## 18.Environmental Management

Domestic Waste Water Treatment Techniques 生活排水対策		GROUP	Ý	0980006
	Enviro	onmental Management-	-Water F	Pollution
		10 participants /		English
OBJECTIVE		ET ORGANIZATION	GROUF	C
The objective of this program is to make feasible action plans to solve or improve wastewater problems for which the participant is responsible through learning about Japanese wastewater treatment techniques and policies. To reach the objective, participants are expected to achieve the following: (1)To understand waste water treatment management in central/local government in Japan, and understand the problems in own country (2)To acquire a basic understanding of the knowledge and technologies related to waste water treatment systems for sewerage, and be able to evaluate technologies that can be applied in your own country (3)To learn methods for measuring the degree of environmental pollution and methods for managing pollution, and be able to explain them (4)To comprehend the ideal form of effective waste water treatment technologies in terms of water resource and river pollution treatment policies from the point of view of water recycling and the water cycle (5)To propose sewerage management plans	[Target Organizations] Central/local government [Target Group] Technical administrators in the field of domestic wastewater treatment in central or local governments			ıestic
CONTENTS	PROGRAM PERIOD	Aug.24.2009 $\sim$ Dec.1	2.2009	
All topics consist of lectures, practice, and exercises (1) Introduction to municipal administration, Introduction to water quality preservation	IMPLEMENTING PARTNER	KITAKYUSHU INT'L TECHNO-COOPERA ASSOCIATION	ATIVE	
(2) Wastewater treatment technique, Treatment technique for human waste,	JICA CENTER	JICA Kyushu		
(4)Administration for water quality, Monitoring method for water pollution,	COOPERATION PERIOD	2005~2009		
Recycling technology of polluted mud (5) Job report, Action plan, Final Report	REMARKS	<ol> <li>A problem analytic help identify the problems in their or</li> <li>The curriculum f low-cost domestic treatment methods tanks.</li> </ol>	particip ountries. ocuses c wastewat	oants' on ter
	1	1		
Environmental Administration with Community Participation 住民との協働による環境都市づくり Envin	ronmental Manag	GROUP gement—Environmenta 9 participants /	l Admini	0980007 istration English
OBJECTIVE	TARG	ET ORGANIZATION	GROUF	 C
<ul> <li>This program is designed to enable participants to improve their abilities to prevent environmental pollution undergoing rapid industrialization through lessons learned from Minamata's experience, and to utilize know-how of mobilizing local communities in the environmental conservation policies of participants' countries.</li> <li>1)Through understanding what Japan and Minamata City have experienced, be able to understand the seriousness of pollution damage and the difficulty of restoring the natural environment.</li> <li>2)Through observation of Minamata City activities, understand the specific arrangements of the creation of a recycling-oriented society in Japan that involves the residents, the private companies, local governments and the state.</li> <li>3)Understand the arrangements of environmental education conducted in concert with local residents.</li> <li>4)Propose a basic strategy for environmental improving activities with community participants in your own country.</li> </ul>	<ul> <li>engaged in environmental policy-making</li> <li>(2) NGO personnel working on environmental conservation</li> <li>* Participants are expected to have experience</li> </ul>			tal ence or ienting
CONTENTS	PROGRAM PERIOD	Sep.27.2009 $\sim$ Nov.7.	2009	
The program consists of lectures, practical exercises, discussions, observation and communication with local residents, covering the following themes: (1)Causes of "Minamata Disease" and its mechanism, Physical and mental injury by	IMPLEMENTING PARTNER	MINAMATA CITY G	OVERNM	1ENT
Minamata disease and its deleterious effects on local communities (2)Environmental policies and administration of the nation, prefecture and Minamata	JICA CENTER	JICA Kyushu		
disease	COOPERATION	2005~2009		

Participation of countries which

face the hazard of environmental

At least 2 candidates are required

pollution is preferable.

per country.

REMARKS

(3)Efforts made by Minamata City government and local residents toward environmental conservation (classification of wastes, activities relating to ISO14001), Communication with patients of Minamata disease, their families and

citizens (4)Job report, Action Plan

Formulation of Environmental Standards and Regulations 環境汚染基準・規制策定手法	Manage	GROUP <b>Y</b> 0980053 mement—Environmental Administration
EIVI	ronmentai wanag	
		10 participants / English
OBJECTIVE           The purpose of the training course is to enhance the ability of policymaking especially for environmental policy or regulations based on the environmental monitoring data.           For this purpose, we set up 4 objectives:           (1) To understand the meanings of the environmental indicators           (2) To acquire the ability to formulate the environmental standards based on the environmental monitoring data           (3) To acquire the ability to formulate the environmental regulations based on the environmental monitoring data           (4) To acquire the ability to plan countermeasures against pollution based on the environmental regulations <b>ECONTENTS</b> 1) Meaning of environmental indicator (BOD, COD, NOx, SOx, etc.)           2) Environmental monitoring method           3) Formulating the environmental standards based on the environmental monitoring data in participating countries           4) Formulating the environmental standards	【Target Organ Policy making in central / lo 【Target Group	ET ORGANIZATION / GROUP hizations ] sections about environmental issues cal governments
Waste management Technique and Environmental Education		GROUP 1 0980100
廃棄物管理技術と環境教育	<b>-</b> .	
	Environme	ntal Management—Urban Solid Wastes
	Environme	ntal Management—Urban Solid Wastes
OBJECTIVE	1	ntal Management—Urban Solid Wastes 7 participants ★ / English ET ORGANIZATION / GROUP
OBJECTIVEThis course is designed for technical officials in developing countries, who are in charge of solid waste management in national/local government to enhance their capabilities for effective and proper planning and implementation of solid waste management.1) To clarify the issues and causes of solid waste management in own countries.2) To understand the historical process of environmental policy and waste management system in Japan.3) To understand the techniques and measures adapted in each process of solid waste management (collection and transportation, intermediate treatment, final disposal) in Japan.4) To understand the techniques and measures of final disposal site in Japan.5) To understand the importance and concrete methods of environmental education/awareness for solid waste management (6) To propose basic policy towards proper waste management in own countries.	TARG Department w	7 participants ★ / English
<ul> <li>This course is designed for technical officials in developing countries, who are in charge of solid waste management in national/local government to enhance their capabilities for effective and proper planning and implementation of solid waste management.</li> <li>1) To clarify the issues and causes of solid waste management in own countries.</li> <li>2) To understand the historical process of environmental policy and waste management system in Japan.</li> <li>3) To understand the techniques and measures adapted in each process of solid waste management (collection and transportation, intermediate treatment, final disposal) in Japan.</li> <li>4) To understand the techniques and measures of final disposal site in Japan.</li> <li>5) To understand the importance and concrete methods of environmental education/awareness for solid waste management</li> <li>6) To propose basic policy towards proper waste management in own countries.</li> </ul>	TARG Department w management in	7participants ★ /       English         ET ORGANIZATION / GROUP       hich deals with solid waste
<ul> <li>This course is designed for technical officials in developing countries, who are in charge of solid waste management in national/local government to enhance their capabilities for effective and proper planning and implementation of solid waste management.</li> <li>1) To clarify the issues and causes of solid waste management in own countries.</li> <li>2) To understand the historical process of environmental policy and waste management system in Japan.</li> <li>3) To understand the techniques and measures adapted in each process of solid waste management (collection and transportation, intermediate treatment, final disposal) in Japan.</li> <li>4) To understand the techniques and measures of final disposal site in Japan.</li> <li>5) To understand the importance and concrete methods of environmental education/awareness for solid waste management</li> </ul>	TARG Department w management in	7participants ★/       English         ET ORGANIZATION / GROUP       hich deals with solid waste a national/local government         Jun.22.2009 ~ Sep.11.2009
<ul> <li>This course is designed for technical officials in developing countries, who are in charge of solid waste management in national/local government to enhance their capabilities for effective and proper planning and implementation of solid waste management.</li> <li>1) To clarify the issues and causes of solid waste management in own countries.</li> <li>2) To understand the historical process of environmental policy and waste management system in Japan.</li> <li>3) To understand the techniques and measures adapted in each process of solid waste management (collection and transportation, intermediate treatment, final disposal) in Japan.</li> <li>4) To understand the techniques and measures of final disposal site in Japan.</li> <li>5) To understand the importance and concrete methods of environmental education/awareness for solid waste management</li> <li>6) To propose basic policy towards proper waste management in own countries.</li> <li>1) •Issue analysis-workshop and interim discussion</li> <li>2) •Countermeasure for environmentin Kitakyushu city</li> </ul>	TARG Department w management in PROGRAM PERIOD	7participants ★ / English ET ORGANIZATION / GROUP hich deals with solid waste a national/local government
This course is designed for technical officials in developing countries, who are in charge of solid waste management in national/local government to enhance their capabilities for effective and proper planning and implementation of solid waste management. 1) To clarify the issues and causes of solid waste management in own countries. 2) To understand the historical process of environmental policy and waste management system in Japan. 3) To understand the techniques and measures adapted in each process of solid waste management (collection and transportation, intermediate treatment, final disposal) in Japan. 4) To understand the techniques and measures of final disposal site in Japan. 5) To understand the importance and concrete methods of environmental education/awareness for solid waste management 6) To propose basic policy towards proper waste management in own countries. <b>CONTENTS</b> 1) •Issue analysis-workshop and interim discussion 2) •Countermeasure for environmentin Kitakyushu city •Solid waste management administration and environment impact assessment 3)•Flow of general waste	TARG Department w management in PROGRAM PERIOD IMPLEMENTING	7participants ★/       English         ET ORGANIZATION / GROUP         hich deals with solid waste         n national/local government
<ul> <li>This course is designed for technical officials in developing countries, who are in charge of solid waste management in national/local government to enhance their capabilities for effective and proper planning and implementation of solid waste management.</li> <li>1) To clarify the issues and causes of solid waste management in own countries.</li> <li>2) To understand the historical process of environmental policy and waste management system in Japan.</li> <li>3) To understand the techniques and measures adapted in each process of solid waste management (collection and transportation, intermediate treatment, final disposal) in Japan.</li> <li>4) To understand the techniques and measures of final disposal site in Japan.</li> <li>5) To understand the importance and concrete methods of environmental education/awareness for solid waste management</li> <li>6) To propose basic policy towards proper waste management in own countries.</li> <li>1) • Issue analysis-workshop and interim discussion</li> <li>2) • Countermeasure for environmentin Kitakyushu city</li> <li>• Solid waste management administration and environment impact assessment</li> </ul>	TARG Department w management in PROGRAM PERIOD MPLEMENTING PARTNER	7participants ★        English         ET ORGANIZATION / GROUP       hich deals with solid waste a national/local government         national/local government         Jun.22.2009 ~ Sep.11.2009         Kitakyushu International Techno-Cooperative Association

Workshop on Administration of Environmental and Social Consideration Process for Implementation of a Japanese ODA Loan Project 円借款事業における環境社会配慮実務 Environmental		GROUP 👖	0980106 ement Issue
Target Countries : Countries which have an on-going or a proposed Japanese ODA Loan Proj	ect	18 participants /	English
OBJECTIVE	TARG	ET ORGANIZATION / GRO	OUP
<ul> <li>(Objectives)</li> <li>(The participants are expected to work for qualitative improvement of the EIA in their countries and to implement the environmental and social considerations required to Japanese ODA Loan.</li> <li>(Outputs)</li> <li>(1) To be able to explain necessity of adequate environmental and social considerations referring to lessons from experience of ODA projects</li> <li>(2) To be able to explain outline of guidelines of environmental and social considerations required for a Japan's ODA loan project</li> <li>(3) To understand the fundamental ideas of EIA and to be able to explain their proper procedure of environmental and social consideration.</li> <li>(4) To identify the issues and measures to promote proper EIA in their countries</li> </ul>	Project (or a p environmental accordance an EIA {Target group <job title=""> Din equivalent <experience> the EIA field s environmental <other>Contr</other></experience></job>	ation body of a Japan's O proposed project), which r and social consideration d (2) the implementation	requires in body of the or erience in charge of or EIA thich the
CONTENTS	PROGRAM PERIOD	May.24.2009 $\sim$ Jun.6.2009	
(1) - Lecture & Discussion: Experience of environmental and social consideration for ODA projects and its lessons -Lecture: lessons and learns of large scale development project in Japan	IMPLEMENTING PARTNER	Japan International Cooper (JICA)	ration Agenc
Lecture: Project economic analysis of a project and environmental and social	JICA CENTER	JICA Tokyo	
onsideration 2)– Lecture: Environment and Social Consideration of JICA 3)–Lecture: Overviews of EIA	COOPERATION PERIOD	2008~2010	
-Lecture: Social Environmental Assessment - Lecture: - Group work: EIA Process (Screening, Scooping, Mitigation, Public Hearing & Fransparency /Accountability, Monitoring & Follow-up) (4) -Presentation: Country Report, Case Study -Lecture: Environmental Assessment law in Japan(Comparative study) -Report writing: on findings through the program	REMARKS		
Pollution Control for Hazardous Substances in the Environment 環境中の有害汚染物質対策 Environmental Target Countries:Algeria, Philippines, Viet Nam, El Salvador, Macedonia, Jordan	Management—Ot	GROUP 👔 ther Environmental Manage 6 participants 🦯	0980224 ement Issu Englisl
OBJECTIVE	TARG	ET ORGANIZATION / GRO	OUP
<ul> <li><li>CObjective&gt;</li> <li>Participants will acquire the abilities to evaluate from emission sources on the environment pollution control, and formulate measures to prevent pollution due to hazardous substances.</li> <li>(Outputs&gt;</li> <li>(1) Understand recent conditions and history of pollution caused by hazardous substances, including Minamata disease, etc. caused by metal containments.</li> <li>(2) Understand the effects on human health resulting from metal contaminants and other hazardous substances.</li> <li>(3) Understand local government's pollution controls for hazardous substances such as environmental assessment and systems based on laws and ordinances.</li> <li>(4) Understand analytical techniques and methods of environmental monitoring mplemented by local government.</li> <li>(5) Understand methods of surveying to obtain a grasp of sources of environmental pollution due of metal contaminants</li> </li></ul>	TARGET ORGANIZATION / GROUP <target organization="">         Governmental Organization (central/local) in         charge of environmental administration.         <target group="">         (1) University graduates with a chemistry         background, or the equivalent         (2) Key administrative engineers (not including         researcher) in the environmental field with at leg         3 years of experience         (3) Between 30 - 40 years of age</target></target>		ry cluding
	PROGRAM	$I_{\rm up} = 1.2009 \sim \Delta_{\rm ug} = 8.2009$	

CONTENTS	PROGRAM PERIOD	Jun.1.2009 ~ Aug.8.2009
Step1 <know background="" countermeasures="" hazardous="" pollutant="" the="" to=""> 1-1 Overview of Pollution Due to Hazardous Substances (Lecture) 1-2 Health Impacts, etc., of Hazardous Substances (Lecture)</know>	IMPLEMENTING PARTNER	OSAKA PREFECTURAL GOVERNMENT,DEP.OF ENVIRON.&Agri.
Step2 <acquire basic="" countermeasures="" hazardous="" information="" pollutant="" relating="" to=""></acquire>	JICA CENTER	JICA Osaka
<ul> <li>2-1 Environmental Measures by Local Government (Lecture)</li> <li>2-2 Environmental Monitoring (Lecture/Practice)</li> <li>Step3 <learn concrete="" countermeasures="" hazardous="" methods="" pollutant="" relating="" to=""></learn></li> </ul>	COOPERATION PERIOD	2006~2010
<ul> <li>3-1 Studies Trace Pollution Sources</li> <li>3-2 3R Promotion Techniques (Lecture/Observation)</li> <li>3-3 Pollution Control Technologies (Facility Tour)</li> <li>Step4 <acquire accomplishment="" country="" for="" from="" home="" in="" of="" solutions="" specialists="" tasks="" the=""></acquire></li> <li>Step5 <action and="" effects="" manifested="" of="" plan="" presentation="" training="" verification=""></action></li> <li>Follow-up by JICA-GEC Network</li> </ul>	REMARKS	Participants are required to bring some photos, slides, or data of examples of hazardous substances pollution.

