JICA Knowledge Co-Creation Program for Long Term Participants

Program Information on GX Human Resources Development for Energy Sector (GX Program)

JFY2023

Energy Transition Policy,

Economic Analysis of Transition Model,

Business Administration of Power Utility,

Next-generation Decarbonization Technology"

(Including Hydrogen Energy)

This information pertains to one of the Japan International Cooperation Agency (JICA)'s Knowledge Co-Creation Program (Long-Term). This handout gives information on the overview of the program. This program will be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both governments.

With regard to the additional information, please contact JICA overseas office in your country.

1. Overview

Developing countries will not accept carbon neutrality which disturbs growth. Energy must be affordable. Invasion of Ukraine makes energy supply unstable and expensive. JICA's goal is to realize both carbon neutrality and stable supply of affordable energy with developing counties while staying close to the country's circumstances. Our goal has changed from low carbon to carbon neutrality.

A lot of developing countries are aiming to achieve carbon neutrality by 2060 or 2070. Variable renewable energy sources that are easy to invest in are rapidly increasing in developing countries, and that is welcome. On the other hand, as the ratio of variable renewable energy increases, batteries and backup power sources are required to stabilize the grid. And these equipment costs will be reflected in tariff and subsidies. To avoid excessive burdens, government has to formulate and implement energy transition policies that incorporate short-term and long-term perspectives. Government has to promote investments for long-term planning, such as hydro power generation and next-generation decarbonization technologies.

And also it is difficult to achieve carbon neutrality only with existing technologies, Nextgeneration decarbonization technologies, such as hydrogen/ammonia, fusion energy, nextgeneration nuclear, space solar power generation, ocean thermal energy conversion has been developed rapidly in the world. Developed countries have grown emitting CO2. Thus developed countries have a responsibility to enable developing countries to enjoy the benefits of new technologies. Goverment has to develop laws, regulations and core human resources to install next-generation technologies.

What is JICA Knowledge Co-Creation Program (KCCP)

The Japanese Cabinet released the Development Cooperation Charter in February 2015, which stated, "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." JICA believes that this 'Knowledge Co-Creation Program' will serve as a foundation of mutual learning process.

What is JICA Development Studies Program (JICA-DSP)

JICA-DSP is being carried out by JICA as part of official development assistance (ODA) by the government of Japan. JICA-DSP is offered for international scholars accepted as the participants of JICA's Human Resource Development Project who are enrolled in a degree program at a Japanese university.

https://www.jica.go.jp/dsp-chair/english/dsp/overview/index.html

2. Objectives

The objectives of this program is to develop core human resources such as governmental officials, educators and researchers who contribute to the energy transition toward carbon neutrality in developing countries. This program offers opportunities for such personnel to study following themes at graduate courses for master's degree / doctor's degree in Japanese graduate schools as international students (hereafter referred to as participants).

< Social Science Course>

- energy transition policy
- > economic analysis of transition model
- business administration of power utility

<Engineering Course>

Next-generation decarbonization technologies, such as hydrogen/ammonia, fusion energy, next-generation nuclear and space solar power generation

3. Program Outline

(1) Program Title: GX Human Resources Development for Energy Sector (GX Program)(2) Language of the Program: English

(3) Contents of the Program

Orientation	Participants have orientation at the beginning of the program, including briefing session about the GX Program, courtesy call to related organizations, etc.
<u><only engineering<="" for="" u=""> <u>Course></u> Research Student Program (6 months)</only></u>	The maximum period for being a research student is six months in principle. Participants are required to prepare for entrance examination of the respective graduate course. Research students are also able to participate in lectures, receive instruction from supervisors. Note: - Participants who failed entrance examination is required to return to their home countries.

