



Knowledge Co-Creation Program (Group & Region Focus)

General information on

**Capacity Development towards Air Quality
Management**

**課題別研修「大気環境管理に向けたキャパシティディベロップメント」
JFY 2025**

Course No.202411718J001

Course Period in Japan: From February 8, 2026 to March 7, 2026

This information pertains to one of the JICA Knowledge Co-Creation Programs (Group & Region Focus) of the Japan International Cooperation Agency (JICA) 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)

The Japanese Cabinet released the Development Cooperation Charter in June 2023, 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.

I. Concept

Background

Due to the recent urbanization, economic growth and industrialization in developing countries, human-caused emissions of air pollutants from stationary sources including manufacturing facilities and mobile sources such as automobiles have kept increasing. Such impacts on atmospheric environment cause human health damage and affect global ecosystem. Air pollutants include primary pollutants (PM₁₀, SO_x, NO_x, etc.) locally generated by pollution sources or transported from other areas, and secondary pollutants (photochemical oxidant, etc.) which are formed through physical/ (photo) chemical reactions in the atmosphere.

According to the "World Health Statistics 2022" published by the World Health Organization, an estimated 7 million deaths are attributed to ambient and indoor air pollution in 2016. More than 90% of the world population is exposed to air quality conditions that do not WHO standards for PM_{2.5}.

Japan has experienced severe environmental pollutions, such as "Yokkaichi Asthma" caused by SO_x as well as air pollutions due to automotive gas emissions in densely populated areas from the 1950s through the 1990s. Based on these past experiences, this program provides policies and measures to control air pollutants as well as the methodologies of air quality monitoring, emission inventories, dispersion modeling. In addition, this program offers an opportunity to share rich experiences of Japanese air quality management with participating countries through lectures/discussions and site visits.

For what?

The Program aims to contribute to the improvement of the air quality management in participating countries especially by strengthening capacities to develop policies and measures for air pollution control and introducing air quality management tools such as air quality monitoring, emission inventory, and dispersion modeling.

For whom?

Technical officials engaged in air quality management and administration, or air pollution control at central or local government, or affiliated research institutions. Participants are expected to utilize the knowledge gained through the program to improve the air quality management in their home countries.

II. Description

1. Title (Course No.)

Capacity Development towards Air Quality Management (202411718J001)

2. Course Duration in Japan

February 8 to March 7, 2026

3. Target Regions or Countries

Indonesia, Kosovo, Kyrgyzstan, Mongolia, Nepal and Republic of North Macedonia

4. Eligible / Target Organization

This course is designed for central and local governments, and research institutes in the field of air quality management.

5. Capacity

6 participants

6. Language

English

7. Objective(s)

Participants contribute to improving air quality management in their own countries by making best use of the knowledge and techniques acquired in Japan.

8. Output and Contents

<Expected outputs>

- To understand the overall framework of air quality management
- To understand monitoring technologies and data analysis methods for various air pollutants, and examine their applicability to one's own city, country, or region
- To understand the methods for identifying sources and quantifying emissions of various air pollutants, as well as the key points of emission reduction measures, and assess their applicability to one's own city, country, or region
- To develop a feasible air quality management action plan for one's own city, country, or a region

<Structure of the Course>

*The program below is tentative.

1st week:

- (1) <Briefing> Program Orientation
- (2) <Presentation> Country Report from each participating country
- (3) <Lecture> Introduction workshop of Action Plan
- (4) <Lecture> History of Air Quality Policy in Japan
- (5) <Lecture> Japan's Air Quality Management Administration and Regulations on Air Pollutants
- (6) <Lecture> Environmental Impacts of Air Pollutants, Environmental Standards and Emission Limits

2nd week:

- (1) <Lecture> Emission Sources of Air Pollutants/Framework of Countermeasures Against Stationary and Mobile Sources
- (2) <Lecture/Site Visit> Quality Measurement Techniques and Sampling
- (3) <Lecture > Introduction and Utilization of Air Quality Model Simulation
- (4) <Lecture/Site Visit> Air Quality Management Administration and Regulations on Air Pollutants by Local Authorities
- (5) <Lecture> Evaluation and Analysis of Monitoring Data (Including QA/QC)
- (6) <Lecture> Mechanism of Photochemical Air Pollution and Its Countermeasures
- (7) <Lecture> Monitoring Methods of PM10 and PM2.5

3rd week:

- (1) <Practice> Intermediate Workshop on the Action Plan.
- (2) <Lecture> Overview of Air Pollution Emission Sources
- (3) Emission Reduction Technologies
- (4) <Lecture/Practice > How To Build And Utilize Emission Inventory Management System
- (5) <Lecture> Introduction and Utilization of Air Quality Management Tool; Model Simulation to Air Quality Management
- (6) <Site Visit> Factories implementing countermeasures against emission sources of Air pollutants and analytical institutions (1)

Final week:

- (1) <Site Visit> Factories implementing countermeasures against emission sources of Air pollutants and analytical institutions (2)
- (2) <Practice> Finalization of the Action Plan
- (3) <Presentation> Presentation of the Action Plan

III. Eligibility and Procedures

1. Expectations to the Applying Organizations

- (1) This course is designed primarily for organizations that intend to address specific issues or problems identified in their operation. Applying organizations are expected to use the program for those specific purposes.
- (2) This course is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These special features enable the course 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.

【 Remarks 】 Each Organizations is requested to strongly encourage female candidates to apply for the course to accelerate the realization of gender equality and women's empowerment.

Disabilities: Persons with disabilities who meet the required qualifications also have an opportunity to apply. Reasonable accommodations will be considered for participants with disabilities. Some programs of the course might have difficulty for persons with disabilities to participate due to environmental and other conditions. "Reasonable accommodation" means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case.

(1) Essential Qualifications

- 1) **Current Duties:** Applicants should be technical officials currently engaged in air quality management, air pollution control, or related administrative work at central or local government, or affiliated research institutions.
- 2) **Experience in the Relevant Field:** In principle, applicants should possess a minimum of three years of professional experience in air quality management, air pollution control, or related administrative work.
- 3) **Educational Background:** Applicants must hold a university degree in science or engineering, or possess an equivalent technical qualification relevant to the field of air quality management and environmental administration.
- 4) **Language Proficiency:** Applicants must have sufficient proficiency in both spoken and written English
- 5) **Health:** Applicants must be in good health to participate in the program in Japan. To reduce the risk of worsening symptoms associated with respiratory tract infection, please be honest to declare in the Medical History (QUESTIONNAIRE ON MEDICAL STATUS RESTRICTION of the application

form) if you have been a patient of following illnesses; Hypertension / Diabetes / Cardiovascular illness / Heart failure / Chronic respiratory illness.

(2) Recommended Qualifications

- 1) Gender Equality and Women's Empowerment: JICA seeks more female applicants due to the past records of fewer applications from women. JICA is committed to promoting gender equality and women's empowerment, and provides equal opportunities for all applicants regardless of their sexual orientation or gender identity.

3. Required Documents for Application

- (1) Application Form:** The Application Form is available at the JICA overseas office (or the Embassy of Japan) in respective countries. The application form should be typewritten in English.

* If you have any difficulties/disabilities which require assistance, please specify necessary assistances in the Medical History (1-(c)) of the application form. Information will be reviewed and used for reasonable accommodation.

- (2) Photocopy of Passport:** You should submit it 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.

*The following information should be included in the photocopy:

Name, Date of Birth, Nationality, Sex, Passport Number and Expiry Date

*It is recommended that your passport be valid for more than 6 months after the last day of the program.

- (3) English Score Sheet:** to be submitted with the application form, if the nominees have any official English examination scores. (e.g., TOEFL, TOEIC, IELTS)
- (4) Questionnaire:** to be submitted with the application form. Fill in Annex II of this General Information.
- (5) Country Report (Please see Annex I and II):** Fill the information in the format and submit with the Application Form. Detail is written in Annex I and II.

4. Procedures for Application and Selection

(1) Submission of the Application Documents

Closing date for applications: **Please confirm the local deadline with the JICA overseas office (or the Embassy of Japan).**

(All required material must arrive at **JICA Center in Japan by November 27, 2025**)

(2) Selection

Primary screening is conducted at the JICA overseas office (or the embassy of Japan) after receiving official documents from your government. JICA Center will consult with concerned organizations in Japan in the process of final

selection. Applying organizations with the best intentions to utilize the opportunity will be highly valued.

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.

(3) Notice of Acceptance

The JICA overseas office (or the Embassy of Japan) will notify the results **not later than December 18, 2025.**

5. Additional Document(s) to Be Submitted by Accepted Candidates

Country Report -- to be submitted together with Application Form by November 27, 2025

All candidates are required to prepare and submit a Country Report (Please read Annex I and II for detailed information.).