Comprehensive Waste Management Technique 廃棄物管理総合技術		GROUP 👖 0980226
		ental Management—Urban Solid Wastes Management—Industrial Solid Wastes 9 participants / English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
<ul> <li>[Objective]</li> <li>Participants will acquire comprehensive knowledge and skills for effective and proper planing and implementation of solid waste management.</li> <li>[Outputs]</li> <li>To achieve the above mentioned objective, the participants will:</li> <li>(1) clarify the problems and causes of solid waste management in their countries,</li> <li>(2) understand the environmental policy and solid waste management in Japan,</li> <li>(3) understand the process of solid waste management in Japan (collection and transportation, intermediate treatment, and final disposal),</li> <li>(4) understand the importance of environmental education,</li> <li>(5) understand the roles of environmental management such as EIA in solid waste management</li> </ul>	in national/loc organizations [Target Group (1) Technical management a public organiz (2) More than	in charge of solid waste management cal government or public p] staff in charge of solid waste at national/local government or ations three (3) years of work experience solid waste management
CONTENTS	PROGRAM PERIOD	Aug.11.2009 ~ Nov.8.2009
* This program deals with general, industrial and medical wastes. ( <u>1)Issue analysis workshop:</u> Analyze the problems and causes of the waste management in participants' countries (2)Country report presentation: Share the	IMPLEMENTING PARTNER	Environment Department, Hiroshima Prefectural Government, Hiroshima International Center
results (3)Waste management policy: Environmental policy and administrative	JICA CENTER	JICA Chugoku
system of waste management in Japan (4)Landfill disposal technique: Sanitary landfill technique "Fukuoka Method", etc. (5)Collection and Transportation: Time	COOPERATION PERIOD	2006~2010
and motion, etc. (6)Waste treatment technique: Recycling, hazardous waste treatment, etc. (7)Environmental education and awareness: Role and concrete methods of environmental education taken by various actors (national/local government, schools, NGOs/citizens' groups and media) (8)Environmental management: Concept, methods and concrete examples of EIA, etc. (9)Feedback <u>session:</u> Review of each unit of the training (10)Final report presentation: Present an action plan for improving waste management in participants' countries	REMARKS	

## Research on Environment Technology 環境調和技術

GROUP 0980729

Environmental Management-Other Environmental Management Issues

		4 participants / English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
<ul> <li>[Objective] Acquiring information and skills on environment-conscious technologies, participant will be enhanced and developed his/her fundamental skills of research as a researcher who can work efficiently to plan and execute research project that contributes to solve problems concerned participant's home country even under restricted circumstances.</li> <li>[Expected Results]</li> <li>1) To deepen new technology and knowledge on environmental technology and be able to explain the international trends of the research and some cases of technological applications in the private sector.</li> <li>2) To improve accuracy fundamental analysis ability.</li> <li>3) To make a Technical Report as a result of the technical training in Japan</li> <li>4) To make a Research Proposal in their countries fully-considered current situation of their countries.</li> </ul>	[Target Group (1) Researchen technology (2) Individuals	h institutes, universities
CONTENTS	PROGRAM PERIOD	Jul.21.2009 ~ Feb.27.2010
[Preparatory phase] Participants are requested to make their own research proposals under the consultations of the host researchers.	IMPLEMENTING PARTNER	National Institute of Advanced Industrial Science
[Program in Japan]	JICA CENTER	JICA Tsukuba
<ol> <li><u>1) Lectures (introduction of the related field) (1-2 weeks)</u></li> <li><u>2) Study tour and site observation(1-2 weeks)</u></li> <li>Related industrial plant in the private sector, other institution or lab.</li> </ol>	COOPERATION PERIOD	2007~2009
3) Individual research (about 7 months) Participants will be assigned as a member of the laboratory of the host researcher, conduct research under the supervision of the host researcher, and write up the results in a technical report. *reference web site : http://www.aist.go.jp/index_en.html	REMARKS	Subjects to be offered in relation with the following fields: Effective Energy Resources Utilization technology assessment Evaluation, Measuring & Monitoring Eco-friendly technology Eco-material, Biomass utilization Human health

Regional Measures and Methods for Pollution Control for Environmental Engineers 地域環境保全対策と技術		GROUP	0980917
Envir	ronmental Manag	gement-Environmental /	Administration
		5 participants /	English
OBJECTIVE		ET ORGANIZATION / G	
<ul> <li>Participants will propose plans to better reflect upon the data and information obtained by the research section for the pollution control policy and administration in their countries.</li> <li>To reach the objective, participants are expected to achieve the following: <ol> <li>To gain practical ideas about an effective process of pollution control policy and measures (environmental policies, legal and administration systems, roles of research and administration sections and cooperation between them, the steps from surveys, and analyses to administrative measures)</li> <li>To gain a concrete understanding of water preservation, water pollutant sources, sewage treatment methods, and related survey and analysis techniques</li> <li>To gain a concrete understanding of waste treatment and waste recycling</li> <li>To make an action plan to strengthen the cooperation and interactions between research organizations, and policy and administration sections, and to better reflect upon the data and information obtained from research for the environmental policy and administration</li> </ol> </li> </ul>	for pollution or research instit charge of pollu administration officers/resear conservation.) (2) University engineering or	graduates in environme chemistry (NOT biolog	nvironment cials in id is NOT for ral ental gy)
CONTENTS	PROGRAM PERIOD	$Oct.6.2009 \sim Dec.3.200$	9
Preparatory Phase: Preparation of Country Report Phase in Japan: (1) Lectures:	IMPLEMENTING PARTNER	Hokkaido Institute of En Sciences	vironmental
Environmental administration in Japan and Hokkaido, Techniques for preventing	JICA CENTER	JICA Sapporo	
water and air pollution, Environmental Impact Assessment(EIA), Solid waste management and recycling, Environmental education (2) Practical exercises:	COOPERATION PERIOD	2005~2009	
Techniques of environmental monitoring(air & water), Environmental pollution source (3) Observation: Organizations and facilities related to pollution control, Factories (possible sources of pollution) Finalization phase: Implementation of the Action Plan and report the progress.	REMARKS	This program is NOT officers/researchers ir natural conservation(i management, preserva life and forests)	n charge of ncluding park
Automative Technology for Environmental Destantion		GROUP	0000001
Autmotive Technology for Environmental Protection 環境保全のための自動車技術 Envir		GROUP Y gement—Environmental A fransportation—Urban 6 participants /	Administration
OBJECTIVE	TARG	ET ORGANIZATION / G	ROUP
[Objective] By sharing the outputs of this training course among organizations, knowledge for making environmental protection policies will be used more widely. [Expected Results]	[Target Organ National or loc environmental	nizations] cal organizations in chau l issues concerning auto	rge of mobiles
(1) To recognize the present situation on environmental issues related to automobiles and its countermeasure technology in their countries in comparison with the situations in Japan and the world.	[Target Group] Administrative or technical officials of the above organizations with at least 5 years of experience		

with the situations in Japan and the world. (2) To build up the capability for policy development in their countries by deepening the knowledge of measures taken in Japan for the environmental protection on automobile in conjunction with the motorization.

(3) To obtain capability to predict the effectiveness of the measures taken in their countries through the practice for the promotion of legislation, institutionalization and implementation of regulations etc.

(4) To make action plans to solve the environmental problems in their countries related with motorization.

CONTENTS	PROGRAM PERIOD	Jun.18.2009 $\sim$ Aug.8.2009
[Preparatory phase] Making an inception report describing present situation, issues, etc. [Program in Japan]	IMPLEMENTING PARTNER	JAPAN AUTOMOBILE RESEARCH INSTITUTE (JARI)
(1)Lectures and exercise	JICA CENTER	JICA Tsukuba
<ul> <li>Outline of the automotive industry, governmental policy</li> <li>Environmental issues: emission, fuels, clean energy, traffic flows</li> <li>Traffic flows, vehicle recycling technology, registration</li> </ul>	COOPERATION PERIOD	2005~2009
<ul> <li>Atmospheric observation system, etc.</li> <li>(2) Discussion</li> <li>Presentation of inception report and action plan</li> </ul>	REMARKS	Web site: JARI http://www.jari.or.jp/en/index.html

Environmental Impact Assessment for ODA Project		GROUP 1 0980936
ODAI:おける環境影響評価         Environmental	Management-Ot	her Environmental Management Issues
		13 participants / English
OBJECTIVE		ET ORGANIZATION / GROUP
<ul> <li>[Objective]</li> <li>Participants will be able to increase their capability for providing appropriate guidance to organizations engaged in EIA (Environmental Impact Assessment) or ESC (Environmental and Social Considerations) as well as being able to make more appropriate judgment for the implementation of EIA in their countries by referring to numerous advanced cases.</li> <li>[Outcome]</li> <li>Through the program, participants are expected to:</li> <li>(1) Be able to explain the fundamental ideas, mission and problems of ESC.</li> <li>(2) Learn the efforts of international aid agencies to increase the awareness of ESC and be able to explain the points of procedures and techniques for the implementation of EIA/ESC.</li> <li>(4) Gain the skills to facilitate smooth consensus-building through workshops.</li> <li>(5) Be able to identify issues of EIA/ESC in their counties, analyze problems and logically present their solutions.</li> </ul>	<ul> <li>2) National or large-scale de [Group]</li> <li>(1)be technica implementatio</li> <li>(2)have basic 1</li> <li>(3)be able to u the course to</li> <li>(4)be under fo</li> <li>(5)be universit</li> <li>(6)have enoug and presentati</li> <li>(7)be in good 1</li> </ul>	authority for EIA, Local Government engaged in velopment projects requiring EIA l officers in charge of planning and n of in ODA projects, knowledge and experience in EIA, titilize the knowledge obtained during own administrative operations, rty-five (45) years of age, y graduates or equivalents, h English capability for discussions ons. health, both physically and mentally
CONTENTS	PROGRAM PERIOD	Jun.14.2009 $\sim$ Jul.11.2009
<preliminary country="" home="" in="" phase=""> Preparations for Inception Report (organizational framework and job description, state of EIA system and Cases conducting EIA in their organizations) and its</preliminary>	IMPLEMENTING PARTNER	Overseas Environmental Cooperation Center
presentation.	JICA CENTER	JICA Tokyo
<core in="" japan="" phase=""></core>	COOPERATION PERIOD	2005~2009
A set of exercise, lectures and site visit will be covered in the main subjects follow. 1) Introduction to EIA, 2) International cooperation and EIA, 3) Procedures and methodologies of EIA, 4) Operational skills, 5) Presentation skills Through these subjects, participants formulate model plan for implementing EIA. <follow-up country="" home="" in="" phase=""> Participants are expected to report the current situation on EIA.</follow-up>	REMARKS	Since this program is subject to administrative officers with technical background, researchers may not be able to attain their academic objectives through this training program.
Water Environmental Monitoring 水環境モニタリング	Enviro	GROUP 🚺 0980962 nmental Management—Water Pollution 10participants / English
Water Environmental Monitoring 水環境モニタリング OBJECTIVE	1	nmental Management-Water Pollution
水環境モニタリング	TARG <organization (1) Central/lo institutions in <qualification (1)leading teck government to and systematic (2) being a uni engineering) o background, a environment, (3)25 -35 year (4)have sufficient making present</qualification </organization 	nmental Management—Water Pollution 10 participants / English ET ORGANIZATION / GROUP Cal government and public charge of water quality monitoring. S> unical officers in central and local o plan and implement comprehensive c monitoring on water quality. versity graduate (science or r have the equivalent academic nd have basic knowledge on water
水環境モニタリング OBJECTIVE [Objective] This course aims at enhancing technical capabilities of officers and laboratory staffs in the field of water quality monitoring and helping them develop action plans for improving their operations. [Outputs] Participants are expected to be able to: (1)To be able to explain the mechanism of the water pollution and its effects. (2)To deepen the knowledge on water quality management. (3)To gain the basic practical skills on water quality monitoring and data processing. (4) To analyze the challenges on water quality monitoring in relevant organization	Corganization (1) Central/lo institutions in (2) Qualification (1) leading tech government to and systematic (2) being a uni engineering) o background, a environment, (3) 25 - 35 year (4) have sufficie	nmental Management—Water Pollution 10 participants / English ET ORGANIZATION / GROUP Cal government and public charge of water quality monitoring. So unical officers in central and local o plan and implement comprehensive c monitoring on water quality. versity graduate (science or r have the equivalent academic nd have basic knowledge on water rs of age, ent command for discussing and
水環境モニタリング OBJECTIVE OBJECTIVE (Objective) This course aims at enhancing technical capabilities of officers and laboratory staffs in the field of water quality monitoring and helping them develop action plans for improving their operations. [Outputs] Participants are expected to be able to: (1)To be able to explain the mechanism of the water pollution and its effects. (2)To deepen the knowledge on water quality management. (3)To gain the basic practical skills on water quality monitoring and data processing. (4) To analyze the challenges on water quality monitoring in relevant organization and formulate an action plan.	TARG <organization (1) Central/lo institutions in <qualification (1)leading teck government to and systematic (2) being a uni engineering) o background, a environment, (3)25 -35 yeau (4)have sufficient making present</qualification </organization 	nmental Management—Water Pollution 10 participants / English ET ORGANIZATION / GROUP Cal government and public charge of water quality monitoring. So mical officers in central and local o plan and implement comprehensive c monitoring on water quality. versity graduate (science or r have the equivalent academic nd have basic knowledge on water rs of age, ent command for discussing and tation in English
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Seminar on Comprehensive Solid Waste Management		GROUP 1 0980974
廃棄物総合管理セミナー	Environme	ntal Management—Urban Solid Wastes
		11 participants / English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
<ul> <li>Participants are expected to <ol> <li>expand the knowledge on administration system of solid waste management system.</li> <li>enhance the outline of solid waste management technologies which include collection, transportation, intermediate treatment, final disposal, re-use and recycling.</li> <li>expand the knowledge for improving their institution through understanding their own problems and other countries' case.</li> </ol></li></ul>	waste manager governments of years of occup (2) Under 45 y (3) University	r officials presently in charge of solid nent in central or provincial or in local bodies, with more than 2 vational experience in this field rears old graduates or possess equivalent fications in this field
CONTENTS	PROGRAM	May.13.2009 ~ Jul.2.2009
The following subjects are covered at the seminar;	PERIOD	
(1) Waste management administration in Japan, Planning of waste management (2) Reduction of waste and citizen's participation	PARTNER	Japan Environmental Sanitation Center
(3) Solid waste collection and transportation	JICA CENTER	JICA Yokohama
<ul><li>(4) Solid waste treatment and disposal</li><li>(5) Recycling and reuse technologies</li></ul>	COOPERATION PERIOD	2005~2009
<ul><li>(6) Hazardous waste management</li><li>(7) Others (country report presentation, group discussion and action plan presentation)</li></ul>	REMARKS	This program is designed for countries whose main final disposal site is NOT in coral area. The country report is used not only for selecting applicants, but also for presentation.
Environmental Management Technology in Chemical Industries 化学産業における環境管理技術	Management—Ot	GROUP 👔 0980982 her Environmental Management Issues
		6 participants / English
OBJECTIVE		ET ORGANIZATION / GROUP
The participants are expected to obtain the capabilities of applying environmental management skills and methods in their respective countries, through learning of the latest information regarding those skills used in Japan. [Expected Results] 1. To broaden understanding of the legal system and management technique for chemicals through the whole life cycle from production to disposal of products as well as their environmental management 2. To acquire technical knowledge needed for the management of chemical substances such as test and assessment methods, risk assessment techniques, etc. 3. To gain a better understanding on comprehensive knowledge of the latest technology currently used in Japan for environmental management i.e. safety management and reduction of effluent discharge, detoxification of hazardous chemicals, resources recycling, energy conservation, etc. 4. To gain understanding of environmental monitoring and domestic solid waste treatment conducted by local governments	other chemica environmental [Target Group (1) Governmer industry, busir engineers with experience in conservation (2) University academic back spoken and wr	cal governments, petrochemical and l industries in charge of management al intal inspectors or planners for the mess executives or technical at least 5 years of practical the field of environmental graduates or those with equivalent aground and proficient command of
CONTENTS	PROGRAM PERIOD	Jun.1.2009 $\sim$ Jul.18.2009
1: Orientations on the Latest Technologies Implemented in Local Government (1) Introduction of the City of Yokkaichi and its Petrochemical Industrial Complex (2) Laws on Emission and Disposal of Chemicals	IMPLEMENTING PARTNER	INT'L CENTER FOR ENVIRONMENTAL TECH. TRANSFER
(3) Footsteps on Improving Environment (Yokkaichi's Experience)	JICA CENTER	JICA Chubu
(4) Local Government's Environment Monitoring System	COOPERATION	
2: Risk Management Technology on Chemical Substances (1) Risk Management of Chemical Substances and Latest Technology of Analysis	PERIOD	2005~2009

The Environmental Management of Enclosed Coastal Seas 閉鎖性海域の水環境管理		GROU	Ρİ	0980997
闭頭性//// 現場官理	Enviro	onmental Managemen	nt—Water	Pollution
Target Countries: Countries with closed marine systems and/or river estuary regions		3 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATIC	N / GROU	JP
To transfer skills related to Japan's experiences of environmental management in enclosed coastal seas and develop the human resources who could play a major role in this field.		nizations】 ake in charge of en f enclosed coastal		ntal
To reach the objective, participants are expected to achieve the following: (1)To clarify environmental problems or issues related to enclosed coastal seas in your country through formulating and presentation of Job Report (2)To improve your knowledge or skill in this field through the training (3)To formulate a practical action plan and finding a solution to environmental problems in your country (4)To share your action plan in your organization and submit a progress report after 6 months	administrative information an environmental seas	p] ators, and enginee bodies who prese d/or experience of management of en	ntly need on the	
CONTENTS	PROGRAM PERIOD	Aug.17.2009 $\sim$ Oc	et.23.2009	
[Preliminary Phase in a participant's home country] Preparation of Job Report on environmental problems of enclosed coastal seas in participant's country.	IMPLEMENTING PARTNER	INTERNATIONAL	L EMECS (	CENTER
	JICA CENTER	JICA Hyogo		
<ul> <li>[Core Phase in Japan]</li> <li>(1)Overview of the management of enclosed coastal seas</li> <li>(2)Mechanisms of Environmental Pollution in Enclosed Coastal Seas</li> </ul>	COOPERATION PERIOD	2005~2009		
<ul> <li>(3)Environmental Management and Policies for Sustainable Development of Enclosed Coastal Seas</li> <li>(4)Methods of monitoring Enclosed Coastal Seas</li> <li>(5)Extension Program</li> <li>(Finalization Phase in a participant's home country) Implementation of Action Plan Participants have to submit a progress report after 6 months</li> </ul>	REMARKS	To implement th match to needs i countries, this c expnading progra on the questiona participants.	in respect ourse est am which	tive ablishes
Sewage treatment technique for Central and South America		R/	FÝ	0984018

## 中南米地域生活排水処理

Environmental Management-Water Pollution

Target Countries:Central and South America		12 participants / Spanisł	
OBJECTIVE	TARGET ORGANIZATION / GROUP		
<ul> <li>[Objective]</li> <li>This program aims to enhance the capabilities of participants to improve the sewage treatment system in their respective countries.</li> <li>[Outputs]</li> <li>To achieve the above mentioned objective, the participants will:</li> <li>1) clarify the current situation and problems of the sewage treatment in their respective countries,</li> <li>2) understand the importance of sewage treatment in relation to water environmental preservation</li> <li>3) acquire knowledge of sewage treatment plan</li> <li>4) understand the importance of capacity development in relation to sewage treatment</li> <li>5) prepare an action plan to improve the sewage treatment in their respective countries</li> </ul>	maintenance of central/local g [Target Group Technical offic qualifications; (1) currently in maintenance of (2) university treatment and (3) belong to of treatment system	charge of planning, operation and f sewage treatment facilities in government or public organizations	
CONTENTS	PROGRAM PERIOD	Aug.25.2009 $\sim$ Nov.1.2009	
This course consists of lectures, discussions, practical exercises, and site observations, and learn following subjects.	IMPLEMENTING PARTNER	Higashi-hiroshima city, Hiroshima International Center	
* Water Environmental Issues and Sewage Treatment	JICA CENTER	JICA Chugoku	
<ul> <li>* General Theory of Sewage Treatment Technique</li> <li>* Current Situations and Issues of Sewage Treatment in Developing Countries</li> <li>* Capacity Development in Relation to Sewage Treatment</li> </ul>	COOPERATION PERIOD	2007~2009	
* Site Observation of Sewage Treatment Facilities etc. Additionally, workshops and discussion sessions are implemented to enhance the understanding of the course.	REMARKS		