	 Necessity of research student program will be considered based on interviews with professors of respective Japanese universities.
Graduate Course Program (2 or 3 years)	 Master's degree course / Doctor's degree course Lecture and practice Research works for the thesis Field research in home country (There are cases in which this research is not conducted due to the budget constraint.) * Field research is to be planned in accordance with the research theme and upon consultation with the supervisor.
Additional Special Program (Short-term Programs and Internship)	- JICA short-term (Spring/Summer) program: Energy Trantison Policy and observation tours to sites, institutions and firms in Japan.

4. Duration

< Social Science Course>

From: End of Sep. 2024	
To: End of Sep. 2027(maximum)	
- 2 years as a master's course student	
- Overall duration shall not exceed 3 years, in principle.	
From: End of Sep. 2024	
tor's Degree To: End of Sep. 2028 (maximum)	
- 3 years as a doctor's course student	
- Overall duration shall not exceed 4 years, in principle.	

< Engineering Course>

Master's Degree Course ParticipantFrom: End of Sep. 2024 To: End of Sep. 2027(maximum) - 6 months as a research student if necessary - 2 years as a master's course student	
	- Overall duration shall not exceed 3 years, in principle. From: End of Sep. 2024
Doctor's Degree Course Participant	 To: End of Sep. 2028 (maximum) 6 months as a research student if necessary 3 years as a doctor's course student Overall duration shall not exceed 4 years, in principle.

5. Number of Participants

(1) Around 20 participants from all the target countries for GX program, and a few for hydrogen energy.

(2) Target Countries

Indonesia, Philippines, Thailand, Vietnam, Cambodia, Laos, Malaysia, East Timor, Solomon, Sri Lanka, Bangladesh, Butan, Iraq, Pakistan, Egypt, Iran, Uzbekistan, Nepal, Costa Rica, Morocco, South Africa, Kenya, Tanzania

(3) Target Participants

This program is designed for the following two types of personnel.

Governmental Officials (Technocrats)	Technocrats who take part in policy making and administration related to energy transition policy and administration management of utility in central/regional government, governmental research institutions or other related public organizations, and they are expected to study in Social Science Course. Mainly for Master's degree, but also Doctor's degree.
Educators/ Researchers	Individuals who are responsible for education and research in the next-generation decarbonization technology in higher education institutions. They are expected to study in Engineering Course for Master's degree and/or Doctor's degree.

6. Language to be used in this Program

English

7. Fields of Study at Japanese Universities

This program targets fields listed as below. Examples of university are shown below, however, you can propose the university. If you are not sure about appropriate university to apply for, JICA will propose the university based on your research themes. Please contact to JICA.

< Social Science Course>

Energy transition policy

National Graduate Institute for Policy Studies

- GRIPS Bulletin Degree Programs for Master's students : <u>https://www.grips.ac.jp/cms/wp-content/uploads/2023/09/bulletin_2023_4.pd</u>
- GRIPS Bulletin Degree Programs for doctoral students : https://www.grips.ac.jp/cms/wp-content/uploads/2023/09/bulletin_2023_5.pdf

International University of Japan

- IUJ Degree Programs for MBA with the "Greeen Transoformation" Specialization: <u>https://www.iuj.ac.jp/im-info/</u>
- > Economic analysis of transition model

Asia Pacific University

- https://admissions.apu.ac.jp/graduate/academics/gsa_master/
- Below is how to apply to APU: <u>https://admissions.apu.ac.jp/graduate/how_to_apply/GSAM_2024/</u>

Yokohama National University

- <u>TBC</u>

> Business administration of power utility

International University of Japan

- IUJ Degree Programs for MBA with the "Greeen Transoformation" Specialization: <u>https://www.iuj.ac.jp/im-info/</u>

<Engineering Course>

- Next-generation decarbonization technologies, such as hydrogen/ammonia, fusion energy, next-generation nuclear and space solar power generation
- Especially for Hydrogen Energy, Kogakuin University is one option for Ph.D. or Master's degree course
 Kogakuin University of Technology&Engineering : <u>https://www.kogakuin.ac.jp/english/</u> Kogakuin University (Clean Energy Creation Laboratory) :

https://www.kogakuin.ac.jp/english/graduate/lab1-45.html

8. Additional Programs for GX participants

Participants need to attend Short-term Program in Summer and in Spring. Contens of the programs are under consideration. Every program will be held during the course or a vacation period. All programs are carried out in English. Cost to attend the program will be borne by JICA. Please refer Annex 2 IUJ short term program (draft).