6. Conditions for Participation

The participants of KCCP are required

- (1) to strictly observe the course schedule,
- (2) not to change the air ticket (and flight class and flight schedule arranged by JICA) and lodging by the participants themselves,
- (3) to understand that leaving Japan during the course period (to return to home country, etc.) is not allowed (except for programs longer than one year),
- (4) not to bring or invite any family members (except for programs longer than one year),
- (5) 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,
- (6) to observe the rules and regulations of the program implementing partners to provide the program or establishments,
- (7) not to engage in political activities, or any form of employment for profit,
- (8) to discontinue the program, should the participants violate the Japanese laws or JICA's regulations, or the participants commit illegal or immoral conduct, or get critical illness or serious injury 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 stipulated in (3) of "4. Expenses", "IV. Administrative Arrangements",
- (9) to return the total amount or a part of the expenditure for the KCCP depending on the severity of such violation, should the participants violate the laws and

- ordinances,
- (10)** not to drive a car or motorbike, regardless of an international driving license possessed,
 - (11)** to observe the rules and regulations at the place of the participants' accommodation, and
 - (12)** to refund allowances or other benefits paid by JICA in the case of a change in schedule.

IV. Administrative Arrangements

1. Organizer (JICA Center in Japan)

- (1) **Center:** JICA Yokohama Center (JICA YOKOHAMA)
- (2) **Program Officer:** Mr. TAKAGI Shun (yicctt1@jica.go.jp)

2. Travel to Japan

- (1) **Air Ticket:** In principle, JICA will arrange an economy-class round-trip ticket between an international airport designated by JICA and Japan.
- (2) **Travel Insurance:** Coverage is from time of arrival up to departure in Japan. Thus, traveling time outside Japan (include damaged baggage during the arrival flight to Japan) will not be covered.

3. Accommodation in Japan

Basically, JICA will arrange the following accommodation(s) for the participants in Japan:

JICA Yokohama Center (JICA YOKOHAMA)
Address: 2-3-1, Shinko, Naka-ku, Yokohama, 231-0001, JAPAN
TEL: +81-45-663-3221
Please refer to facility guide of JICA Yokohama at its URL,
<https://www.jica.go.jp/english/domestic/yokohama/index.html>

If there is no vacancy at JICA Yokohama, JICA will arrange alternative accommodation(s) for the participants.

4. Expenses

The following expenses in Japan will be provided by JICA

- (1) Allowances for meals, living expenses, and stopover.
- (2) Expenses for study tours (basically in the form of train tickets).
- (3) Medical care for participants who become ill after arriving in Japan (the costs related to pre-existing illness, pregnancy, or dental treatment are not included).
- (4) Expenses for program implementation, including materials.
- (5) For more details, please see “III. ALLOWANCES” of “KENSHU-IN GUIDEBOOK,” (English/French/Spanish/Russian).

*Link to the Website:

https://www.jica.go.jp/english/our_work/types_of_assistance/tech/acceptance/training/index.html or
<https://jica-van-cms.jica.go.jp/custom/kccp/kccp01.html>

5. Pre-departure Orientation*

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

*YouTube of “Knowledge Co-Creation Program and Life in Japan” and “Introduction

of JICA Center” are viewable from the link below.

Image videos of 'Introduction of JICA Center (YouTube)' show the following information of JICA Centers: Location, Building, Entrance, Reception (Front desk), Lobby, Office, Accommodation (Room), Amenities (Hand dryer), Bathroom (Shower and Toilet), Toiletries, Restaurant, Laundry Room (Washing machine, Iron), ICT Room (Computer for participants), Clinic, Cash dispenser, Gym, Neighborhood

Part I: Knowledge Co-Creation Program and Life in Japan	
English ver.	https://www.youtube.com/watch?v=SLurfKugrEw
Part II: Introduction of JICA Centers in Japan	
JICA Yokohama	https://www.jica.go.jp/yokohama/english/office/index.html

ANNEX I

Country Report JFY 2025

Please follow the instruction below for your **Country Report**.

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1. Objective:

This document will be used as a screening material for the overview of the air quality management situation in the participant's countries. Please describe as precise as possible unless related data is unavailable.

The report should be typewritten in English and submitted together with the Application Form, but as a separate document or an electronic data file.

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2. Contents: Please include the contents shown below.