KOICA-JICA JOINT TRAINING PROGRAM「Policy and Technology for Energy Conservation and Environmental Protection in East Asia」 日韓共同研修「東アジア環境・省エネルギー政策と技術」	ronmental Manag	gement—Environm	R/F [ 🖠 Nental /	-
Target Countries: East Asia		14 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATI	ION / G	ROUP
[Objective] Government administrative officers and researchers in developing countries, who are in energy conservation or environmental protection in national/local government become able to set basic policy strategies to address own problems.	Technology fo	rhich deals with F or Energy conserv l protection in na r Institution	vation a	and
<ul> <li>[Expected Results]</li> <li>(1)To understand the outline of energy conservation and environmental protection at national and local level in Korea and Japan, and in East Asia.</li> <li>(2)To observe and understand the concrete activities taken by national/local government and private companies.</li> <li>(3)To understand environmental education with community participation.</li> <li>(4)To propose "action plan" for energy conservation and sound material cycle society in own countries.</li> </ul>				
CONTENTS	PROGRAM PERIOD	$Oct.18.2009 \sim C$	Oct.31.2	009
This course is designed for governmental officers and experts in developing countries, who are in charge of solid waste management, climate change,	IMPLEMENTING PARTNER	Kitakyushu Inter Techno-Coopera		
sustainable water resource management, bioenergy production from biomass in national/local government to acquire appropriate knowledge for energy conservation, sound material cycle society, water resource management and	JICA CENTER	JICA Kyushu		
bioenergy production to take action against the issues in East Asian countries.	COOPERATION PERIOD	2008~2010		
	REMARKS			
KOICA-JICA JOINT TRAINING PROGRAM <sup>Γ</sup> Environmental Protection Technolog Management for Air Pollution Control」 日韓共同研修「大気環境保全管理」		R Management—Air	R∕F [Ì́ ∙Pollu†	-
Management for Air Pollution Control J			Pollut	-
Management for Air Pollution Control」 日韓共同研修「大気環境保全管理」	Environmental	Management—Air	· Pollut	tion/Acid Rai English
Management for Air Pollution Control」         日韓共同研修「大気環境保全管理」         Target Countries: Asia         OBJECTIVE         Government administrative officers and researchers in developing countries, who are in charge of air quality management or monitoring in national/local government become able to set basic policy strategies to address own problems.         (1)To understand basic knowledge on air pollution problem         (2)To understand the policy and regulation for air quality management at central and local government in Korea and Japan.	Environmental TARG 1) Individuals administrative quality manag 2) Administratifield of air qua	Management — Air 16 participants ET ORGANIZATI with more than 5 e or research wor ement tive engineers an ality management	Pollut // ION / G o years k in the	tion/Acid Rai English ROUP experience of e area of air
Management for Air Pollution Control」         日韓共同研修「大気環境保全管理」         Target Countries: Asia         OBJECTIVE         Government administrative officers and researchers in developing countries, who are in charge of air quality management or monitoring in national/local government become able to set basic policy strategies to address own problems.         (1)To understand basic knowledge on air pollution problem         (2)To understand the policy and regulation for air quality management at central and	Environmental TARG 1) Individuals administrative quality manag 2) Administratifield of air qua	Management — Air 16 participants ET ORGANIZATI with more than 5 e or research wor ement tive engineers an ality management	Pollut // ION / G o years k in the	tion/Acid Rai English ROUP experience of e area of air
Management for Air Pollution Control」         日韓共同研修「大気環境保全管理」         Target Countries: Asia         OBJECTIVE         Government administrative officers and researchers in developing countries, who are in charge of air quality management or monitoring in national/local government become able to set basic policy strategies to address own problems.         (1)To understand basic knowledge on air pollution problem         (2)To understand the policy and regulation for air quality management at central and local government in Korea and Japan.         (3)To acquire the knowledge of monitoring and inspection system taken by national/local government in Korea and Japan.         (4)To observe and understand monitoring methodologies for prevention of environmental pollution by private company.	Environmental TARG 1) Individuals administrative quality manag 2) Administrat field of air qua 3) Age: 30–50	Management — Air 16 participants ET ORGANIZATI with more than 5 e or research wor ement tive engineers an ality management	Pollut ION / G 5 years k in the	tion/Acid Rai English ROUP experience of e area of air urchers in the
Management for Air Pollution Control J         Target Countries: Asia         OBJECTIVE         Government administrative officers and researchers in developing countries, who are in charge of air quality management or monitoring in national/local government become able to set basic policy strategies to address own problems.         (1)To understand basic knowledge on air pollution problem         (2)To understand the policy and regulation for air quality management at central and local government in Korea and Japan.         (3)To acquire the knowledge of monitoring and inspection system taken by national/local government in Korea and Japan.         (4)To observe and understand monitoring methodologies for prevention of environmental pollution by private company.         (5)To propose "action plan" for air quality management in own countries.         CONTENTS         Korea:       1) Global environmental issues	Environmental TARG 1) Individuals administrative quality manag 2) Administrat field of air qua 3) Age: 30–50	Management — Air 16 participants ET ORGANIZATI with more than 5 or research wore ement tive engineers an ality management ) years old Sep.27.2009 ~ O	Doct.10.20	tion/Acid Rai English ROUP experience of e area of air urchers in the
Management for Air Pollution Control J         Target Countries: Asia         OBJECTIVE         Government administrative officers and researchers in developing countries, who are in charge of air quality management or monitoring in national/local government become able to set basic policy strategies to address own problems.         (1)To understand basic knowledge on air pollution problem         (2)To understand the policy and regulation for air quality management at central and local government in Korea and Japan.         (3)To acquire the knowledge of monitoring and inspection system taken by national/local government in Korea and Japan.         (4)To observe and understand monitoring methodologies for prevention of environmental pollution by private company.         (5)To propose "action plan" for air quality management in own countries.         Korea:         1) Global environmental issues         2) Indoor air pollution         3) Toxic organic and inorganic chemicals in atmosphere (POPs)	Environmental TARG 1) Individuals administrative quality manag 2) Administratifield of air qua 3) Age: 30–50 PROGRAM PERIOD	Management — Air 16 participants ET ORGANIZATI with more than 5 or research wor ement tive engineers an ality management ) years old Sep.27.2009 ~ O Kitakyushu Inter Techno-cooperat	Doct.10.20	tion/Acid Rai English ROUP experience of e area of air urchers in the
Management for Air Pollution Control」         Target Countries: Asia         OBJECTIVE         Government administrative officers and researchers in developing countries, who are in charge of air quality management or monitoring in national/local government become able to set basic policy strategies to address own problems.         (1)To understand basic knowledge on air pollution problem         (2)To understand the policy and regulation for air quality management at central and local government in Korea and Japan.         (3)To acquire the knowledge of monitoring and inspection system taken by national/local government in Korea and Japan.         (4)To observe and understand monitoring methodologies for prevention of environmental pollution by private company.         (5)To propose "action plan" for air quality management in own countries.         CONTENTS         Korea:         1) Global environmental issues         2) Indoor air pollution	Environmental TARG 1) Individuals administrative quality manag 2) Administratifield of air qua 3) Age: 30–50 PROGRAM PERIOD IMPLEMENTING PARTNER	Management — Air 16 participants <b>ET ORGANIZATI</b> with more than 5 or research wore ement tive engineers an ality management ) years old Sep.27.2009 ~ O Kitakyushu Inter Techno-cooperar JICA Kyushu	Doct.10.20	tion/Acid Rai English ROUP experience of e area of air urchers in the

Capacity Building for Officers dealing with AR-CDM Project for Asia-Pacific Region and South & Central America		R	/F 🖠	0984202
アジア大洋州・中南米地域ARーCDM(CDM植林)担当者育成	Envir	onmental Manager	ment—Globa	al Warming
Target Countries: Asia-Pacific region and Central and South America		9 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATI	ON / GROL	JP
To foster the personnel in charge of AR-CDM, and to enhance their abilities to develop and implement measures on AR-CDM	TARGET ORGANIZATION / GROUP         [Target Organization]         Central administrative organizations in charge policies regarding AR-CDM         [Target Group]         Administrative officers working for AR-CDM in central administrative organizations or its relation organizations, or researchers         Participation of counterparts in projects for technical cooperation is encouraged.			DM in related
CONTENTS	PROGRAM PERIOD	$Oct.14.2009 \sim N$	ov.9.2009	
Lectures to understand the mechanism of global warming and measures for forest conservation scientifically and to understand Kyoto Protocol, rules for Kyoto mechanism, rules for AR-CDM and small scale AR-CDM	IMPLEMENTING PARTNER	JICA		
Observations to grasp the present situations regarding forest conservation in Japan that contributes to AR-CDM	JICA CENTER	JICA Tokyo		
Country report presentations and discussions to understand the roles of developing countries concerning Kyoto Protocol and forest conservation	COOPERATION PERIOD	2007~2009		
Practices about the carbon absorption calculation method and its actual calculation, and the processes to formulate a project plan for AR-CDM and to draw up project design drawing (PDD) The participants will make plans to conduct AR-CDM projects verified adaptability to their own countries.	REMARKS			

Hazardous Waste Management and Appropriate Disposal for Asia アジア地域有害廃棄物管理・適正処理		R/	-	0984209
	Environmental M	Management — Indu	strial	Solid Wastes
Target Countries: Asian Countries		6 participants	/	English
OBJECTIVE	TARGE	ET ORGANIZATIO	)N / GF	ROUP
<ul> <li>Participants are expected to</li> <li>1. learn the experience and knowledge on hazardous waste management in Japan.</li> <li>2. share their experiences on hazardous waste management in their countries.</li> <li>3. formulate draft Action Plans during the course to improve their situation through understanding their own problems.</li> <li>as expected after returning their countries</li> <li>be able to develop a hazardous waste management policy in their respective countries.</li> </ul>	TARGET ORGANIZATION / GROUP         [Target Organizations]         Organizations engaged in hazardous waste         management in the central government ager         gh         [Target Group]         (1) Mid-career officials presently in charge         hazardous waste management in central         government agencies         (2) Under 45 years old         (3) University graduates or with equivalent         technical qualifications in this field			
CONTENTS	PROGRAM PERIOD	Nov.18.2009 $\sim$ De	ec.20.20	09
The following subjects are covered during the course; (1) Measures taken by central and local governments in Japan against hazardous waste including success and failure cases	IMPLEMENTING PARTNER	Japan Environmen	tal Sani	tation Center
(2) Approach of business enterprises to specified wastes such as industrial wastes	JICA CENTER	JICA Yokohama		
and hospital wastes generated by their activities (3) Comprehension of current treatment system and problems through observation trips to business enterprises and hospitals which generate hazardous wastes	COOPERATION PERIOD	2007~2009		
<ul> <li>(4) Formulation of draft Action Plans through discussion, group work, knowledge and experience obtained in the course</li> <li>(5) Follow-up through an individual consultation, TV conference, etc., if necessary (financial support for realization of such an action plan as construction of disposal plant is not included)</li> </ul>	REMARKS			

Solid Waste Management for Southwest Asia - Discussion for Realizing the			R/	Έ	0984224
Improvement Measures - 南西アジア地域廃棄物管理ー具体的改善策の策定に向けて一	Environme	ntal Manag	gement-	-Urban	Solid Wastes
Target Countries:Bangladesh, India, Nepal, Pakistan, Sri Lanaka and Bhutan		9 particip	oants	/	English
OBJECTIVE	TARG		NIZATIC	)N / GR	OUP
<ul> <li>Over all goal of the training course is to implement strategies created through the course in each participant's organization.</li> <li>At the end of the program, the participants are expected to achieve the following;</li> <li>(1) To understand solid waste management in Japan and local government, and the issue in own country</li> <li>(2) To understand waste treatment technique through learning effective methods of collection and treatment</li> <li>(3) To understand the activity of environmental education with community participation in local government</li> <li>(4) To acquire proper methodology of final landfill site</li> <li>(5) To acquire composting techniques for organic waste</li> <li>(6) To formulate action plan for waste management</li> </ul>	TARGET ORGANIZATION / GROUP1) Current Duties: be government officers wh presently engaged in solid waste managemer environmental education for citizens at local central government.2) Experience in the relevant field: have more 			agement or local or e more than oned above ate of nd of	
CONTENTS	PROGRAM PERIOD	Oct.4.2009	$\theta \sim \text{Nov}$	.27.2009	9
Following lectures, observations and practices are scheduled to achieve the objective.	IMPLEMENTING PARTNER	Kitakyush Techno-c	u Interna ooperativ	ational ve Assoc	ciation (KITA)
(1) Laws related to waste treatment / Waste management in local government /	JICA CENTER	JICA Kyus	shu		
Conservation activity for environment in Japan (2) Separation of general waste, Collection and transportation, and Effective system of treatment / Treatment of toxic waste (Medical waste and industrial waste) /	COOPERATION 2007~2009				
<ul> <li>(3) Method and practice of environmental education where and matching where, it is a state of the intervention of the</li></ul>	REMARKS Two participants are expe Bangladesh, Pakistan and Lanka.				*

Action plan presentation

Human resource development program in environmental management and material cycle society (Master's Degree: Engineering or Environmental management) 環境管理と資源循環型社会を担う中核的人材育成(長期) Env L/T 0981206 Environmental Management-Environmental Administration

/

3 participants English OBJECTIVE TARGET ORGANIZATION / GROUP [Objective] Central/local government, research institute and The ability of environmental management and research for officers in central/local university relating to environmental management government and researchers in institution and university is improved. and material cycle society Expected Results (1)To acquire the knowledge and measures of formulating policy and planning for sustainable environment (2)To acquire the knowledge and measures for analyzing substances in water and atmosphere, and pollution in groundwater based on physical, chemical and biological aspects. (3)To acquire the knowledge and measures for process developments, designing and analysis through learning various kinds of unit processes and analysis/monitoring methods to promote environmental protection and material cycle society. (4)Training on thesis writing PROGRAM Sep.1.2009 ~ Sep.30.2011 CONTENTS PERIOD This program is designed for administrative officers and researchers who are in IMPLEMENTING charge of environmental management and sound material cycle society to University of Kitakyushu PARTNER strengthen their capacity through acquiring master course degree of environment engineer and environment management. JICA CENTER JICA Kyushu COOPERATION (1)Environmental Economics, Environmental Reporting and Accounting,  $2009 \sim 2011$ PERIOD Environmental Policy and Administration, System of Sustainable Management, Urban Environmental Assessment and Planning, etc (2)Analysis of Toxic Chemicals in Environment, Aquatic Environment and Engineering, Remediation of Soil and Groundwater, etc REMARKS (3) Environmental Preservation Engineering, Recycling Engineering, Environmental Information Technology and Computer Simulation, etc. (4)Special Study I, II

## Global Environmental Leaders Development for Climate Change Mitigation (Master's Degree: Environmental Studies or Engineering) 国際環境人材育成 地球温暖化対策(長期)

Environmental Management-Global Warming

L/T 🍸

0981210

Target Countries: Asia and Africa	2 participants / Engl			
OBJECTIVE	TARGET ORGANIZATION / GROUP			
<ul> <li>[Objective]</li> <li>Policymakers and technitians will develop their capability of: 1) proposing and practicing approaches to solve the problems with a correct understanding of local situations, 2) coping with cross-sectoral and emerging problems, and 3) communication in the policy dialogues etc. that suits conditions of local society.</li> <li>[Expected Results]</li> <li>(1)To acquire the theories, advanced knowledge and the problem-solving way of thinking.</li> <li>(2)To improve practical abilities through the internship and seminars to solve the problems in the original countries of the participants.</li> <li>(3)To acquire the ability to wrap up and publicize special reports logically and make actions based on them.</li> </ul>	Agencies of central/local governments, priva companies, or higher education bodies relate climate policy and mitigation technology.			
CONTENTS	PROGRAM PERIOD	Sep.20.2009 ~ Sep.30.2011		
This program aims to develop global environmental leaders who are able to propose practical measures to solve the problems of climate change.	IMPLEMENTING PARTNER	Graduate School of Environmental Studies, Nagoya University		
(1)The participants will take lectures, workshops and seminars under this course as	JICA CENTER	JICA Chubu		
required by the curriculum model and acquire credits (at least eight) to obtain the degree. (2)The participants will have a training or internship for a certain period in partner	COOPERATION PERIOD	2009~2011		
organizations from the Chubu Consortium for Environmental Leaders Development (cooperating body of this program). (3)The participants will complete a dissertation based on research instruction by main and assistant supervisors. The dissertation should identify and analyze an important issue in their original country, and provide measures to be taken to solve it.	REMARKS			

Operation and Maintenance of Sewerage System and Waste Water Treatment		GROUP	<b>#†</b> ††	0980103
Technique 下水道維持管理システムと排水処理技術	Enviro	nmental Management.	-Water	Pollution
		9 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATION	/ GROL	JP
<ul> <li>[Objectives]</li> <li>Based on the Action Plan proposed by respective participant, the knowledge or skills shall be shared his/her organization.</li> <li>[Outputs]</li> <li>(1) To review basic knowledge of sewerage systems and wastewater treatment (2) To acquire knowledge necessary for planning and designing of sewerage systems (sewer network, wastewater treatment plants)</li> <li>(3) To acquire knowledge necessary for maintaining sewerage systems (sewer network, wastewater treatment plants)</li> <li>(4) To acquire knowledge necessary for industrial wastewater treatment and pretreatment facilities for discharge to sewerage systems</li> <li>(5) To propose sewerage systems improvement plans as "Action Plans" for the participant's respective countries, with a clear understanding of relevant experiences and knowledge acquired in the course</li> </ul>		anizations] cal authority in charg ution and maintenanc		werage
	PROGRAM			
CONTENTS	PERIOD	Jan.13.2010 ~ Mar.14	4.2010	
<ul> <li>(1) - Japanese regulation and situation of sewerage system</li> <li>- Sewerage in Kitakyushu</li> <li>- Basic planning for sewerage system</li> <li>(2) - Sewer network planning</li> </ul>	IMPLEMENTING PARTNER	Kitakyushu Interna Techno-Cooperativ		ociation
- Construction and designing of sewage treatment facilities	JICA CENTER	JICA Kyushu		
<ul> <li>Principles of biological treatments and selections of treating methods</li> <li>(3) - Construction of sewer network</li> <li>Operation and maintenance of sewer network</li> </ul>	COOPERATION PERIOD	2008~2010		
<ul> <li>Maintenance of wastewater treatment facilities</li> <li>Water quality practices and effective use of sewage sludge</li> <li>(4) - Water quality regulation of industrial wastewater</li> <li>Water quality inspection of industrial wastewater</li> <li>Wastewater treatment facilities</li> <li>(5) - Job report preparation (in advance), and presentation</li> <li>Action plan preparation, and presentation</li> <li>Report to JICA the progress of knowledge/skills sharing among the respective organization.</li> </ul>	REMARKS			