9. Application Qualifications and Requirements

Applicants shall satisfy the following requirements:

Please bring the original copy of documents when you come to Japan.

(1) Nationality	Citizens of the target countries	
(2) Education	For Master's degree course:	
	 At least 16 years of academic background or equivalent 	
	- A bachelor's degree	
	For Doctor's degree course:	
	- At least 18 years of academic background or equivalent	
	- A Master's degree	
(3) Working Experience	Applicants from government sectors / educators must;	
/Status	- have more than 2 \sim 3 years of working experience	

 at their current organizations obtain permission for application and securing reinstatement from their current organizations (4) English Proficiency Adequate English proficiency, both in written and oral communication, in order to complete the Master's / Doctor's degree. Applicants should submit any one of the English scores (TOEFL, IELTS or TOEIC). (5) Understanding of the Program Applicants are required to have clear understanding of the objectives of the program, and have a strong will to contribute to the development of energy transition in their home countries as well as to strengthen the linkage between their countries and Japan after returning home country. (6) Others Applicants must; be both physically and mentally fit for the program, and thend t
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- be both physically and mentally fit for the program,
- not be receiving nor applying for scholarship
offered by other organizations,
Applicants might be required to attend the activities on
the weekends / holidays in unavoidable circumstances
(ex. official exam).
Though the number of female participants has been
limited so far, female participants are encouraged to
apply for the program.

11. Procedures and Required Documents for Application

Each applicant is required to submit the following documents by the deadline set by JICA Office in the applicants' country.

Applic	(1) Application Form (Annex 1) consists of;
ation	 Declaration of desired university placement: 1st and 2nd choice
Docu	 Personal Information
ments	 Education Background
	Work Experience
	 Details of Current and Previous Employment
	 Career Plan after completion of GX program
	 Research plan
	Medical History
	Declaration
	(2) Undergraduate degree graduation certificate / master's degree completion
	certificate
	* Prepare the undergraduate certificate if you apply master's course. Also,

prepare the master's one if you apply doctor's course.
* Officially certified copies of the original.
* Written in English or accompanied with official translation in English.
(3) Academic transcript
* Prepare the undergraduate transcript if you apply master's course. Also,
prepare the master's one if you apply doctor's course.
* Must contain all the grades earned in the university.
* Officially certified copies of the original.
* Written in English or accompanied with official translation in English.
(4) A letter of recommendation (Annex 2) from home country's government.
(5) A copy of valid passport with photo (for checking nationality, name, sex, and
date of birth. National ID and birth certificate are acceptable if you do not have
valid passport. Certified English translation must be attached if ID is not
written in English).
(6) ID Photo (4 cm×3 cm) must be pasted on application form.
(7) Score of English proficiency examination
See "9. Application Qualifications and Requirements", "(4) English
Proficiency". If you have any problem or question, please contact to JICA.
(8) Check List (Annex 3)
(9) Health certificate to be submitted after the selection
Below are the requirement documents for IUJ (MBA course) and APU.
(10) GMAT score
(for IUJ only, if applicantas do not have GMAT score, it can be replaced with
IUJ original math test score, so please let us know)
(11) For APU, video recording interview and online test is required, so please
refer below guidline(p25) and register from the link below.
https://admissions.apu.ac.jp/resource/ln/4b34576768ecbe2921be42d087d37e
fe9b232b7b/2024 APU Graduate Application Handbook.pdf
https://apu.hirevue.com/signup/EuGPMVpMTEqsdVZAgkSmPx/
Also, reserach proposal which is including below is required (Approximately
3000 words separately from JICA application form)
Brief Literature Review
Research Questions
Research Design / Method
Theoretical and/or Practical Contributions of the Likely Findings of the
Research

12. Application Period

Below are the schedule for Hydrogen energy course.