3. Length: 1 to 2 pages

4. Data Format: Microsoft Word

5. Submission: **November 27 (Thursday), 2025** with your Application Form.

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6. Point to keep in mind:

The Country Report is important information source to make JICA's cooperation activities more effective for the program participants' countries. During the program, the participants will be asked whether they allow JICA to refer the country reports contents for JICA's relevant studies and operations in the future.

The Country Reports submitted from applicants who are not accepted by JICA will be safely deleted for a copyright concern and shall not be used by JICA.

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Country Report

Name:

Country:

Organization/ Your position:

Email address:

< Your Organization >

1. Name of your organization and its main duty

2. Your organization chart (attach in a separate sheet if necessary)

3. Budget and the number of the staff members related to air quality management in your organization

< Air Quality Management >

4. Air quality management legislations and their contents (attach laws/regulations in a separate sheet if necessary)

5. Role of central government and local government for air quality management respectively (explain here or in ANNEX II)

6. Ambient air quality standards and existing problems (explain here or in ANNEX II)

7. Measurement of air pollutants and monitoring systems for air quality (by whom? how? and how often?) (explain here or in ANNEX II)

8. Usage of air quality management tools such as:
 - Atmospheric dispersion models,
 - Emission inventory,
 - Particulate Matter (PM₁₀ and PM_{2.5}) speciation, and
 - Recent models.

< Issues surrounding Air Quality >

9. Historical background of air quality control in your country

10. Present status of air quality in your country (in big cities and in countryside)

11. Main sources of air pollution (what kind of industry? what kind of transport?)

12. The number of complaints and health damage (ex. number of patients) caused by air pollution.

13. Challenges for implementing air quality management

< Issues to be Focused on >

14. Idea of topics you would like to describe in your Action Plan (see the Annex III)

Important Notice for Your Presentation

- The accepted participants are expected to deliver a 20-minute presentation based on the Country Report in the first week of this program.
- For the presentation, the accepted participants are supposed to prepare PowerPoint slides of the Country Report.
- In the presentation, please briefly explain the background information on your country, your organization and your job. Please put your emphasis on the problems your organization is facing, and possible solutions for them.
- The important part of the presentation is to share your experiences with Japanese experts and participants from other countries.
- Country Report is an important information source for JICA as well as other participants. JICA might refer to the content of your Country Report in JICA's relevant studies.

ANNEX II

1. Jurisdictions of Central and Local Government in Air Quality Management Administration

Please clarify the roles of central government, regional government (province or state) and local government (municipality) for the regulation of air pollution in your country. (Please fill in the check mark on the responsible organization.)

	Responsibility of Administration	Central Government	Regional Government (Province or State)	Local Government (Municipality)	Other Organization (Public or Private)
Strategy and plan for air quality management and pollution control	Designation of responsibilities among authorities and institutional arrangement				
	Preparation of strategy and plan for air quality management and pollution control				
	Preparation of related analytical works and tools for decision making such as Emission Inventory and Simulation Modeling				
Legal and regulatory framework	Preparation of Law and Regulation				
	Preparation of Guidelines				
	Setting of related Standards				

	Responsibility of Administration	Central Government	Regional Government (Province or State)	Local Government (Municipality)	Other Organization (Public or Private)
Ambient air quality monitoring	Preparation of Ambient Air Quality Monitoring Plan (National and Sub-National Level)				
	Installation of Equipment for Ambient Air Quality Monitoring (National and Sub-National Level)				
	Related laboratory works for Ambient Air Quality Monitoring (National and Sub-National Level)				
	Data evaluation of Ambient Air Quality Monitoring (National and Sub-National Level)				
	Data dissemination and utilization of Ambient Air Quality Monitoring (National and Sub-National Level)				
Emission source monitoring	Emission source monitoring of stationary sources such as power plants, factories and incinerators				
	Emission source monitoring of mobile sources and related fugitive sources such as roads dust and gas stations				

	Responsibility of Administration	Central Government	Regional Government (Province or State)	Local Government (Municipality)	Other Organization (Public or Private)
	Emission source monitoring of area sources and others such as open burning and households' emissions				
Emission control (voluntary or mandated), inspection, administrative guidance and law enforcement	Stationary sources such as power plants, factories and incinerators				
	Mobile sources and related fugitive sources such as roads dust and gas stations				
	Area sources and others such as open burning and households' emissions				

2. Please fill in Ambient Air Quality Standards, currently measured values and existing problems to achieve the Standards in your country or the area under your direct control.