Sewerage Technology for Wastewater Control and Urban Drainage		GROUP া	0980105
下水道維持管理•都市排水	Enviro	nmental Management—Wate	r Pollution
Target Countries: Bhutan, Maldives, South Africa, Tanzania, Zimbabwe, Mauritius, Macedonia		8 participants /	English
OBJECTIVE	TARG	ET ORGANIZATION / GRO	-
<ul> <li>[Objectives] Based on the Action Plan proposed by respective participant, the gained knowledge or skills shall be shared in his/her organization.</li> <li>[Outputs]</li> <li>(1) To acquire basic knowledge of sewerage systems and wastewater treatment</li> <li>(2) To acquire knowledge necessary for planning and designing of sewerage systems (sewer network, wastewater treatment plants)</li> <li>(3) To acquire knowledge necessary for maintaining sewerage systems (sewer network, wastewater treatment plants)</li> <li>(4) To acquire knowledge necessary for sewerage administration and International cooperation</li> <li>(5) To propose sewerage systems improvement plans as "Action Plans" for the participant's respective countries, with a clear understanding of relevant experiences and knowledge acquired in the course</li> </ul>	treatment, see [Target Grou (1) be univer equivalent te and have mon experience (2) be senior sewerage and /local govern	cal authority in charge of we ewage work and stormwater up) sity graduate or those who echnical qualifications in the re than five(5) years of pra- technical officers in charge d drainage management in o	r drainage have is field, ctical e of
CONTENTS	PROGRAM	Aug.31.2009 ~ Nov.7.2009	
(Preparatory phase (Before coming to Japan))	PERIOD		
Country Report describing present situation of their country and organization on the Sewrage Technology and Urban Drainage will be formulated by participants/participating organizations.	IMPLEMENTING PARTNER	Public works bureau/Osa	ka City
	JICA CENTER	JICA Osaka	
<pre>[Program in Japan] (1) To review basic knowledge related to; - Japanese regulation and situation of sewerage system</pre>	COOPERATION PERIOD	2008~2010	
<ul> <li>Sewerage in Osaka</li> <li>(2) Planning, designing and constructing of Sewerage facilities</li> <li>(Basic Plan, sewege pipe line, pumping station, sewerage treatment facilities, sludge treatment facilities, Principles of biological treatments and selections of treating methods)</li> <li>(3) Maintenance of sewerage systems</li> <li>(Sewerage ledger, sewege pipe line, pumping stations, sewerage treatment facilities, sludge treatment facilities, water quality regulations and industrial wastewater, water quality test)</li> <li>(4) Sewerage administration and international cooperation</li> <li>(Finance and management of sewerage works)</li> <li>(5) Preparation/Presentation of action plan</li> <li>-Country Report preparation (in advance), and presentation</li> <li>-Action plan preparation, and presentation</li> <li>[Post-program activities (After participants' return)]</li> <li>Report to JICA on the progress of knowledge/skills sharing among the relevant engineers in the participating organization.</li> </ul>	REMARKS		

Operation and Maintenance of Sewerage Systems		GROUP	<b>14</b> +	0980762
下水道維持管理	Enviro	nmental Management-	Water	Pollution
		7 participants 🗸		English
OBJECTIVE	TARGET ORGANIZATION / GROUP			JP
[Objective] Every participant shares and implements its action plan, and then reports progress to JICA	[Organizations] Sewerage works entities (can be government semi-governmental/ corporate)			nental/
<ul> <li>(Expected Outputs)</li> <li>(1) To understand sewerage systems in Japan</li> <li>(2) To understand and experience planning and designing of sewerage systems to improve those in participant's country</li> <li>(3) To understand and experience operation and maintenance of sewerage systems to improve those in participant's country</li> <li>(4) To understand and experience industrial wastewater and pre-treatment to improve those in participant's country</li> <li>(5) To propose "Action Plan" to clarify how to improve participant' job and organization based on Modules 1)~4)</li> </ul>	【Personal Qualifications】 〈Current Duties〉 Senior sewerage works engineers 〈Experience〉			
CONTENTS	PROGRAM PERIOD	Sep.8.2009 $\sim$ Nov.10.3	2009	
(Preparatory Phase)	PERIOD		2000	
Each participant prepares Job report to identify its issues	IMPLEMENTING PARTNER	Construction Burea Sapporo	u, City	7 of
【Core Phase】 〈Subjects per modules〉 (1) Current situation and rules & regulations of sewerage system in Japan,	JICA CENTER	JICA Sapporo		
sewerage system in Sapporo, master plan of sewerage systems (2) Sewer network planning, planning and construction of treatment plant,	COOPERATION PERIOD	2008~2010		
<ul> <li>principal of biological treatment, appropriate selection of treatment method</li> <li>(3) Construction of pipe, operation and maintenance of pipe, operation and maintenance of water treatment plant, practice of water quality inspection, efficient use of sludge</li> <li>(4) Water quality regulations, water quality control, wastewater treatment plant</li> <li>(5) Job report presentation, discussions, guidance for action plan making, action plan presentation</li> <li>[Finalization Phase]</li> <li>With in 6 months after completion of the course, every participant is requested to share its knowledge and experience in Japan at respective organization, then reports Action Plan progress to JICA</li> </ul>	REMARKS			

		8 participants / English		
OBJECTIVE	TARG	ET ORGANIZATION / GROUP		
[Objective] Adaptive watershed management methods will be systematically shared among organizations operating flood control and ecosystem conservation for watershed management by having mid-level working and senior administrative officers from the target organizations (a three-year objective).	[Target Organization] Project implementation organizations engaging flood control or ecosystem conservation in watershed areas			
<ul> <li>[Outputs]</li> <li>To attain the objective, the participants are expected to achieve the followings:</li> <li>1. First and Second year program <ol> <li>To be able to explain the effects of climate change on the watersheds of their respective areas and discuss the possibility of introducing adaptive watershed management method,</li> <li>To be able to analyze current flood risks and the conditions/patterns of ecosystem destruction in the watersheds of their respective areas and explain tasks related to area management methods and ongoing adaptive measures,</li> <li>To formulate the Action Plan (temporary) for an adaptive watershed management project in the target country.</li> </ol> </li> <li>Third year program <ul> <li>In addition to the Outoputs (1) to (3),</li> <li>To formulate the Action Plan of necessary method for adaptive management planning applicable to the watersheds in the target country.</li> </ul> </li> </ul>	<pre>[Target Group] <position> First and second year: Mid-level working in charge of flood control and ecosystem conservation projects within organizations Third year: Senior administrative officers of organizations related to flood control and ecosystem conservation and academic exp directly involved in designing management for individual watershed <experience>Have more than five years practical experience in the relevant field <other> It is strongly recommended for the same organization related to flood corr ecosystem conservation to nominate an ap every year.</other></experience></position></pre>			
CONTENTS	PROGRAM PERIOD	Aug.16.2009 ~ Oct.17.2009		
[Preparatory Phase] Submission of the Inception Report (present state and issues)	IMPLEMENTING PARTNER	Hokkaido University, Rakuno Gakuen University, Hokkaido Regional Development Bureau		
<ul><li>[Program in Japan]</li><li>L:Lecture, O:Observation, P:Practice, D:Discussion</li><li>1. First and second year program</li></ul>	JICA CENTER	JICA Obihiro		
(1)L: Global environmental change/Kyoto Protocol, Post-Kyoto Protocol framework, L/O: Fundamentals of landscape ecology, Dams and watershed control	PERIOD	2009~2011		
<ul> <li>(2) L/O: Conservation method of ecosystem, Floodplain management and Resident activities, L/P: Floodplain management methods, biodiversity and flood frequency, L/O: River flood control and biodiversity conservation, L/P: Basic knowledge and operation of GIS, Floodplain management methods using GIS, L/O: Protection of biodiversity and small mammals</li> <li>(3) Workshop: Issue analysis, Capacity development, L/D: Consensus building, Cooperation with NGOs</li> <li>2. Third year program In addition to the Outoputs (1) to (3), (4) D: Issues on the Action Plan (draft) [Program in home country] Submission of the Final Report within six months after returning home countries.</li></ul>	REMARKS	Since the program objective is designed to be attained through 3 years, the duration of each year's program differs as follows: -First and Second year: 60 days -Third year: 21 days		

Environmental Education Focused on Fresh Water Environment –For Tertiary Level		GROU	P ###	0980991
		her Environmenta n—Other Nature 6participants		
OBJECTIVE	TARG	ET ORGANIZATIO	N / GRO	UP
<ul> <li>(Overall Goal) Activities for promoting environmental education are continuously implemented based on the Action plan approved by the participants' organization in their home countries.</li> <li>(Program objectives (Outcome))</li> <li>This program is designed to strengthen the participants' capacity to make action plans to solve the problems which participants' countries/ organizations are facing and to develop and spread environmental education</li> <li>(Outputs)</li> <li>1) Understand the concept and theory of environmental education, and</li> <li>3) Make draft action plans to solve the problems which participants' countries/ organizations are facing.</li> </ul>	<ul><li>(2) Engaged</li><li>environmenta</li><li>(3) Engaged</li><li>than 3 years</li></ul>	y/College lecture or ecpected to en al education in environmental e y/college graduat	gaged in education	more
CONTENTS	PROGRAM PERIOD	Aug.17.2009 $\sim$ Oc	t.17.2009	
〈Preparatory Phase in participants' home countries〉 Preparation and Submission of Country Report 〈Phase in Japan〉	IMPLEMENTING PARTNER	Shiga University Lake Environme Foundation		
Participants will learn following items through lectures, observations and practices - Basic Concepts in Environmental Issues: Country Report Presentation, EE in General, Environmental Problems, Public Sanitation in General	JICA CENTER	JICA Osaka		
- EE Principles, Activities and Materials: Principles of EE, EE Activities and Teaching Materials	COOPERATION PERIOD	2005~2009		
<ul> <li>Deployment of EE: Know-how for Worldwide Dissemination of EE</li> <li>Networking between Citizens, Schools and Governments</li> <li>Presentation of Training Results: Lectures by Participants to University Students, Individual Discussion on Final Report (Finalization Phase in participants' home countries)</li> <li>Sharing and developing Action Plan, Submission of Final Report (including progress of the Action Plan) to JICA regional office</li> </ul>	REMARKS	<training institu<br="">Lake Environme ILEC)</training>		

Sustainable community development by citizens' participation for West Balkan countries		R/F	<b>†††</b> †	0984200
西バルカン地域市民参加による持続可能な地域づくりと環境保全 Envi	ronmental Manag	gement—Environment	al Admir	nistration
Target Countries:West Balkan countries	1	8 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATION	/ GROU	P
Capabilities for implementing sustainable communities will be enhanced. To reach the objectives, the participants are expected: (1) To cultivate a practical ability to reflect knowledge in policies by understanding the Japanese framework for municipalities. (2) To obtain the know-how of sustainable community development based on collaboration between citizens and municipalities. (3) To formulate an action plan for sustainable community focused on democratic consensus-building .	formulation a community-l policy. (2)At least 3 * Participant	ernment officials res and implementation based environmental years of practical e ts are expected to h he participatory appr	of manage xperienc ave stroi	ment e
CONTENTS	PROGRAM PERIOD	Nov.3.2009 $\sim$ Nov.2	1.2009	
The curriculum consists of the following three parts: (1) Lectures (a) Community Development in Japan (b) Environmental impact accomment (ELA)	IMPLEMENTING PARTNER	City of Kawasaki		
<ul><li>(b) Environmental impact assessment (EIA)</li><li>(c) Environmental education /public awareness</li><li>(d) Disclosure, environmental media, etc.</li></ul>	JICA CENTER	JICA Tokyo		
<ul><li>(2)Field visits</li><li>(a) Private companies with corporate social responsibility (CSR)</li></ul>	COOPERATION PERIOD	2007~2009		
<ul> <li>(b) Model environmental cities</li> <li>(3) Presentation and Discussions/Workshop</li> <li>(a) Presentation of job report</li> <li>(b) Group discussion and panel session</li> <li>(c) Presentation of action plan</li> </ul>	REMARKS			

Adaptation for climate change		GROUP 🚳 0980066	
気候変動への適応 	Environmental Management-Global Warm		
		20 participants / English	
OBJECTIVE	TARGET ORGANIZATION / GROUP		
<ul> <li>[Program Objectives]</li> <li>Proposed plan for formulation and implementation of adaptation for climate change will be considered at the respective organizations.</li> <li>[Expected Results]</li> <li>(1) To understand the current situation on adaptation to climate change in respective countries.</li> <li>(2) To understand the overview and international framework on adaptation to climate change.</li> <li>(3) To understand the factors for adaptive capacity, impact assessment and vulnerability assessment on climate change, measures, technology and cases on adaptation to climate change in Japan, and the way of the cooperation for developing countries.</li> <li>(4) To formulate measures to solve the problems on adaptation to climate change in respective countries.</li> </ul>	<ul> <li>[Target Organizations]</li> <li>This program is designed for a national (or l governmental office which is involved in adaptation to climate change.</li> <li>[Target Group]</li> <li>Administrative officers in charge of planni implementation of adaptation to climate change. (Preferably be an officer in national focal po UNFCCC, who is in charge of coordination adaptation issues in respective countries)</li> <li>Experience in the relevant field: more that</li> </ul>		
CONTENTS	PROGRAM PERIOD	Sep.24.2009 ~ Oct.24.2009	
[Preliminary Phase] Participants will make an Inception Report on the current situation of adaptation to climate change policy and problems in their country.	PERIOD IMPLEMENTING PARTNER	Meteorological Research Institute (MRI) and National Institute for Environmental Studies (NIES), etc	
【Program in Japan】 Participants are expected to understand the overall view of adaptation to climate	JICA CENTER	JICA Tsukuba	
<ul> <li>change issue in order to fulfill the responsibilities stipulated by UNFCCC through lectures, discussions, practical exercises and site visits.</li> <li>(1) International framework and negotiation on adaptation to climate change</li> <li>(2) Climate change policy in Japan</li> <li>(3) Impact assessment and vulnerability assessment, measures, technology and cases on adaptation for climate change</li> <li>(4) Formulation an Action Plan for solving the problems on adaptation to climate change</li> </ul>	COOPERATION PERIOD	2008~2010	
【Finalization Phase】 The Action Plans made in the program in Japan should be shared in the participants' organization and should be elaborated as Final Report. Six months after going back to Japan, participants will report the progress of the Final Report to JICA.	REMARKS		

Solid Waste Management by Local Government 地方自治体における廃棄物処理	- ·	GROUP (20) 0980091	
	Environme	ntal Management—Urban Solid Waste	
	7450	7 participants ★ / English	
OBJECTIVE		ET ORGANIZATION / GROUP	
Objective A draft plan for improvement of solid waste management will be formulated by a ocal government of an area designated as a model.	[Target Organizations] Local governments and related organizations engaged in solid waste management of a mod area designated by each country.		
Outputs (1) 1. To grasp the reality and issues on waste management and to extract practical hints for solution through exchanging views among participants (2) o be able to explain the current state of measures against waste taken by a local government for the effective use in each country. (Planning, effective collection and transportation method, sanitary treatment/disposal method, treatment of hazardous waste etc.) (3) To be able to explain the roles of and cooperation among citizens, businesses, and local governments for the appropriate waste management (4) Action plan (interim report featuring the improvement plan) is formulated to solve issues related to waste management based on the reality of each country (5) Action Plan will be studied by each participating organization	[Target Group] (1) Current Duties: be an administrative of technical officer of a model local governme related organization engaged in solid wast		
CONTENTS	PROGRAM PERIOD	Aug.24.2009 ~ Oct.16.2009	
[Preliminary Phase in a participant's home country] Formulation and submission of Inception Report Preparation for report presentation	PERIOD IMPLEMENTING PARTNER	Hyogo Prefectural Environmental Create Center Public Corporation	
Core Phase	JICA CENTER	JICA Hyogo	
<u>Related to output (1):</u> Lectures and Presentation Sharing the information and ideas through report presentation and discussion Presentation of information on waste (type and composition)	COOPERATION PERIOD	2008~2010	
Related to output (2):       Lectures and Observations         Waste treatment planning, Reducing wastes, Waste collection, Intermediate treatment, Waste incineration, Final disposal, Recycling.         Discussion and suggestions to apply the above mentioned items to participants' countries.         Related to output (3):         Lectures and Presentation         Citizens's role and and the importance of the collaboration between local government & citizens in the field of solid waste management.         Environmetal education and public awareness to reduce waste.         Related to output (4):       Workshop and Discussion         Workshop for problem analysis         Designing action plan and its improvement through individual guidance and discussion         (Finalization Phase in a participant's home country]         Related to output (5):         PExplanation of the action plan and submission of its final report compiled by a	REMARKS	Since there is a technical or economical gap on waste treatment between Japan and participating countries, not only the introductio of Japan's examples but also guidance considering the participanting country's situation will be provided for each participant. This course will be implemented twice for JFY 2009. The second one is scheduled from Jan. 11 to Mar. 6, 2010.	

