) Other matters which you are expecting to obtain from the course

4. **Have you ever learned the following subjects in your work? We want to know your work experience. Please check either "Yes" or "No". If your answer "Yes", please fill in "Years" column as to the length of your application on the respective items.**

	Yes	No	Years
1) Energy policy, law, or regulation			
2) Renewable energy without PV generation			
3) PV system promotional activities			
4) Installation of PV generation facilities			
5) Electrical power network system and/or micro-grid			
6) Others			

If you check 6) Others, please specify subject associated with solar power technology, not covered in items 1) to 5).

Name: _____

【Ⅰ】,【Ⅱ】,【Ⅲ】 These columns will be filled during the training course.

No	【A】* Issues that you confront.	【B】 Actions that you are taking.	
1			
	【Ⅰ】 Task or The information that I need.	【Ⅱ】 Useful information that I obtained /found.	【Ⅲ】 Lecturer

No	【A】* Issues that you confront.	【B】 Actions that you are taking.	
2			
	【Ⅰ】 Task or The information that I need.	【Ⅱ】 Useful information that I obtained /found.	【Ⅲ】 Lecturer

No	【A】* Issues that you confront.	【B】 Actions that you are taking.	
3			
	【Ⅰ】 Task or The information that I need.	【Ⅱ】 Useful information that I obtained /found.	【Ⅲ】 Lecturer

*You shall describe challenges you are facing in your section also in the Job Report. Among them, in column A, please describe only those issues you expect to solve utilizing information and knowledge being delivered in this training course.

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ANNEX III

Issue Analysis Sheet (IAS) Guidelines

1. What is IAS?

(1) IAS is a tool to logically organize relationships between issues and contents of the training program in Japan.

(2) IAS will help the nominee to clarify his/her challenges 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 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 confronting, 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 describe the issues you confront in column" **A: Issues that you confront**".

(2) You shall describe challenges you are facing in your section also in the Job Report. Among them, in column A, please describe only those issues you expect to solve utilizing information and knowledge being delivered in this training course. Prepare the separate rows for each problem; if necessary, please add new rows.

(3) In column "**B: Actions that you are taking**", please describe actions that you are taking to solve the issues shown in "**Column A**".

(4) This information is very important to carry out the training course and also to make Action Plan as a fruit of the training.

(5) It's not necessary to fill in column " Ⅰ : **Task or the information that I need**", column "Ⅱ : **Useful information that I obtained/found**" and column "Ⅲ : **Lecturer**". These columns shall be filled out during the training.

(6) "**Column I**" shall be clarified and filled out in the subject "**Task extraction using IAS**" implemented at the earlier time in the training.

(7) "**Column II**" and "**Column III**" shall be filled out during the training and you are required to present completed IAS in the subject "**Action Plan Presentation**".

Sample Schedule (Online program)

A Group

country	Local time		Japan Time　14:00～17:00			
			8:00-11:00	9:00-12:00	15:00-18:00	16:00-19:00
			Lebanon	Armenia, Azerbaijan	Papua New Guinea	Solomon
Month	Day		Subject			
January in 2021	11	Monday	Course orientation and How to modify the Job Report			
	12	Tuesday	Current Situation and Issues of Solar PV Systems in Developing Countries			
	13	Wednesday	Key Points for Sustainable Solar PV Systems			
	14	Thursday	Basics of mini Grid			
	15	Friday	Training Theme discussion			
	16	Saturday	holyday			
	17	Sunday	holyday			
	18	Monday	Outline of photovoltaic generation technology			
	19	Tuesday	Conditions to Promote Photovoltaic Technologies and its Policy 1			
	20	Wednesday	Conditions to Promote Photovoltaic Technologies and its Policy 2			
	21	Thursday	Policy for PV Generation Spread in Japan			
	22	Friday	Basics of grid & Grid connection			

B Group

country	Local time		Japan Time　21:00～24:00			
			7:00-10:00	12:00-15:00	13:00-16:00	14:00-17:00
			Panama	Burkina Faso	Niger	Bosnia and Herzegovina
Month	Day		Subject			
January in 2021	25	Monday	Course orientation and How to modify the Job Report			
	26	Tuesday	Current Situation and Issues of Solar PV Systems in Developing Countries			
	27	Wednesday	Key Points for Sustainable Solar PV Systems			
	28	Thursday	Basics of mini Grid			
	29	Friday	Training Theme discussion			
	30	Saturday	holyday			
	31	Sunday	holyday			
February in 2021	1	Monday	Outline of photovoltaic generation technology			
	2	Tuesday	Conditions to Promote Photovoltaic Technologies and its Policy 1			
	3	Wednesday	Conditions to Promote Photovoltaic Technologies and its Policy 2			
	4	Thursday	Policy for PV Generation Spread in Japan			
	5	Friday	Basics of grid & Grid connection			

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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