Year: _____ Country: _____ Area: _____

	Unit (ppm or mg/m ³)	Standard Value			Current Annual Average Values Measured	Existing Problems
		1 hour	1 day (24-hour)	Annual		
Sulfur Dioxide (SO ₂)						
Nitrogen Dioxide (NO ₂)						
Photochemical Oxidant						
Carbon Monoxide (CO)						
Suspended Particulate Matter such as TSP, PM ₁₀ , PM _{2.5} (Please specify.)						
Others						

3. Please indicate status of emission standards in your country (and area if applicable) including controlled specific air pollution sources and pollutants.

Year: _____ country: _____ area: _____

Targeted Air Pollution Sources	Title of Emission Standards and/or Related Laws and Regulations	Controlled Air Pollutants (such as TSP, PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO and others)	Current Status of Compliance
Stationary Sources (such as power plants and factories):			
Mobile Sources (such as auto vehicles and vessels):			
Others:			

ANNEX III

<For accepted applicants only>

• Formulation of an Action Plan during the Program :

All participants are required to formulate an Action Plan during the Knowledge Co-Creation Program and make its presentation **at the end of the program.**

Please pick up one topic to tackle from issues that you mention in your country report, and formulate an Action Plan, by utilizing the knowledge that you have gained through the Program. Try to formulate the plan in consideration of the existing human and financial resources in your organization in as efficient and effective way as possible.

<Contents (Recommended)>

- a. Theme
- b. Background, issues and problems
- c. Scope
- d. Goals, objectives and outcomes
- e. Direct and indirect beneficiaries
- f. Actions and activities
- g. Implementation schedule
- h. Responsible agencies and their roles
- i. Strategies and tactics for implementation
- j. Monitoring and evaluation
- k. Budget and resources

All participants are required to prepare presentation materials on Action Plan. More detailed guidance is provided after your arrival in Japan.

*In order to formulate a better Action Plan, you are recommended to bring necessary documents, data as well as personal computers, if possible, from your country. Desktop computers are available at JICA's International Centers but your own personal computer will make you more convenient to work on Action Plan.

*Like Country Reports, Action Plans are important information source for JICA. to enable JICA's cooperation activities be more effective for the Program participants' countries. During the Knowledge Co-Creation Program, the participants will be asked whether they allow JICA to refer the Action Plan contents for a JICA's relevant studies and operations in the future.

For Your Reference

JICA and Capacity Development

Technical cooperation is people-to-people cooperation that supports partner countries in enhancing their comprehensive capacities to address development challenges by their own efforts. Instead of applying Japanese technology per se to partner countries, JICA's technical cooperation provides solutions that best fit their needs by working with people living there. In the process, consideration is given to factors such as their regional characteristics, historical background, and languages. JICA does not limit its technical cooperation to human resources development; it offers multi-tiered assistance that also involves organizational strengthening, policy formulation, and institution building.

Implementation methods of JICA's technical cooperation can be divided into two approaches. One is overseas cooperation by dispatching experts and volunteers in various development sectors to partner countries; the other is domestic cooperation by inviting participants from developing countries to Japan. The latter method is the Knowledge Co-Creation Program, formerly called Training Program, and it is one of the core programs carried out in Japan. By inviting officials from partner countries and with cooperation from domestic partners, the Knowledge Co-Creation Program provides technical knowledge and practical solutions for development issues in participating countries.

The Knowledge Co-Creation Program (Group & Region Focus) has long occupied an important place in JICA operations. About 400 pre-organized courses 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 is being customized by the different target organizations to address the specific needs, 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, as the first non-Western nation to become a developed country, built itself into a country that is free, peaceful, prosperous and democratic while preserving its tradition. Japan will serve as one of the best examples for our partner countries to follow in their own development.

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 a process of adoption and adaptation, of course, has been accompanied by countless failures and errors behind the success stories.

Through Japan's progressive adaptation and application of systems, methods and technologies from the West in a way that is suited to its own circumstances, Japan has

developed a storehouse of knowledge not found elsewhere from unique systems of organization, administration and personnel management to such social systems as the livelihood improvement approach and governmental organization. It is not easy to apply such experiences to other countries where the circumstances differ, but the experiences can provide ideas and clues useful when devising measures to solve problems.

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.



Contact Information for Inquiries

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

JICA Yokohama Center (JICA YOKOHAMA)

Address: 2-3-1 Shinko, Nakaku, Yokohama,
Kanagawa 231-0001, Japan

TEL: +81-45-663-3221 FAX: +81-45-663-3265