WASTE MANAGEMENT and 3R(Reduce,Reuse and Recycle)POLICIES		GROUP	0980121
廃棄物3R•再資源化	Environme	ntal Management—Urban Soli	id Wastes
		10 participants ★ 🖊	English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP	c
The purpose of this program is to give the participants an overall knowledge of technologies for industrial waste management and recycling, present trends of legislation and policies in the field of industrial waste management & recycling, skills to develop and implement recycling plans for industrial waste, and an overall information on the facilities and equipment concerned.	section/ Min section Target Group (1) Technical equivalent te experience (2) Technical government v experience ir	nvironment, waste manageme istry of Industry ,waste mana	lers of ional cal
CONTENTS	PROGRAM PERIOD	Nov.12.2009 ~ Dec.5.2009	
<ol> <li>Present status of industrial waste management &amp; recycling in Japan</li> <li>Related legislation and strategies established in Japan</li> <li>Implementation of countermeasures towards the creation of recycle-oriented</li> </ol>	PERIOD IMPLEMENTING PARTNER	CLEAN JAPAN CENTER	
society (standardization by ISO / green purchasing / product assessment (including LCA) / 3R-oriented design (Design for Environment)) (4) Present status of recycling by products in Japan	JICA CENTER	JICA Tokyo	
(packaging & containers / home electrical appliances / foods / construction materials / end-of-life vehicles)	COOPERATION PERIOD	2009~2011	
(5) Development of environmental key technology (pre-treatment (collection, dismantling, crushing, sorting, dehydration & drying) / incineration, vitrification (melting) & solidification / pyrolysis / bio-treatment / energy-utilization)	REMARKS	This training course is sche be implemented twice withi JFY2009 (November 2009 a March 2010)	n

Pollution Control and Local Environmental Management 公害防止と地域環境管理		GROUF		0980133
	ronmental Manag	ement—Environmer	ntal Admin	nistration
	1	7 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATIO	N / GROL	IP
[Objective] The local government officer (who are in charge of the areal pollution control and environmental management) shall get the administrative management methodology on raising awareness, implementation of the practical countermeasures, etc. [Expected Results] (1)Comprehension of industrial pollution problems (2) Environmental improvement, Environmental Management (3) Enhancement of Capacity Building on local environmental management (4) Based on the each country's situation, action plan to solve Environmental Management Problem is composed.	pollution (ma recognized. I	ment official where inly, air or water of His/her office is ex- ights on the sourc	quality iss apected to	ue) is
CONTENTS	PROGRAM	Aug.10.2009 ~ Sep	.19.2009	
This is a practical training targeting for certain local areas where industrial pollution exists and the situation is serious without effective countermeasures.	PERIOD IMPLEMENTING PARTNER	International Cer Environmental T (ICETT)		v Transfer
(1)Comparing to the experience and status of Japanese pollution era, this chapter aims to promote the participants to have more consciousness upon the areal pollution (incl. medium & small scale one). Lecture but participatory discussion,	JICA CENTER	JICA Chubu		
analysis and presentation will be provided. (2)Review the concept of autonomous EMS. Introduce suitable EOP or CP	COOPERATION PERIOD	2009~2011		
technologies for the case studies reported by the participants. Incentives towards improvement such as ener-con, and social & economic approaches will be explained. Participants will settle feasible targets and their AP. (3)Areal environmental management will be focused. Hostile relationship among factory/company, government and local people will be wiped out and on the contrary, creates good relationship. Strategy of public participation to local environment management by each sector will be considered. (4)Composing Action Plan and implement the action plan after return.	REMARKS	This course aims solution to impro- problem by train the training cont activities like do presentation.	ove enviro ing in Jap ains self o	onmental an. Thus devotive

Measures Against Urban Environmental Problems 都市生活型の環境問題		GROUP 🚳 0980215		
部門生活至の煤境间處 Environmental Management—Environmental Administr				
		7 participants / English		
OBJECTIVE	TARG	ET ORGANIZATION / GROUP		
<ul> <li>Participants will propose realistic measures against urban environmental problems in their cities.</li> <li>To reach the objective, participants are expected to achieve the following: <ol> <li>To deepen understanding of methods and frameworks of urban environmental preservation for public health and safety.</li> <li>To analyze and understand concrete environmental policies and projects (especially, best practices and controversial practices) which have been implemented by urban municipalities.</li> <li>To understand methods and process to reflect monitoring results on environmental policies.</li> <li>To make practical "Action Plan" based on the achievement of 13. above, to tackle existing urban environmental problems in respective countries.</li> </ol> </li> </ul>				
CONTENTS	PROGRAM	Jan.19.2010 ~ Mar.3.2010		
<pre></pre>	PERIOD	Jan. 13. 2010 Wat. 5. 2010		
<phase in="" japan=""> (1) Lectures: Approach to urban environmental management, Municipalities'</phase>	IMPLEMENTING PARTNER	Environmental Affairs Bureau, City of Sapporo		
missions and functions in urban environmental administration, Features and measures of main urban environmental problems (waste management, water	JICA CENTER	JICA Sapporo		
<ul> <li>pollution, disaster/energy control, etc.), Environmental education, etc.</li> <li>(2) Practice, discussion:PCM (Project Cycle Management), etc.</li> <li>(3) Observations and discussions:Case examples for urban environmental management, Case examples of environmental education</li> </ul>	PERIOD	2006~2010		
<finalization phase=""> Action Plans will be shared and implemented through discussion among persons concerned and the progress will be reprted or submitted as Final Report to JICA within 3 months after return.</finalization>	REMARKS			

Development of Strategies on Climate Change 地球温暖化対策コース		GROUP (3) 0980572	
	Environmental Management—Global Wa		
		25 participants / English	
OBJECTIVE [Program Objective]	TARG Target Org	ET ORGANIZATION / GROUP	
<ul> <li>Participants will become capable of proposing policies on climate change domestically and internationally with consideration for sustainable development.</li> <li>[Expected Results]</li> <li>(1) To understand the concept of mainstreaming climate change policy into sustainable development.</li> <li>(2) To understand the basic concept of national communications and how to make it.</li> <li>(3) To understand how to develop inventories of greenhouse gas emission and sinks.</li> <li>(4) To understand adaptation and mitigation measures against climate change.</li> <li>(5) To develop an interim report (a draft of action plan) to solve problems in the field of his/her charge.</li> </ul>	This program organizations such as thos UNFCCC. 【Target Gro - Administra change issue - Experience years' experi	n is offered to governmental s in charge of climate change issues e from a national focal point office of	
CONTENTS	PROGRAM	Jan.7.2010 ~ Mar.6.2010	
[Preliminary Phase] Participants will make an Inception Report on the current situation of the climate change policy and problems in their country.	PERIOD IMPLEMENTING PARTNER	Ministry of the Environment	
[Program in Japan]	JICA CENTER	JICA Tsukuba	
Participants are expected to understand the overall view of the climate change issue in order to fulfill the responsibilities stipulated by the UNFCCC through lectures, discussions, practical exercises and site visits.	COOPERATION PERIOD	2007~2009	
<ul> <li>(1) Outline of climate change</li> <li>(2) Basic concept of national communication</li> <li>(3) Outline of Mitigation (including CDM) and Adaptation</li> <li>(4) International framework for climate change issue</li> <li>(Finalization Phase)</li> <li>The Action Plans made in the program in Japan should be shared in the participants' organization and should be elaborated as Final Report. Six months after going back to Japan, participants will report the progress of the Final Report to JICA.</li> </ul>	REMARKS	<pre>[Related website] <ministry environment="" of="" the=""> http://www.env.go.jp/en/ <kyoto information<br="" mechanism="">Platform&gt; http://www.kyomecha.org/e/index .html</kyoto></ministry></pre>	

Sewage Works Engineering and Stormwater Drainage Technology			GROUP	۲	0980779
下水道技術・都市排水コース	Enviro	nmental	Management	—Water	Pollution
		14 part	ticipants 2	/	English
OBJECTIVE	TARG	ET ORG	ANIZATION	/ GROL	IP
<ul> <li>[Objective]</li> <li>This course aims at achieving consensus for challenges on sewage works engineering and storm water drainage among the related persons and clarifying the points on implementing projects and business for the solution.</li> <li>[Outputs]</li> <li>[Inrough the program, participants are expected: <ol> <li>To understand the related factors and procedure/methods for the designing/implementation of sewage engineering and storm water drainage technology,</li> <li>To formulate the practical improvement plan for the sewage engineering and storm water drainage in their territory</li> <li>To achieve consensus for challenges on sewage engineering and/or storm water drainage in their organizations and clarify the issues on implementing projects and business for the solution</li> <li>To report the progress of improvement plan in six months after their return.</li> </ol> </li> </ul>	<ul> <li>【Target Cou Central or lo public organi purification, a drainage</li> <li>【Target Grou (1) Present p Senior techni and/or storm governments organizations (2) Occupation More than th works and/or (3) Academic University gr equivalent te sewage works</li> </ul>	cal gove zations i sewage v osition: ical offic i vater I , or gove 5. onal Bac ree (3) v storm v Backgr aduates chnical offic	ernments, au related to w works, and s ers engaging Drainage in o ernment rela ekground: years of exp water draina ound: or persons qualification	g in sew central of ated erience ge tech who hav s in the	er ater age works or local in sewage nology ve field of
CONTENTS	PROGRAM	Sen 2 20	$009 \sim Nov.29$	2009	
<preliminary country="" home="" in="" phase=""></preliminary>	PERIOD	569.2.20	100.22	.2005	
Nominees are expected to make a Country Report, which is containing the status and issues of sewage, storm water drainage technology, water environment, and laws in addition to present jobs activities.	IMPLEMENTING PARTNER	Sewage Center	e Business N	/lanagen	nent
Besides, Case study theme specifying issues which participants work on through	JICA CENTER	JICA T	Tokyo		
the program, on sewage services and water environment protection etc., are included.	COOPERATION PERIOD	2005~	-2009		
<core in="" japan="" phase=""> Participants develop an Action Plan, which is described actions to solve the case study, which is set by participants by considering concrete solution based on the knowledge and information gained from the program, after they distill and reprioritize their issues by referring Japanese case on sewage works, stormwater drainage and water environment. A set of lecture, site observation and discussion will be set at the point of the main subjects as following: (1) Basic knowledge on sewage works and stormwater drainage such as long-term plan, law, finance etc. (2) Planning, Design and Maintenance of sewerage system facilities (3) Urban stormwater drainage system (4) Environmental protection measures (5) Management of sewerage services</core>	REMARKS				

Urban Solid Waste Management by Local government 地方自治体における都市廃棄物処理		GROUP	۲	0980802
地力日泊神における御巾焼業物処理 	Environmental Management—Urban Solid			olid Wastes
		10 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATION	I/GRO	UP
<ul> <li>[Objectives]</li> <li>This course aims for more effective and efficient waste management plan to be proposed and discussed in participatory countries and organizations based on the action plans designed by participants.</li> <li>[Outputs]</li> <li>(1) To realize issues on solid waste managements and get hints to address them through exchange the information and ideas with lecturers and/or other participants</li> <li>(2) To acquire knowledge and skills of urban waste countermeasures through the introduction of detailed actual conditions of waste treatment in major Japanese cities, mainly focused on Osaka city</li> <li>(3) To explain the role of citizens and the importance of the collaboration between local government and citizens</li> <li>(4) To design action plans which propose some solutions towards the issues and problems on solid waste management of each participatory country.</li> </ul>	sections which organizations management (Target Grou 1. Engineer of management knowledge 2. Experience than 3 years'	<pre>ments (or national ch support local go s) are in charge of u waste up ] or administrative of experience or an e e in the relevant fie ' experience l continue working</pre>	vernmen urban so ficials of quivalen eld: have	nts' blid f waste nt level of e more
CONTENTS	PROGRAM PERIOD	Aug.10.2009 $\sim$ Oct	.21.2009	
<ol> <li>Preliminary: Country Report preparation as a matrix form, which marshal their issues and the training modules in Japan.</li> <li>In Japan:</li> </ol>	IMPLEMENTING PARTNER	Osaka City Envir Global Environme Foundation (GEC	ent Cent	
(1) Current situation and problems with waste management in Developing Countries (Workshop, Presentation and Discussion)	JICA CENTER	JICA Osaka		
<ul><li>(2) Current Situation and Problems of Waste Management in Japan (Lecture, Observation and Exercise)</li><li>(3) Collection and transport work (Lecture, Observation and Exercise)</li></ul>	COOPERATION PERIOD	2008~2010		
<ul> <li>(4) Intermediate treatment work (Lecture, Observation and Exercise)</li> <li>(5) Final disposal (Lecture, Observation and Exercise)</li> <li>(6) Waste that requires special treatment (Lecture, Observation and Exercise)</li> <li>(7) Collaboration with Citizens (Lecture, Observation and Exercise)</li> <li>(8) Country Report Presentation/Action Plan Making (Exercise, Presentation and Discussion)</li> <li>3. After returning: Participants explain the action plans to their organizations. Participants report their activities on fields to JICA &amp; implementing partners.</li> </ul>	REMARKS	JICA Osaka and website, which op participants' coun others to related ex-participants, instructors. The self-learning, sha information on th	pens tex ntry rep people Japanese people c ring var	ts, orts and e.g. e can do ious

Risk Management and Residue Analysis of Chemicals for Environmental Safety 理論中会のための化学物質のリスク管理上建図公共		GROUP	098081
環境安全のための化学物質のリスク管理と残留分析	Environmental M	lanagement—Environmental	l Manageme
		7 participants 🖌	Englisl
OBJECTIVE	TARG	ET ORGANIZATION / GRO	DUP
<ul> <li>(Objective)</li> <li>A draft of project for improving the comprehensive risk management and monitoring technology will be formulated by relevant governmental organizations and this draft will be shared among those concerned.</li> <li>(Outputs)</li> <li>(1) To be able to explain about basic concept of risk management based on risk assessment of chemicals – contamination of the environment and foods, adverse effects on ecosystem and human health, etc.</li> <li>(2) To be able to explain about principles and operation of analytical techniques related to monitoring of chemicals in environmental resources and agricultural products</li> <li>(3) To acquire analytical techniques and skills in instrumental analysis (including sampling, preparation, and pretreatment), immunoassay, and bioassay</li> <li>(4) To submit research reports at the end of first and second half periods with given theme, and to formulate action plan on use of acquired knowledge and techniques</li> <li>(5) The action plan will be submitted and studied for its feasibility.</li> </ul>	<ul> <li>management</li> <li>monitoring o</li> <li>chemicals.</li> <li>Target Grov</li> <li>(1) Current I</li> <li>supervisor in</li> <li>technical offi</li> <li>monitoring o</li> <li>(2) Experience</li> <li>experience in</li> <li>monitoring o</li> <li>(3) Education</li> </ul>	ve organizations in charge and research institutes in f environmental and indus up Duties: be an administration charge of risk manageme cer and researcher in char f environmental chemicals ce: have more than 3 year in the field of risk managem f environmental chemicals hal Background: be a grad	charge of trial on officer , nt or a rge of s' nent or
CONTENTS	PROGRAM	Feb.15.2010 ~ Aug.21.2010	0
[Preliminary Phase in a participant's home country] Formulation and submission of Job Mission Report Preparation for the report presentation	PÉRIOD IMPLEMENTING PARTNER	Hyogo Prefecture, Kobe University, etc.	!
[Core Phase] <u>Related to output (1):</u> Lectures and Presentation	JICA CENTER	JICA Hyogo	
Job mission report presentation for sharing the information and ideas Basic concept of risk management of chemicals for environmental safety Outline of environmental chemicals, risk evaluation, risk management and risk	COOPERATION PERIOD	2008~2010	
<ul> <li>Communication,</li> <li>Laws and regulations concerning environmental management.</li> <li>Effects on ecosystems, human health etc.</li> <li>Related to output (2): Lectures and Lab Practices</li> <li>Theory and principle of chemical analysis for monitoring (soil, water, air and agricultural/livestock products.</li> <li>Theory and principle of instrumental analysis and bioassay</li> <li>Related to output (3): Lectures and Lab Practices</li> <li>Pesticide residue analysis remained in agricultural products</li> <li>Chemical analysis of agro products and environmental samples</li> <li>Immunoassay of POPs</li> <li>Theory and principle of various test kits</li> <li>Related to output (4): Workshop and Presentation</li> <li>PCM Workshop for the selection of issues.</li> <li>Preparation and presentation of action plan</li> <li>Guidance session by Course Leader and technical advisor appointed for each participant</li> <li>Finalization Phase in a participant's home country</li> <li>Related to output (5):</li> <li>Explanation of the action plan as a start for the implementation back in the participating organization and submission of its final report compiled by the</li> </ul>	REMARKS	As legal restriction on environmental chemicals important laws and regu- be introduced. For producing realistic a a technical advisor will h appointed for each parti	lation will action plan be

Industrial Wastewater Treatment Technique		GROUP	۲	0980815
産業廃水処理技術	Enviro	onmental Management	t—Water	r Pollution
		8 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATION	I/GRO	UP
[Objectives] Enhance the capability of officials and engineers in charge of industrial wastewater treatment to formulate adequate plans of industrial wastewater treatment in participant's countries.	[Target Organizations] Departments related to wastewater treatment the central/local government or manufacturin enterprise.			
<ul> <li>[Outputs]</li> <li>To achieve this program objective, participants are expected to achieve the followings in Japan;</li> <li>(1) To understand the importance of wastewater treatment and the water pollution related existing regulations included disposal treatment</li> <li>(2) To understand the water pollution control process, and the general concept of wastewater treatment technologies</li> <li>(3) To acquire the method of selecting wastewater treatment by analysis, and the basic design of wastewater treatment facilities</li> <li>(4) To understand the techniques concerning the detail design and manufacturing control of the facilities for precipitation filtration, neutralization, removal of oil contents etc.</li> <li>(5) To acquire the method of analyzing wastewater through practice, and to understand the methods of operation and maintenance of wastewater treatment facilities.</li> </ul>	【Target Group】 1) Current Duties: be engineers in charge of wastewater treatm			facturing vastewater nemical,
CONTENTS	PROGRAM	Iul.20.2009 $\sim$ Nov.2	27 2009	
1. Preliminary Phase in a participant's home country Applying organizations are required to submit the Job Report and the Issue Analysis Sheet together with the application form for selection in Japan.	PROGRAM PERIOD IMPLEMENTING PARTNER		onal	ociation
2.Core Phase in Japan (Lecture, practice and/or field study) (1)Basic of Water Pollution Control	JICA CENTER	JICA Kyushu		
<ul> <li>(2)Basic Theory of Wastewater Treatment</li> <li>(3)Basic Plan of Wastewater Treatment</li> <li>(4)Design and Construction of Wastewater Treatment Facilities</li> <li>(5)Operation and Maintenance of Wastewater Treatment Facilities</li> </ul>	COOPERATION PERIOD	2008~2010		
(6)Formulation of Action 3. Finalization Phase in a participant's home country Application and implementation of the action plan is discussed in the participant's organization and its result will be submitted by March, 2009 based on the follow-up questionnaire to be provided during the phase in Japan.	REMARKS			