<JICA>

Complete set of application documents must be submitted to JICA Office in your country before and no later than the end of March 2024.

<University (Kogakuin University)>

- Send an e-mail for requesting the application documents to below address (International Affiars Office) by end of February 2024
 Email address: international@sc.kogakuin.ac.jp
- Submit the application documents by e-mail (PDF) by end of March, 2024 (Original documents is required to be sent to the University by end of April 2024, which International Affairs office will inform the candidates when they send the application documents.)

13. Selection Procedures

* Any costs incurred during the selection procedures including travel expenses to selection venues will NOT BE COVERED by JICA.

* The reasons for disqualification on each selection procedure will NOT BE DISCOLSED.

- (1) Selection Procedures
 - [1st Step]Screening of the Application Documents by JICA and University Period: April – May 2024

- JICA will conduct screening whether the applicants meet the program's purpose and qualification set by JICA. JICA will share the information of qualified applicants with Japanese university.

- Japanese universities will examine the documents and may select candidates for the 3rd selection.

[2nd Step]Interview by University and JICA

Period: May - June 2024

Venue: Online (You may have an interview at JICA Office in your country) Applicants who passed 1st Step will have an interview through online meeting with faculty member of the Japanese university and JICA Headquarters if necessary.

(2) Announcement of result of the selection

JICA will inform candidates with result of the selection through JICA Office in your country by the end of June 2024.

(3) Others

JICA might offer the candidate universities that are not stipulated in the "Declaration of desired university placement" in the Application Form as the result of matching process.

14. Expenses To Be Borne By JICA

Under the JICA Long-term Trainee Allowance standards, JICA will cover expenses and allowance to participants accepted to the program/course. See the table below for further details. Note that the payments (e.g. for tuition, research support expenses, school support expenses) will not be paid to the accepted participants themselves, but directly to the university or other relevant institutions.

Expense category	Payment amount	Payment frequency
Tuition (official examination fees, entrance fees, course fees)	Actual costs	According to the request from universities
Living Allowance*	JPY 117,000–148,000 per month*	Every month via university
Airfare	Actual costs	Upon arrival in Japan and upon returning home
Outfit Allowance**	JPY103,750-106,000	Once (upon arrival in Japan)
Moving Allowance***	Up to JPY164,000-224,000	Once (during the training period)**
Research Support Expenses****	 Actual costs (up to JPY360,000 per year) Expenses for overseas field survey and internship 	
Medical care for participants who become ill after arriving in Japan	In accordance with the provisions of the medical insurance	

*Varies according to living area in Japan, type of accommodation, etc.

**Once, after opening bank account in Japan. As it takes several weeks to have the bank account opened, it is strongly recommended to bring cash for personal expenses during the period.

***Depending on the accommodation facility. Consultation with the university is required.

****Research Support Expenses are allowed to be provided via the university and be disbursed with the consultation and approval of the applicant's supervisor.

15. Expenses Not To Be Borne By JICA

JICA will not bear costs other than the allowances described above. JICA is not responsible for the following expenses especially:

- (1) Passport fees (for re-issuance and extensions, etc.)
- (2) Visa fees of a transit country and transportation expenses to obtain Visa
- (3) Transportation expenses to obtain Japanese Visa
- (4) Domestic travel expenses at the applicant's home country
- (5) Departure tax
- (6) Airport tax/airport facility charges outside of Japan, including third countries
- (7) Customs duty
- (8) Excess baggage charges
- (9) Compensation for lost and/or damaged baggage
- (10) "No show charge" to the transit airport hotel (non-refundable)
- (11) Lost ticket fee

11/14

- (12) Accommodation fee for day-use hotel in return flight
- (13) Transportation expenses other than official programs
- (14) Telephone bill or mini-bar tab at accommodation
- (15) Medical costs related to pre-existing illness, pregnancy, and dental treatment
- (16) Medical cost related to the same illness over 180 days
- (17) "National Health Insurance" fee

Note: If participant/accepted applicant does not follow the regulation of JICA, the participant may have to bear such other cost of necessary expenses.