Marine Environment Protection for Senior Officials in the Maritime Authorities and Law Enforcement Authorities	GROUP 🚳 098082
	ronmental Management—Environmental Administrati
Target Countries:maritime country	8 participants / Englis
OBJECTIVE	TARGET ORGANIZATION / GROUP
<ul> <li>This program aims to realize the development of the effective policies for marine environmental protection, and to direct the practical measures to the issues on the above mentioned field.</li> <li>To attain the objective, participants are expected to achieve the following:</li> <li>(1) To explain the present situation and activities of marine environment protection in respective countries,</li> <li>(2) To explain the international framework of marine environment protection,</li> <li>(3) To explain the present situation and activities of marine environment protection in ASEAN, and the way of strengthening the cooperation and networking among the neighboring countries,</li> <li>(4) To explain the present situation and activities of marine environment protection in Japan,</li> <li>(5) To formulate an action plan on how to develop and promote the effective policy of marine environment protection.</li> </ul>	<ul> <li>[Target Organizations] Coast guard or maritime authority obliged to marine pollution prevention work</li> <li>[Target Group]</li> <li>(1) Individuals in a managerial position.</li> <li>(2) Individuals who have more than 5 years of occupational experience in the above field.</li> </ul>
CONTENTS	PROGRAM Jan.19.2010 ~ Mar.6.2010
<preliminary (activities="" country)="" home="" in="" phase=""> (1) Preparation of the County report</preliminary>	IMPLEMENTING PARTNERJapan Coast Guard, Japan Coast Guard Association
<core (activities="" in="" japan)="" phase=""> (1) International framework of marine environment conservation (2) Outline of Japan coast guard</core>	JICA CENTER JICA Okinawa
<ul><li>(3) Outline of laws regarding marine environment in Japan</li><li>(4) Activity for marine environment conservation</li><li>(5) Assessment technique for vulnerability of environment</li></ul>	COOPERATION 2008~2010
<ul> <li>(6) Actual condition of marine pollution in Japan</li> <li>(7) Marine disaster prevention</li> <li>(8) Analysis method of pollutant and oil and others</li> <li>(9) Regulatory measures for law violation of marine environment laws</li> <li>(10) Pollution survey method</li> <li>(11) PCM method</li> <li>(12) Formulation and presentation of the Action Plan</li> <li><i style="text-align: right;"><i style="text-align: right;"><i style="text-align: right;"><i style="text-align: right;"></i></i></i></i></li> <li>(10) Pollution survey method</li> <li>(11) PCM method</li> <li>(12) Formulation and presentation of the Action Plan</li> <li><i style="text-align: right;"><i style="text-align: right;"><i style="text-align: right;"></i></i></i></li> <li>(1) Share and discuss the action plan in respective organizations</li> <li>(2) Modify the action plan</li> <li>(3) Formulate and submit the progress report and completion report</li> </ul>	REMARKS

Cleaner Production for productivity improvement and energy conservation on			GROUP	0980885
Maintenance management 設備管理における生産性向上と省エネのためのクリーナープロダクション	Environme	ental Ma	anagement—Cleane	r Productio
		7 pa	rticipants ★ 🖊	English
OBJECTIVE	TARG	ET OR	GANIZATION / GRO	OUP
<ul> <li>[Objective]</li> <li>Proposal is formulated for introducing of cleaner production technology in national organization and private company relating to energy plant and organization disseminating cleaner production.</li> <li>[Expected Results]</li> <li>(1)1)Participants are able to explain the basic concept of cleaner production technology for productivity improvement and energy conservation.</li> <li>(2)2)Participants are able to explain the management measures for effective maintenance site and prevention of occupational and maintenance accident.</li> <li>(3)3)Participants are able to explain maintenance technology and training methodology for energy conservation and productivity improvement.</li> <li>(4)4)Participants are able to formulate action plan for introduction of cleaner production technology.</li> <li>(5)5)After returning within the due date of submission of the final report, the proposal (Action plan) created by participants is shared in the organization and discussed towards the realization and implementation</li> </ul>	relating to er	nergy p dissem	n and private com lant (ex.power plar inating cleaner pro ion center)	nt) and
CONTENTS	PROGRAM	Aug 5 9	$2009 \sim Nov.28.2009$	
This program aims to promote productivity improvement and energy conservation by formulating policy relating to Cleaner Production on maintenance management.	PÉRIOD IMPLEMENTING PARTNER	Kitak	yushu Internationa no-Cooperative As	1
(1)•Global environmental issue and basic knowledge of cleaner production •History and current situation of environmental management in Kitakyushu city	JICA CENTER	JICA	Kyushu	
<ul> <li>Necessity of maintenance management</li> <li>(2) Management measures in productivity and maintenance site</li> <li>Methodology of how-to advance and improve maintenance management in each</li> </ul>	COOPERATION PERIOD	2009~	~2011	
<ul> <li>element of job</li> <li>Methodology for prevention of occupational and maintenance accident and risk management</li> <li>(3) History and background of maintenance management for productivity improvement and energy conservation</li> <li>Technology and Training methodology for maintenance management</li> <li>Introduction of technology, methodology and supporting tool</li> <li>(4) Job report presentation</li> <li>Creating of Issue analysis sheet</li> <li>Action plan presentation</li> <li>(5) Presentation of proposal (Action plan) in participant's organization</li> <li>Presentation for the final report</li> </ul>	REMARKS	Nov.2	irst course in Aug. 28.2009, and the s 1.2010~Apr.24.20	econd in

Integrated Basin Management for Lake Environment 湖沼環境保全のための統合的流域管理		GROUP (10) 0980988	
	Enviro Nature Conserv	nmental Management—Water Pollution ation—Conservation of Biodiversity 10 participants / English	
OBJECTIVE	TARG	ET ORGANIZATION / GROUP	
<outcome> For the participants to become adequately knowledgeable about the fundamental of lake basin management, and to become able to play a major catalytic role in developing the needed governance framework</outcome>	<pre>&lt; Target Organization &gt; Division in National/Local government which charge of Management of Lakes and their basins</pre>		
<output> <ol> <li>Preliminary Lake Basin Report and Lake Basin Questionnaire are completed.</li> <li>Participants are able to explain the resources of lakes and its utilization.</li> <li>Participants are able to explain the challenges of governance in the field of Lake Basin management in general and in their respective country.</li> <li>Participants are able to propose an draft action plan, to solve the problems/challenges which participants' organization are facing, by properly integrating the components of the governance framework involving institutions, policies, stakeholder participation, technological investments, information, financing and other considerations.</li> <li>Draft Action Plans are shared and discussed by the participating organization</li> </ol></output>	< Target Group > 1) Current Duties: be either technical of charge of lake/wetland water management (including management of rivers flowing i water bodies) who are expected to assu executive administrative posts in that fit researchers in water quality and ecosyst management who are expected to take		
	PROCRAM	Jan.3.2010 ~ Mar.13.2010	
CONTENTS  1. Orientation Lecture and Practice 2. Stage 1. Understanding the Resource Topic 1. Share Information about the State of Lakes Topic 2. Biophysical Characteristics	PROGRAM PERIOD IMPLEMENTING PARTNER	INT'L LAKE ENVIRONMENT COMMITTEE FOUNDATION	
Topic 3. Human Use of Lakes 3. Stage 2. Meeting the Governance Challenge	JICA CENTER		
Topic 4. Institution Topic 5. Incentives and Regulations Topic 6. Involving People	PERIOD	2005~2009 ILEC Homepage:	
Topic 6. Information Topic 8. Information Topic 9. Finance 4. Stage 3. Synthesis (TBD) Topic 10. Plan to Action Topic 11. Towards the Future	REMARKS	http://www.ilec.or.jp/ Required to bring each country report contained on CD-ROM.	

Environmental Policy and Environmental Management System 環境政策・環境マネージメントシステム GROUP 0980992 Environmental Management-Environmental Administration 9 participants English OBJECTIVE TARGET ORGANIZATION / GROUP [Objective] [Target Organization] Division in National/Local government with Participants' capability of formulation of comprehensive environmental management plans which take account of global environmental conservation frameworks and the responsibility for planning, project design, or concept of sustainable development as well as regionally based strategies to deal implementation of environmental policy with pollution from industry and urban living is improved. [Outputs] [Target Group] (Preparatory Phase in participants' home countries) 1) Current Duties: Engineers or administrative 0) The country reports are formulated in participants' home countries. officials with central responsibility for planning, (Core Phase in Japan) project design, or implementation of environmental policy 1) Based on the country reports and discussions, environmental issues in participants' countries are preliminary sorted out. 2) Experience in the relevant field: at least five 2) Understanding the scale of environmental problems and getting knowledge of the (5) years' experience in the field of industrial/urban pollution control way how to solve the problems. 3) Draft Action Plans for countermeasures against environmental issues using 3) Age: be between twenty-five (25) and forty-five (45) years of age knowledge and skills applicable for participating countries are formulated. (Finalization phase in participants' home countries) 4) The draft action plan is shared and examined in their respective organization. PROGRAM May.6.2009  $\sim$  Jul.4.2009 CONTENTS In this program, the following major subjects will be covered through lectures, IMPLEMENTING GLOBAL ENVIRONMENT discussions and observation trips: PARTNER CENTRE FOUNDATION (1) Countermeasure to environmental problem and its history (2) Environmental law system in Japan JICA CENTER JICA Osaka (3) Establishment of environmental standard and discharge standard (4) Monitoring of generation sources COOPERATION (5) Establishment of environmental management plan and regional pollution  $2005 \sim 2009$ PERIOD prevention plan (6) Environmental assessment Through a 6 day programme, (7) Sustainable development participants will get 50% points to get the international authorized (8) Preservation of global environment environmental audit personnel including UNEP personnel. REMARKS

Establishment of Sound Material Cycle Society For ASEAN Countries- Formulation of Practical Measures - アセアン地域 循環型社会の構築 -実践的な改善策の策定に向けて-	Environmo	r ntal Management	R∕F @	0984006 Solid Waste
アモデノ地域 加速空社会の構築 一天成的な改善束の束定に向けて Target Countries:ASEAN	Environme	6 participants		English
OBJECTIVE	TARG	ET ORGANIZAT		
<ul> <li>[Objective]</li> <li>Practical action plan rerated to 3R and environmental education at national and local level is formulated for promoting establishment of sound material cycle society.</li> <li>[Expected Results]</li> <li>(1)1)Participants are able to explain the overview of the system for establishment of sound material cycle society in central and local government.</li> <li>(2)2)Participants are able to explain the measures to understand concrete efforts implemented by local government and private company</li> <li>(3)3)Participants are able to explain the environmental education activity with citizens implemented.</li> <li>(4)4)Participants are able to formulate action plan for introducing of practical 3R and environmental education activity.</li> <li>(5)5)After returning within the due date of submission of the final report, the proposal (Action plan) created by participants is shared in the organization and discussed towards the realization and implementation</li> </ul>		l government an lanagement, 3R		0
CONTENTS This program aims to promote the 3R and environmental education by formulating practical action plans, toward the establishment of sound material society. (1)Introduction of legal system for sound material cycle, Introduction of 3R system and environmental management in Japan, Administration of industrial waste management, International waste material flow in Asian countries (2)Overview of eco town project, Separate collection in offices and household, Data collection and analysis for general waste, Hazardous waste treatment in hospital (3)Environmental education for citizens, River clean-up campaign by citizen, Composting activity for general waste (4)Job report presentation, Creation of Issue analysis sheet, Action plan presentation (5)Presentation of proposal (Action plan) in participants' organization, Presentation for the final report	PROGRAM PERIOD IMPLEMENTING PARTNER JICA CENTER COOPERATION PERIOD	Jan.15.2010 ~ F Kitakyushu Int Techno-Coope JICA Kyushu 2009~2011	ernationa	al

Industrial Pollution Control Management for Middle Eastern Countries 中東地域産業環境対策			R/F	٩	09	984021
	Management—Ot	her Environmen	tal	Managem	ent	Issues
Target Countries:Middle East		7 participants	; ,	/	En	nglish
OBJECTIVE	TARG	ET ORGANIZA	ΓΙΟΝ	/ GROL	JP	
<ul> <li>[Objectives]</li> <li>To help administrators engaged in the management of industrial environments understand the functions and roles which municipalities, research institutes and businesses should represent in the improvement of industrial environments, as well as the interplay between them, through looking at how industrial environments have been improved in Japan, and learn the skills required to establish effective policies for administrative guidance using pollution prevention techniques, facility management strategies, and administrative measures.</li> <li>[Outputs]</li> <li>(1) To master air pollution control administration and pollution control technique, and propose a solution for the issue.</li> <li>(2) To master water pollution control administration and pollution control technique, and propose a solution for the issue.</li> <li>(3) To master wate disposal administration and recycling technique, and propose a solution for the issue.</li> <li>(4) To understand measurement of environmental pollutants and their affect on the human body and the nature, and propose a solution for the issue.</li> <li>(5) To master environment improvement technique, and propose a practical action plan for the department. to which participants belong</li> </ul>	Pollution Con [Target Grou 1) Current D charge of in 2) Experience than 3 years' of industrial 3) Education university, m equivalent.	Organization ir ntrol	nnica on co nt fiel exper ol be a neerin	al admini ontrol. Id: have rience in a gradua ng or th	istra e mo n the te c ie	ator in ore e field of
	PROGRAM	11.0010		0.0010		
CONTENTS	PERIOD	Jan.11.2010 $\sim A$	Apr.2	8.2010		
1. Preliminary Phase in a participant's home country Preparation of Issue Analysis Sheet	IMPLEMENTING PARTNER	Kitakyushu In Techno-coop (KITA)	terna erati	ational ve Asso	ciat	ion
<ul> <li>2. Core Phase in Japan (Lecture, practice and/or field study)</li> <li>(1) Air pollution control administration and pollution control technologies,</li> <li>(2) Water pollution control administration and pollution control technologies,</li> </ul>	JICA CENTER	JICA Kyushu				
<ul><li>(2) Water pollution control administration and pollution control technologies,</li><li>(3) Waste treatment administration and effective treatment technologies,</li><li>(4) Measurement of environmental pollutants and their effects upon the human</li></ul>	COOPERATION PERIOD	2006~2010				
<ul> <li>body and the natural world, and</li> <li>(5) Environmental improvement techniques, and design of an environmental improvement activity plan to suit an issue in the participant's home country.</li> <li>3. Finalization Phase in a participant's home country</li> <li>Application and implementation of the action plan is discussed in the participant's organization and its result will be submitted by March, 2009 based on the follow-up questionnaire to be provided during the phase in Japan.</li> </ul>	REMARKS					

Waste Management Technologies and 3Rs for Central and South American Countri 中南米地域 廃棄物処理技術および3R			/F 🞱	0984026
	Environme	ental Management	—Urban ∶	
Target Countries:Central and South America OBJECTIVE		10 participants		Spanisł
To acquire knowledge/skills of waste management(Disposal and 3R) and formulate Action Plans to improve waste management system in the participant's respective countries. (1)To learn waste disposal technologies and 3R policy in Japan (2)To learn the roles/functions among organizations/stakeholders concerned to develop sound material-cycle society (3)To propose feasible "Action Plan" for proper disposal of waste by making the best use of the learnt knowledge/technologies (4)To establish the participants' network in order to exchange relevant information/knowledge after completion of the program in Japan	<ol> <li>Technical or administrative personnel in central or local governments in the field of we management and the 3Rs (Reduce, Reuse and Recycle)</li> <li>Individuals with at least 5 years of practical work experience</li> <li>University graduates or equivalent in scient</li> </ol>			
CONTENTS <preparatory phase=""> Formulation of Country Report <curriculum in="" japan=""> 1) Waste management administration - Collection and transportation of waste on the city level - The 3R policy (the 3R Initiative)</curriculum></preparatory>	PROGRAM PERIOD IMPLEMENTING PARTNER	Aug.11.2009 ~ So Japan Environm Center and Env Bureau, City of	iental Sa vironmen	nitation tal Affairs
	JICA CENTER	JICA Sapporo		
- Transition of waste management administration in Japan 2) Waste treatment techniques	COOPERATION PERIOD	2007~2009		
<ul> <li>Industrial waste treatment techniques (intermediate, final disposal)</li> <li>Recycling and composting techniques</li> <li>Public awareness</li> <li>Environmental education</li> <li>Discussions with citizens</li> <li>(Finalization Phase)</li> <li>Implementation of the Action Plan and the report of the progress.</li> </ul>	REMARKS			

🖞 : Learning Program, 🎁 : Diffusion Program, 👁 : Solution Program, 🍞 : International Dialogue Program

Water quality monitoring for effective usage of water re	sources in Central Asia
中央アジア地域 水資源有効利用を目的とした水質モ	ニタリング
中天アンア地域 小貝源有効利用を日内としに小貝モ	ープリング

Water quality monitoring for effective usage of water resources in Central Asia 中央アジア地域 水資源有効利用を目的とした水質モニタリング		R/	F	0984042
千天/ ノノ地域 小貝都有効利用を日的とした小貝モーチリング	Enviro	nmental Manageme	nt—Water	Pollution
Target Countries:Countries which use Amu River and Syl River as water resources and can s	peak	7 participants	/	Russian
OBJECTIVE	TARG	ET ORGANIZATIC	)N / GROU	JP
<ul> <li>[Objective]</li> <li>In the organizations in charge of water quality monitoring and management, reccomendation paper will be presented on improvement of technical standard for adminitrating area and also on vast water area management.</li> <li>[Expected Results]</li> <li>(1) Understanding Japanese laws, regulations, standards on water issue.</li> <li>(2) Finding the way of improvement on the accuracy management on water quality monitoring.</li> <li>(3) Being able to process the Analysis Result and Wide-area Water Quality Monitoring System</li> <li>(4) Understanding others' sense of value over the utilization of shared rivers/lakes.</li> <li>(5) Take the reccomendation repot into an action.</li> </ul>		te Committee for Nature Protectio		ent
CONTENTS	PROGRAM	Nov.1.2009 $\sim$ Dec	.2.2009	
(1)Lectures on general information on water quality control policy. Inception report presentation on the actual status and problems on water quality monitoring in Central Asia. (2)Review of Current Water Quality Monitoring Technology and Improvement of Accuracy Management (3)Data process and application towards compiling database and preparation for setting up GIS in order to utilize the information for further research and policy making. Also, to understand the importance of information disclosure and sharing. Some treatment technology will be introduced. (4)utilize the water monitoring as process for wide-area environmental conservation and proactive water resource for shared use with the understanding of different situation and opinions of other participants. Its process and challenging issue will be summarized and presented as A/P. (5)Participants will prepare a report about the advance of activities with the fruit of training in Japan in 6 months after the return. Besides, making a conference to solve the problems mentioned in the report.	PROGRAM PERIOD IMPLEMENTING PARTNER JICA CENTER COOPERATION PERIOD	Nov.1.2009 ~ Dec International Ce Environmental T (ICETT) JICA Chubu 2009~2011	nter for	7 Transfer

Dissemination of Education for Sustainable Development through environmental		R	/F 🕲	0984074
education in Pacific Region 大洋州地域 環境教育を通じたESD(持続可能な開発のための教育)の普及	Environmental M	lanagement—Envir	onmenta	l Management
Target Countries:Oceanian countries		6 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATIO	ON / GRO	OUP
[Objectives] Under the theme of the waste disposal problem which is the common characteristic in Oceanian countries, ESD promotion plan will be formulated as suit the each countries' condition. [Outputs] (1)To understand the Japan's environmental policy and projects. (2)To understand the education for community and human development in a sustainable way through environmental issues. (3)To understand waste disposal problems, international trends and an environmental education. (4)To learn planning of problem solution and business promotion method utilizing the regional characteristics. (5)To formulate action plans for sustainable development of a region in each country.	Environment Affairs and so Target Groo 1)Current Du in the admini engaged in th environmenta (Participants Environment ministries an 2) Education surpassing to	lated ESD (such a , Education, Econo o on) up] aties: be an office istrative bodies we he field of enviror al education from not only the and Education be d agencies are acc al Background: bo o a graduate of ur tween the ages o	nomy, Fo er, techni ho is pre umental p e Ministr ut also o ceptable e equal o iversity	oreign ical officers esently policy or ry of ther ) or
CONTENTS	PROGRAM PERIOD	$Oct.5.2009 \sim Oc$	t.30.2009	
Output(1) •To take lectures about outline of basic environment plan of central and local government in Japan.	IMPLEMENTING PARTNER	Learning and E Foundation for		
<ul> <li>To take lectures about autonomy's activities from Nishinomiya City. Output(2)</li> <li>To take lectures about basic notion of ESD</li> </ul>	JICA CENTER	JICA Hyogo		
• To visit the sites of education and activity of ESD in Nishinomiya City Output(3)	COOPERATION PERIOD	2008~2010		
<ul> <li>To visit Nishinomiya Waste Treatment Facility and private waste treatment facility</li> <li>To take lectures about economic activity related to waste products and international trend Output(4)</li> <li>Visit a school and local community to learn environmental education for waste products</li> <li>To have a workshop of business solution about regional development Output(5)</li> <li>To make up an action plan through a workshop</li> </ul>	REMARKS	Three (year-on are set for each And utilize ex- next year's trai linkage among 3	ı year's t participa ning to r	raining. nts to the nake

🖞 : Learning Program, 🇰 : Diffusion Program, 👁 : Solution Program, 🌍 : International Dialogue Program

R/F 💿 0984076 Environmental Management-Cleaner Production

Target Countries: Southern and Eastern European Countries	10 participants ★ / Ei		
OBJECTIVE	TARGET ORGANIZATION / GROUP		
<ul> <li>[Objectives]</li> <li>Participants will understand knowledge and techniques regarding cleaner production aiming to develop an action plan to promote cleaner production activities in their countries.</li> <li>[Outputs]</li> <li>(1) To understand the definition, concept, necessity, role of governmental and private sector regarding cleaner production.</li> <li>(2) To understand the knowledge and techniques regarding technology to minimize environmental impact.</li> <li>(3) To understand the knowledge and techniques regarding energy conservation technology.</li> <li>(4) To understand the knowledge and techniques regarding resource saving technology.</li> <li>(5) To understand the knowledge and techniques regarding recycling technology.</li> </ul>	TARGET ORGANIZATION / GROUP         [Target Organizations]         Enterprise including former national enterprenergy consumption industry, governmenta organization in charge of cleaner production environment         [Target Group]         (1)Individuals from above-mentioned organization         (2) Individuals with more than 5 years occupational experience in this field		
CONTENTS	PROGRAM PERIOD Oct.12.2009 ~ N	Nov.21.2009	
<ul> <li>(1) Definition, concept, necessity, role of governmental and private sector regarding cleaner production, Green productivity, Public awareness activity, Environmental law, Recycling society and global issue, Environmental administration and monitoring system, Inspection and guidance system for private sector</li> <li>(2) Zero emission, Wastewater treatment (Plating waste), Exhaust emission control system, Reduce of solid waste, Environment impact assessment</li> <li>(3) Energy conservation and global issue, Energy conservation law and its enforcement in Japan, Energy management in a plant, Case study – Energy</li> </ul>	IMPLEMENTING Kitakyushu Int	ernational rative Association	
conservation activities in a plant, Energy consevetion technology on heating furnace, Machine condition diagnosis techniques (4) Production control, Program Evaluation and Review Technique (PERT), Quality Control using QC 7 tolls, Total Productive Management (TPM), Productivity and equipment maintenance, 5S activity (5) 3R(Reuse, Reduce, Recycle), Economy aspects of recycling, Support to private company for 3R, Reclaimer of scrap metal, Separation and collection of waste	REMARKS		

The Acid Deposition Monitoring Network in East Asia 東アジア酸性雨モニタリングネットワーク強化		R	⁄F 🕲	0984078
	Environmental	Management—Air	Polluti	on/Acid Rain
Target Countries: 10 countries receiving ODA out of 13 EANET member countries	1	6 participants	/	English
OBJECTIVE			ON / GR	OUP
<ul> <li>[Objectives]</li> <li>To develop the ability of mid-level engineers who are involved in EANET activities in each countries, in order to improve each countries' abilities to monitor and evaluate the current situation of damage by acid deposition, reduce the pollutants coused for acid rain.</li> <li>[Outputs]</li> <li>(1) To analyze damage and countermeasures of acid deposition in each countries (2) To understand Japan's history, experiences, current situation and countermeasures in this field</li> <li>(3) To improve the technique and accuracy of monitoring through practical trainings</li> <li>(4) To make action plans that answer to each countries' challenges</li> </ul>	Acid Deposit countries in 1 {Target Grou <position> An engineeri the issue of a also related t <experience Experience in years' experi management <others> Educational 1</others></experience </position>	s engaging in the ion Monitoring N East Asia (EANE up] ng official or rese acid deposition or to EANET activit	etwork i Γ) archer e air poll- ies. d: have of enviro	n each engaged in ution and more than 3 onmental
CONTENTS	PROGRAM PERIOD	Oct.5.2009 $\sim$ Dec	2.18.2009	)
Output(1) To present country reports and discuss current situation and problems in each countries.	IMPLEMENTING PARTNER	Hyogo Environr Association	nental A	dvancement
Output(2) •To study the role of central government, local government and business enterprises and their countermeasures, development of legal systems.	JICA CENTER	JICA Hyogo		
•To iconduct field research at smoke generation facilities, smoke treatment facilities and air environment observation facilities.	COOPERATION PERIOD	2008~2010		
<ul> <li>Output(3)</li> <li>To learn skills of monitoring on wet and dry deposition, monitoring on soil, vegetation and inland aquatic environment, monitoring on air pollutant.</li> <li>Exercise of quality management and quality control</li> <li>Transportation of air pollutants and generation source inventory.</li> <li>Output(4)</li> <li>To review the training</li> <li>To formulate an action plan for solving problems analysed at the beginning.</li> <li>To discuss for the regional cooperation in East Asia</li> </ul>		The result of th highly evaluated capacity-buildir countries at the governmental c	l for ng of par e EANET	ticipating F
	REMARKS			

Capacity Development for Adaptation to Climate Change –Climate Modering and		R/F 💿 0984141
Analysis アジア地域 気候変動への適応にかかる能力開発 一気候変動予測解析	Envir	onmental Management—Global Warmin
Target Countries:Bangladesh,Thailand,Vietnum,Indonesia,Philippines		5 participants / English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
[Objectives] <ul> <li>•to develop a capacity for adaptation to climate change, particularly forecast and impact assessment</li> <li>•in the first two years: be focused on climate change forecast where a technique of climate modeling based on the 'Earth Simulator' and a downscaling method will be learned <ul> <li>•in the last year:impact assessment by using the climate change forecast and</li> </ul></li></ul>	,Meteorologi 【Target Gro	f Technology and Engineering cal Inatitute up] cal Reseachers in charge of climate
		V 00.0000 I 00.0000
CONTENTS	PROGRAM PERIOD	May.20.2009 ~ Jun.20.2009
(1)Lectures (a)Adaptation policy in Japan (b)Basic concept of Climate Change Model	IMPLEMENTING PARTNER	Meteorological Research Institute
(c) and other related lectures	JICA CENTER	JICA Tokyo
(2)Exercise (a)Data analysis of Climate Change Model	COOPERATION PERIOD	2008~2010
(b)Data modeling of Climate Change (c) and other related research	REMARKS	Applicants are expected to nominate from same organization and/or person each year(3years) as far as possible

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Waste Management for Promoting Recycling-oriented Societies in Central and South	۲
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## 中南米地域 循環型社会形成促進のための廃棄物総合管理

Environmental Management-Urban Solid Wastes

15 participants /

Target Countries: BV, CR, DN, EL, GU, HD, MX, NC, PM, PG, PE, VE, CB

0984146

Target Countries : BV, CR, DN, EL, GU, HD, MX, NC, PM, PG, PE, VE, CB	15 participants / Si		
OBJECTIVE	TARG	ET ORGANIZATIO	N / GROUP
[Objectives]         Comprehensive master or related action plan on SWM will be planned then accordingly, the SWM system shall be improved. Thus, current problems/ challenges in the said field will be solved and recyclable society is further promoted in Central and South America.         [Outputs]         1) To understand the present system and the characteristics of SWM administration to compare with their own and to extract hints for improvement         2) To understand various techniques and measures in waste treatment and recycling         3) To learn methods of environmental awareness raising through the experience of case study in waste management         4) To make and report Action Plans for improvement of SWM system in each country/ local administration including role or responsibility of participants themselves	solid waste p America. Lo	anizations <b>]</b> local governments problem in Central cal government offi to participate in.	and South
CONTENTS	PROGRAM PERIOD	May.20.2009 $\sim$ Jul.	4.2009
Promoting SWM and Recycling oriented society for Central and South America, the training course aims to build capacity of administration board by learning characteristics and technology of SWM in Japan. The final goal is to compose and implement Action Plan to solve problem found, which hinders proper management	IMPLEMENTING PARTNER	International Cer Environmental Te (ICETT)	nter for echnology Transfer
of solid waste in each country.	JICA CENTER	JICA Chubu	
(1)-Recognition of conditions and/or problems in waste generation -General issued in SWM in Japan incl. Laws, regulations, the 3R initiative,	COOPERATION PERIOD	2008~2009	
<ul> <li>collection and transportation and international Laws such as PRTR, etc.</li> <li>(2)-Site visits to waste treatment technologies, Reduce, Reuse and Recycle, and hazardous waste treatment <ul> <li>The concepts of Eco-town and Recycle business</li> <li>(3)-Strategic approach and Tool making for public awareness raising</li> <li>(4)-Making and Presentations on Waste management Masterplans and /or Action Plans</li> <li>(5)-Implementation of the Action Plan</li> </ul> </li> </ul>	REMARKS		

Capacity Development in Environmental Management (Air and Water Pollution Control) for Middle Eastern countries 中東地域環境管理能力向上(大気汚染・水質汚濁防止)	Environmental N	R∕ Ianagement—Envir	/F 💿	0984148 I Management
Target Countries∶Iran, Lebanon, Syria, Egypt, Saudi Arabia, Palestine		9 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATIO	ON / GRO	OUP
[Objectives] The participants are expected to improve/acquire the capacity to formulate and execute the policy and regulations in the field of air and water pollution control. (In JFY 2009, the program will focus on Air Pollution) [Outputs] (1) to identify environmental problems of participating countries and obtain hints for the improvement of the situation (2) to learn from the experience of Osaka and other cities in Japan about air/water pollution and coutermeasures thereof (3) to obtain applicable knowledge on environmental communication (4) to produce Action Plan while in Japan and explain it to stakeholders in respective countries after returning	engaged in E 【Target Gro Administrativ	cal Governmental Invironmental Adr	ninistrat sing in	ion
CONTENTS	PROGRAM PERIOD	Jan.11.2010 $\sim$ Fe	b.27.2010	)
[Preparatory phase (Before coming to Japan)] •Participants are expected to write Country Report on the present situation and problems	IMPLEMENTING PARTNER	Global Environn Foundation	nent Cer	ntre
[Program in Japan] (1) • At the Presentation of Coutry Report, through information exchange and	JICA CENTER	JICA Osaka		
<ul> <li>(1) At the resentation of Courty Report, through minimation exchange and discussion, participants obtain hints for improvement</li> <li>(2) •through lectures, practices and observation, participants gain knowledge on</li> </ul>	COOPERATION PERIOD	2008~2010		
<ul> <li>environmental management systematically, from identification, analysis, planning through guidance</li> <li>(3) • participantns learn various methods of communication such as information disclosure, cooperation with stake holders, environmental education etc.</li> <li>(4) • participants are to discuss countermeasures to pollution problems of each coutry with co-participants and Japanese lecturers and produce an Action Plan as fruits of this program.</li> <li>[Post-program activities (After participants' return)]</li> <li>• Within 3 months of the end of the program in Japan, participants/participating organizations are expected to implement the above Action Plan and report the progress in Comletion Report.</li> </ul>	REMARKS	In JFY 2009 the on Air Pollution		n will focus

CLEANER PRODUCTION IN PROCESS INDUSTRIES FOR LATIN AMERICAN COUNTRIES (FOR MANAGERS AND ENGINEERS OF PROCESS INDUSTRIES) 中南米地域 プロセス工業におけるクリーナープロダクション	Environme	R/F 💿 ental Management-Cleaner	0984155 Production
Target Countries:Latin American Countries		7 participants ★ 🖊	Spanish
OBJECTIVE	TARG	ET ORGANIZATION / GRO	
[Objectives] To be able to set the plan and goal in order to utilize Cleaner Production method in the production process of industrial material in order to solve the environmental problem, caused by industrialization in developing countries [Outputs] (1) To observe the real state of Cleaner Production in Japan and to learn the method of executing Cleaner Production (2) To learn the basic technologies of engineering for process industries (3) To learn how to implement effective maintenance management and to acquire the useful technologies for it	industries su ion and steel 【Target Gro	is belonging to the field of ch as chemical, petroleum l, food and ceramic plant	refinery,
CONTENTS	PROGRAM PERIOD	Aug.3.2009 $\sim$ Nov.20.2009	
<ul> <li>(1) Recent situation of global environment, Cleaner Production, TPM, 5S, Kaizen Activity, New QC Seven Tools, PCM, Plant Visit</li> <li>(2) Selection of Equipment, Selection of Motors, Selection of Materials, Corrosion</li> </ul>	IMPLEMENTING PARTNER	Kitakyushu International Techno-cooperative Ass (KITA)	
and Protection, Sequence Control, Process Control, Plant Visit (3) Maintenance Management, Maintenance in Actual Plant, Visual Maintenance Management, Diagnosis TechniquePlant Visit	JICA CENTER	JICA Kyushu	
(4) Orientation of training course, instruction of making action plan, instruction of presentation, presentation of action plan	COOPERATION PERIOD	2008~2010	
(5) Report to JICA the progress of knowledge/skills sharing among the respective organization.	REMARKS	This seminar will be imp twice for JFY 2008.The is scheduled from early I to late May 2010 in the content.(The term of thi course is not yet determ	second one Feb 2010 same s training

Capacity Development of Host Countries of CDM/JI for Southeast European and CIS countries 南東欧・CIS地域京都メカニズム能力開発	Envir	R/F 🕢 0984195 onmental Management—Global Warming	
Target Countries : Southeast European and CIS countries	9 participants / Engl		
OBJECTIVE	TARG		
<ul> <li>[Program Objective]</li> <li>Participants will be enhanced the capabilities for efficient formulation of CDM/JI projects under the UN Framework Convention on Climate Change.</li> <li>[Expected Results]</li> <li>(1) To understand the overview of the UNFCCC and the Kyoto Protocol, including the Kyoto Mechanisms such as CDM/JI and GIS (Green Investment Scheme).</li> <li>(2) To understand effective measures to promote CDM and JI.</li> <li>(3) To acquire skills to develop CDM/JI projects.</li> <li>(4) To strengthen a network among participating countries, as well as with major stakeholders in Japan.</li> <li>(5) To elaborate a report on plan of actions that would be implemented after returning home, in view of prioritized needs of each country.</li> </ul>	TARGET ORGANIZATION / GROUP         [Target Organizations]         This course is designed for governmental organizations in charge of CDM or JI issues Designated National Authorities (DNAs) for CDM, or Designated Focal Points (DFPs) fo or relevant national governmental offices.         [Target Group]         - Administrative officers in charge of CDM or JI, or relevant national governmental offices.         - Experience in the relevant field: more thar years' experience.		
CONTENTS	PROGRAM	Aug.13.2009 ~ Sep.3.2009	
[Preliminary Phrase] Participants will make an Inception Report on the current situation of CDM/JI and problems in their country.	PERIOD IMPLEMENTING PARTNER	Overseas Environmental Cooperation Center, Japan	
[Program in Japan]	JICA CENTER	JICA Tsukuba	
Participants are expected to understand the overall view of CDM/JI issue in order to fulfill the responsibilities stipulated by the UNFCCC through lectures, discussions, practical exercises and site visits.	COOPERATION PERIOD	2007~2009	
<ul> <li>(1) The transition of effort for solving global warming issue, the role and mechanism of CDM/JI/GIS, and the policy on CDM/JI/GIS in Japan</li> <li>(2) The process of formulation and the way of proposition for CDM/JI projects</li> <li>(3) Exercise on drafting the projects of PDD in CDM/JI</li> <li>(4) Visiting the government-affiliated agency and the private company, and discussing with them about CDM/JI</li> <li>(5) Discussion for drafting action plan</li> <li>[Finalization Phase]</li> <li>The action plans made during the program in Japan should be shared in the participants' organization and should be elaborated as Final Report. Six months after leaving Japan, participants will report the progress of the Final Report to JICA.</li> </ul>	REMARKS	【Related website】 〈Kyoto Mechanism Information Platform〉 http://www.kyomecha.org/e/index .html	