16. Conditions for Participation

The accepted applicants/participants of KCCP are required:

- (1) to understand that participants must physically come to Japan to participate in this program at the date designated by JICA,
- (2) to be in good health to participate in the program,
- (3) not to change course subjects or extend the course period,
- (4) not to change the air ticket (and flight class and flight schedule arranged by JICA) and lodging by the participants on their own,
- (5) to accept that the Government of Japan will examine applicants who belong to the military or other military-related organizations and/or who are enlisted in the military, taking into consideration of their duties, positions in the organization and other relevant information in a comprehensive manner to be consistent with the Development Cooperation Charter of Japan,
- (6) to submit a Health Certificate in JICA format at the participant's expense. The certificate must be the results of health check-up at the time the participant applied to the entrance examinations (within 6 months before arrival in Japan),
- (7) to accept to submit a second Health Certificate in JICA format if the participant will not be able to arrive within 6 months from the date of his/her first medical examination. The cost of the Health Certificate will be borne by JICA only if the delay is not due to the participant's personal reasons,
- (8) to return to their home country on the designated flight by JICA, when they finish the program/course or when it is deemed impossible to finish the program within the program period, or when the participant is not successful on the regular course examination,
- (9) to refund allowances or other benefits paid by JICA in the case of a change in schedule,
- (10) to understand that inviting participant's family members is not recommended before their stay in Japan has passed more than 6 months,
- (11) to carry out such instructions and abide by such conditions as may be stipulated by both the nominating Government and the Japanese Government in respect of the course,
- (12) to observe the rules and regulations of the program implementing partners to provide the program or establishments ("Plagiarism" especially is taken severely by enrolling

university, regardless of whether it is direct plagiarism or self-plagiarism and participants may be subjected to disciplinary action such as suspension),

- (13) to observe the rules and regulations at the place of the participants' accommodation,
- (14) not to engage in political activities, or any form of employment for profit,
- (15) not to drive a car or motorbike, regardless of an international driving license possessed,
- (16) to discontinue the program, should the participant violate Japanese laws or JICA's regulations, or commit illegal or immoral conduct, or become critically ill or seriously injured and be considered unable to continue the course. The participants shall be responsible for paying any cost for treatment of the said health conditions except for the medical care expenses described in the table of "11. Expenses To be borne by JICA,"
- (17) to return the total amount or a part of the expenditure for KCCP depending on the severity of such violation, should the participants violate the laws and ordinances,
- (18) not to be receiving nor plan to receive another scholarship during the program,
- (19) to understand not to make other applications for different JICA KCCP (long-term) at the same time,
- (20) to understand that the maximum duration of "Overseas research" and "Temporary Leave (leaving Japan for private purpose)" is 60 days, in principle, and
- (21) to enroll and complete JICA-DSP online courses, when you receive JICA's instructions to do so.

17. Other Information

(1) Laptop PC

Participants are strongly recommended to bring their own laptop to conduct their research.

(2) Expenses

Please be noted that the "arrival allowance" is paid one or two weeks after opening bank account in Japan. Therefore, JICA strongly recommends bringing approximately 100,000 JPY (about 800 USD···depending on the rate) from your home country to bear the expenses that will be incurred before these allowances are paid after arrival in Japan.

(3) Research Samples

Participants are recommended to bring their research samples and data. Please consult to your supervisor and check the import regulations.

18. Annex

Annex 1. Application Form

Annex 2. IUJ short-term program (capstone program)



CORRESPONDENCE

For enquiries and further information, please contact the JICA office.