Waste Effluent Pollution Control Caused by Mining and Manufacturing Industries for Central and South America 中南米地域 鉱工業による廃水汚染対策	R/F 💿 0984246 Environmental Management-Water Pollutior
Target Countries: Central and South America	18 participants / Span i sh
OBJECTIVE	TARGET ORGANIZATION / GROUP
<outcome> Effective and tangible action plan for preventing environmental destruction coming from hazardous substance included in the discharged water from mining and manufacturing industries will be formulated with close coordination among the related organizations that take charge of the control of the Effuluent regulation (such as ministries and the local governmenttal offices) <output> <ol> <li>Country reports which summarizing problems and issues of waste effluent caused by mining and manufacturing industries are formulated in participants' respective countries</li> <li>Problems and issues of systems and policies on waste effluent pollition control caused by mining and manufacturing industries in their respective countries will be sorted out through the case study in Japan.</li> <li>Draft action plan will be formulated by respective countries</li> <li>Praft action plan will be shared and examined in their respective countries</li> </ol></output></outcome>	[Target Organizations] Some ministries related to heavy industries, or basic industries integrated on petrochemistry, chemistry, mining, medicine, leather, metal finishing etc [Target Group] Technologists on the administrative level • Individuals with more than 5 years vocational experiences in charge of hazardous chemical substances treatment (in enterprises, public organizations, etc.) • Individuals with official requests, majoring in chemistry, under 50 years old
CONTENTS	PROGRAM Nov.11.2009 ~ Dec.12.2009
This course is designed for participating countries to recognize the negative impacts of hazardous substances on environments and human bodies, and propose effective measures to reduce or prevent the environmental disruption or deterioration of environment caused by these substances.	PERIOD         Global Environment Center           IMPLEMENTING PARTNER         Global Environment Center           Foundation         Foundation
(Preparatory Phase in participants' home countries)	JICA CENTER JICA Osaka
Formulation of country reports by team of 3 members in each country. $\langle \text{Core phase in Japan} \rangle$	COOPERATION 2007~2009
<ul> <li>Participants will learn following items through lectures, observations and discussion</li> <li>① Generating mechanism, countermeasures and compensation issue of pollution-related diseases (based on Japanese experience)</li> <li>② Effect of hazardous substances on human body</li> <li>③ Overview of pollution due to hazardous substances</li> <li>④ Laws and regulations for environmental management</li> <li>⑤ Environmental measures by local governments</li> <li>⑥ Environmental protection measures and technologies in chemical industries</li> <li>⑦ Cleaner production technologies</li> <li>⑧ Sharing the problems, draft Action Plan presentation and discussion</li> <li>〈Finalization Phase in participants' home countries</li> <li>Sharing and developing Action Plan, Report to JICA regional office</li> </ul>	REMARKS

Promotion of Project Formulation of Clean Development Mechanism in Central Asia and Caucasus Region		R/F	0984280
中央アジア・コーガサス地域 クリーン開発メカニズム案件形成促進	Envir	onmental Management-Glo	bal Warmin
Target Countries : The countries which are NOT on ANNEX I of Kyoto Protocol.		4 participants /	Russian
OBJECTIVE	TARGET ORGANIZATION / GROUP		
(Objective) The formulation and registration of CDM projects will be promoted in the respective countries.	correspondin	National Authorities (DNA) og organization like Nation o and CDM related offices.	al Focal
<ul> <li>[Expected Results]</li> <li>(1)To grasp the problems which the CDM related organizations in their countries have in the process of project formulation (before coming to Japan).</li> <li>(2)The system to provide information for the stakeholders of CDM projects will be established in the respective DNAs. (the 1st year)</li> <li>(3)The guideline for the formulation of CDM projects considering the situations of the respective countries will be drafted. (the 2nd year)</li> <li>(4)The system to provide the consultation for the registration of CDM projects will be established in the respective DNAs. (the 3rd year)</li> <li>(5)To contribute to the solution of the problems which CDM related organizations have, with fruits of the training program in Japan (after going back to participants' own countries).</li> </ul>			
CONTENTS	PROGRAM	Nov.23.2009 $\sim$ Dec.23.2009	9
To solve the problems which CDM related organizations have in the process of project formulation.	PERIOD IMPLEMENTING PARTNER	International Center for Environmental Technolo	gy Transfe
(1)To clarify the starting point of the training course and To prepare for the practice PDD in Japan.	JICA CENTER	JICA Chubu	
(2)To learn the roles of developing countries in the process of CDM project formulation, registration, and implementation. To frame a PDD in practice.	COOPERATION PERIOD	2009~2011	
<ul> <li>(3)To discuss the way to register CDM projects more easier through sharing PDD which is made in Output 2 and good/bad practices which is collected in participants' country.</li> <li>(4)To learn the perspectives and the measures of Japanese Industry, Private Sector, Ministries and Agencies of the government for the CDM projects. To visit sites (plants, etc.) where efforts for the energy/resources conservation is actually implementing.</li> <li>(5)To frame and present an action plan based on the fruit of the course to solve the problems which are analyzed in Output 1.</li> <li>To aim at the implementation of the action plan which is elaborated in the end of the course in Japan, involving the organization that the participants are belong to.</li> </ul>	REMARKS		

Air pollution source management 大気汚染源管理		R/F 🕥 09842
	Environmental	Management-Air Pollution/Acid F
Target Countries: Algeria, China, Egypt, Hunduras, and Mongolia		8 participants / Engli
OBJECTIVE	TARG	GET ORGANIZATION / GROUP
(Objective) Policy rerated to air pollution source management at own organaization is formulated for promoting air pollution management.		tal management department at l government
<ul> <li>[Expected Results]</li> <li>(1)Participants are able to explain the overview of the administrative system for air pollution prevention.</li> <li>(2)Participants are able to explain the overview of monitoring and analysis method implemented.</li> <li>(3)Participants are able to explain the overview of technology for air pollution prevention to visit government of local government and private companies.</li> <li>(4)Participants are able to formulate action plan for introducing of air pollution source management.</li> <li>(5)After returning, the proposal (Action plan) created by participants is shared in the organization and discussed towards the realization and implementation</li> </ul>		
CONTENTS	PROGRAM	Oct.15.2009 ~ Dec.15.2009
This program aims to promote air pollution management at central/local government by formulating proper policy relating to air pollution source management.	IMPLEMENTING PARTNER	Kitakyushu International Techno-Cooperative Associatior
<ul><li>(1)• History of industrial pollution and health effects of air pollution</li><li>• Law system of air pollution prevention, Plant Inspection system in kitakyushu</li></ul>	JICA CENTER	JICA Kyushu
<ul> <li>Anti-air pollution measures for automobile exhaust gas</li> <li>Environmental education</li> </ul>	COOPERATION PERIOD	2009~2011
<ul> <li>(2) Air pollution monitoring system in Kitakyushu city</li> <li>Monitoring and analysis of air pollution substance</li> <li>Measurement of automobile exhaust gas</li> <li>(3) Technology of dust collection and control of Sulfur and Nitrogen oxides</li> <li>Visit to steel company and thermal power station</li> <li>(4) Job report presentation</li> <li>Lecture of Project cycle management, Instruction for creating Action plan and Issue analysis sheet</li> <li>Action plan presentation</li> <li>(5) Presentation of proposal (Action plan) in participants' organization</li> <li>Presentation for the final report</li> </ul>	REMARKS	

Countermeasure against Automobile Pollution in Urban Area 都市における自動車公害対策		R	?∕F 🕲	0984287
即回このいる日勤半公吉対東	Environmental	Management—Air	Pollution,	/Acid Rain
Target Countries : Countries which face serious problem of automobile pollution		9 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATI	ON / GROL	JP
Objective Capacity of participating organization on making plans countermeasures for utomobile pollution is improved. Expected Results 1)The situation reports which summarizing problems and issues of countermeasures gainst automobile pollution are formulated and based on the situation reports and iscussions, participants are able to analyze problems and issues of ountermeasures against automobile pollution. 2)Participants are able to explain about countermeasures against automobile ollution in the case of Japan. 3)Participants are able to explain how to measure, monitor and control air pollutant xhausted by automobile, 4)Participants are able to explain about city planning and education programs which are effective in prevention of automobile pollution. 5)Draft training plans for dissemination of applicable knowledge and skills about ountermeasures against automobile pollution are formulated, shared and examined a their respective organization.	charge of pol against autor < Target Gru 1) Administra policy planni automobile p 2) Experienc than 3 year's	ational/local gov licy planning on o nobile pollution i oup > ative/Technical o ng on counterme ollution in urban e in the relevant	countermea in urban are officers in c asure again area	ea ea charge of ast
00175170	PROGRAM	Sep.30.2009 ~ N	ov. 15, 2000	
CONTENTS This training is designed for deepen understandings of automobile emissions and for strengthening capacity on making plans countermeasures for automobile pollution.	IMPLEMENTING PARTNER	Global Environ Foundation		tre
(1)Formulation of the situation reports summarizing problems and issues of	JICA CENTER	JICA Osaka		
countermeasures against automobile pollution in participants' respective countries •Presentation/discussion of situation reports •Determination/sharing of the needs of each participants	COOPERATION PERIOD	2009~2011		
<ul> <li>Workshop on training of the fields of cuton participants</li> <li>Workshop on training plan making and sorting out and analyzing the problems/issues in order of importance</li> <li>(2) •Lectures on overview/history of countermeasures against automobile pollution based on the case study from Osaka area (focusing on methods, relation with resident etc.)</li> <li>•Lectures on legal structure related to automobile pollution</li> <li>•Air diffusion, figuring out the amount of emission</li> <li>•Automobile pollution prevention plan in Osaka, EIA etc.</li> <li>(3) • Practical work on measurement of auto emission, figuring out the amount of emission</li> <li>•Site visit to constant monitoring facilities, emission experiment facility using real cars etc.</li> <li>(4) • Lectures on City Planning aiming at Environmentally Sustainable Transport (EST) (traffic survey, simulation, countermeasures against traffic jams, etc.)</li> <li>• Lectures on education for resident (Mobility Management Program, Eco driving etc.)</li> <li>(5) • Formulation of "draft training plans for dissemination of applicable knowledge and skills about countermeasures against automobile pollution</li> <li>• Presentation/discussion of the draft training plans</li> <li>• Holding workshops to share and examine the draft training plan in participants' respective organization.</li> <li>• Finalization of draft training plans.</li> </ul>	REMARKS	This program i strengthening of organization as through 3 year desirable that p selected from t organization th order to have s communication from differnet y	capacity of s well as ind 's program. participants the same rrough 3 yes smooth a among par	. It is s are ras in

Target Countries: Only Chile		4 participants	/	Spanish
OBJECTIVE	TARG	ET ORGANIZATIO	) DN / GRC	 )UP
[Objective] The action plan for promoting the environmental education model which developed in the JICA technical cooperation project at each municipality will be shared in the trainee's organization.	CONAMA, C	City Government		
[Expected Results] (1)Through formulation and presentation of job reports and following discussion, trainees can clarify the challenges for promoting environmental education in their areas.				
<ul> <li>(2)Trainees can explain the concept of ESD(Education for Sustainable Development) and current situation of ESD in Japan.</li> <li>(3)Trainees can explain the activities related to environmental education in Nishinomiya City.</li> </ul>				
<ul> <li>(4)Through the outputs (1)-(3), trainees can figure out their challenges and formulate action plans to solve them.</li> <li>(5)(After the fact) Trainees can develop their action plans after they go back and share in their organizations.</li> </ul>				
CONTENTS	PROGRAM PERIOD	Feb.8.2010 $\sim$ Feb	.26.2010	
This training aims to formulate plans for introduction of environmental education through learning the case of Nishinomiya City.	IMPLEMENTING PARTNER	Learning and Ec Foundation for (		
<ul><li>(1)To formulate and present job reports</li><li>(2)•The workshop for basic understanding of ESD</li></ul>	JICA CENTER	JICA Hyogo		
<ul> <li>Lectures of current situation of ESD in Japan</li> <li>(3) Lectures of an environmental policy in Nishinomiya City</li> <li>To visit schools for viewing the environmental learning</li> </ul>	COOPERATION PERIOD	2009~2011		
<ul> <li>To visit waste disposal centers and private businesses' activities for waste reduction</li> <li>Discussion with Eco-community members</li> <li>(4) To study a method of action plan formulation</li> <li>To formulate and present action plans</li> </ul>				
	REMARKS			

Sustainable solid waste management in Caribbean islands カリブ島嶼国における持続可能な廃棄物管理		R	/F 🕥	0984305
カリノ島嶼国における持続可能な廃業物官理	Environme	ental Management <sup>.</sup>	—Urban S	Solid Wastes
Target Countries: Caribbean countries		6 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATIO	ON / GRC	DUP
<pre>[Objective] The issus on sustainable solid waste management in small islands which participating organization are facing will be directed, and the practical meacures to the issus will be formulated. [Expected Results]</pre>	[Target Organization] Ministries, Agencies and NGOs concerned with solid waste management [Target Group] <ol> <li>Current Duties: Be involved (currently or possibly in the near future) in solid waste management</li> <li>Experience in the relevant field: have more than five (5) years' practical experience in the above field</li> </ol>			
<ul> <li>(1) Issues on sustainable solid waste management in participating country will be solved.</li> <li>(2) Issues on sustainable solid waste management will be solved, regarding Okinawa's case.</li> <li>(3) Issues on establishing participatory solid waste management will be solved.</li> <li>(4) To be able to formulate an institutional action plan which aims for solving a issue in sustainable waste management.</li> <li>(5) The action plan will be shared and submitted in participating organization.</li> </ul>				/e more
CONTENTS	PROGRAM PERIOD	Nov.10.2009 $\sim$ D	ec.12.200	9
<preliminary (activities="" country)="" home="" in="" phase=""> (1) Formulation and presentation of Job Report <core (activities="" in="" japan)="" phase=""></core></preliminary>	IMPLEMENTING PARTNER	Okinawa Recyc	le Society	y
(1) •Legislation, ordinance	JICA CENTER	JICA Okinawa		
<ul><li>Administration project</li><li>Industrial and hazardous waste management</li></ul>	COOPERATION PERIOD	2009~2011		
<ul> <li>Current condition and issues of incineration processing</li> <li>Current condition and issue of final disposal sites</li> <li>Circulation route of recycling</li> <li>Financial burden of local community</li> <li>(2)</li> <li>Necessity for citizens and companies to cooperate</li> <li>Collection of garbage by type through citizens and companies cooperation</li> <li>Environmental education (Waste management game, Shopping game)</li> <li>(3)</li> <li>Discussion on necessary resources for sustainable waste management</li> <li>Identify key problem of solid waste management in respective countries and organizations</li> <li>Discussion on the direction for solution creation</li> <li>Formulation and presentation of an action plan</li> <li>(Finalization Phase (activities in home country)&gt; (1) Share and discuss the action plan in respective organizations (2) Modify the action plan (3) Formulate and submit the progress report and completion report</li></ul>	REMARKS			

Workshop for enhancement of the governmental capacity on water environment in Asian countries	_ ·		R/F		0984278
アジア水環境ガバナンス強化ワークショップ	Enviro	onmental Ma		t—Water	
Target Countries: 10 countries in South East Asia and East Asia which take part in WEPA		5 particip	pants	/	English
OBJECTIVE	TARGET ORGANIZATION / GROUP				JP
<ul> <li>(Objective)</li> <li>For strengthening capacities for enforcement in water environmental management in each countries, to propose solution for these, through information sharing among executive officers and environmantal analysts.</li> <li>(Expected Results)</li> <li>(1)Share the system, technical level, monitoring system, issue of water management in each country to build common awareness among participators</li> <li>(2)Understanding the administration on water management in Japan</li> <li>(3)Perceiving the status of the implementation of a local government activities on water management</li> <li>(4)Arrange common tasks and Specific challenge in each country with sharing the information of water environment system among participator</li> </ul>	Related organi environmental			of water	
CONTENTS	PROGRAM PERIOD	Nov.23.200	$09 \sim \text{Dec}$	.5.2009	
Enhance the capacity of handling skill on water pollution at political level in south East Asia and East Asia countries with improving the partnership among these countries	IMPLEMENTING PARTNER	Institurte Strategies		l Environr	mental
(1)•Inception-Report	JICA CENTER	JICA Yok	ohama		
<ul> <li>Introduce a kind of activities on development water environmental laws and monitoring system in each country</li> <li>(2) Lecture (about water environmental law established in Japan)</li> </ul>	COOPERATION PERIOD	N 2009~2011			
<ul> <li>A workshop on environmental monitoring system in each country reported by each administrator</li> <li>(3) Lecture (water environmental monitoring system established in Japan)</li> <li>A workshop on environmental monitoring system in each country reported by each environment analyst</li> <li>(4) Problem Analysis Discussion •Problem Analysis Workshop •Propose an Action-Plan</li> <li>(5) •Action plan and Progress report</li> </ul>	REMARKS				