WASTE MANAGEMENT and 3R(Reduce, Reuse and Recycle)POLICIES 廃棄物3R·再資源化

PITD Solution Environmental Manag Sub-Sector: Urban Solid Wastes

20 participants

English

108012

OBJECTIVE

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.

TARGET ORGANIZATION / GROUP

Target Organization:

Ministry of Environment, waste management section/ Ministry of Industry, waste management section

Target Group:

(1) Technical university graduates or holders of equivalent technical knowledge & professional experience

(2) Technical officials in the central or local government with more than 5 years of practical experience in the field of industrial waste management and recycling (3) 30-45 years old

CONTENTS

- (1) Present status of industrial waste management & recycling in Japan
- (2) Related legislation and strategies established in Japan
- (3) Implementation of countermeasures towards the creation of recycle-oriented society (standardization / green purchasing / product assessment (including LCA) / 3R-oriented design (Design for Environment))
- (4) Present status of recycling by products in Japan
- (packaging & containers / home electrical appliances / foods / construction materials / end-of-life vehicles)
- (5) Development of environmental key technology (pre-treatment (collection, dismantling, crushing, sorting, dehydration & drying) / incineration, vitrification (melting) & solidification / pyrolysis / bio-treatment / energy-utilization)

PROGRAM PERIOD	under planning
MPLEMENTING PARTNER	Clean Japan Center

JICA CENTER JICA Tokyo(Economy&Env.)

COOPERATION PERIOD

2009~2011

REMARKS and WEBSITE

This training course is scheduled to be implemented twice within JFY2010

Seminar on Comprehensive Solid Waste Management and the 3R 廃棄物総合管理及び3R

PITD Solution

Sector : Environmental Management -Sector : Urban Solid Wastes

12 participants

English

1080974

OBJECTIVE

The expected outcome of this program is for the organization to which a participant belongs to sort out directions of policy development for the improvement of waste management in their own countries based on an action plan to be drawn up by the participant through this program.

- 1 To be able to explain the overview and guiding principles of Japan's policy systems and technologies for waste management and the establishment of sound material-cycle society.(semi-senior object)
- 2 To be able to explain the overview and features of Japan's systems and policies for waste management and the 3Rs
- 3 To be able to explain waste management technologies that could be applicable to their own countries
- 4 To draw up an action plan for the improvement of waste management and recycling administration, taking account of the analysis of issues the participant's organization are facing.

1) Be ranked as at least a director general or a director in charge of SWM planning in central governments, provincial governments or local

TARGET ORGANIZATION / GROUP

- bodies 2) Have more than 2 years' experience in the relevant field
- 3) Be university graduates or possess equivalent technical qualifications in this field
- 4) Language: have a competent command of spoken and written English which is equal to TOEFL CBT
- 5) Health: must be in good health, both physically and mentally
- 6) Must not be serving any form of military service.

Jun / 13 / 2010 ∼ Jul /

7) Age: be under fifty (50) years

WEBSITE

CONTENTS

- L: History of Japan's waste management L: Institutions and mechanisms for waste management in Japan
- L: Public cleansing activities at local governments
- L: Public awareness and environmental education
- L: International promotion of the 3Rs
- L: Technology for waste treatment and disposal
- V: refuse transfer stations, intermediate treatment facilities, recycling facilities, final disposal facilities, research institutions

L. V: Human waste treatment in Japan

Practice: Analytical techniques of refuse and water quality

Exercise: Presentation of country report

Exercise: Group discussions Exercise: Drawing up action plans Exercise: Presentation of action plans

IMPLEMENTING Japan Environmental Sanitation Center PARTNER JICA CENTER IICA Yokohama COOPERATION 2010~2012 PERIOD REMARKS and

participanting country's situation will

twice for JFY 2010. The second one

be provided for each participant.

This course will be implemented

is from Jan. 10 to Mar. 5, 2011.

REMARKS

and

WEBSITE

Related to output (3): Citizens's role and and the importance of the collaboration

between local government & citizens in the field of solid waste management.

Related to output (4): Workshop and Discussion to design action plan and its

Environmetal education and public awareness to reduce waste.

[Finalization Phase] Submission of final report to JICA

improvement through individual guidance

Waste Management Technology and 3Rs for Central and South American Countries 中南米地域 廃棄物処理技術及び3R

OBJECTIVE

PRTD Solution Sector Fovironmental Manage Sub-Sector: Urban Solid Wastes

[Target Organization]

1084026

Target Countries: South American Countries

13 participants TARGET ORGANIZATION / GROUP

Spanish

Central or local government in charge of solid The Plan to improve solid waste management administration is officially formulated by the participants organization, based on the Action Plan proposed through the waste management including 3R (Reduce, Reuse and Recycle) program in Japan. [Target Group] [Outputs] 1. Officers in charge of solid waste management 1. Understand administration system of solid waste management aiming at including 3R (Reduce, Reuse and Recycle) in establishment of a sound material-cycle society central / local government 2. Understand waste treatment technology (collection and transportation, 2. Have at least five (5) years of practical work intermediate treatment, final disposasi, reuse and recycling etc.) 3. Propose Action Plan in order to improve and strengthening of solid waste experience management administration, based on analysis of each problems and obtained knowledge and skills in Japan Aug / 17 / 2010 ~ Oct / 1 / 2010 CONTENTS [Preliminary Phase]Preparation and submission of Country Report ①Japan Environmental Sanitation Center, ②Environmental Affairs Bureau, City of Sapporo **IMPLEMENTING** PARTNER [Phase in Japan] 1. Administration system of solid waste management: Waste management system in Japan, Approach to 3R for establishing a sound material-cycle society, Waste JICA CENTER JICA Sapporo management and 3R policies at local government, Environmental(waste) education, COOPERATION 2010~2012 Partnership with community PERIOD 2. Waste treatment technology: Collection and transportation, intermediate treatment, final disposal, reuse and recycling, Compost etc.

and the control of th	
Waste Management for Promoting Recycling-Oriented Societies in Centr	at and
MARCE MANAGEMENT TO LIGHTORING PRODUCTION OF CONTROL OF CONTROL OF CONTROL	41. 40.00
Carable Amendan	
South America	
South America 中南米地域 循環型社会形成促進のための廃棄物管理	
・ 付き (元) (44.5kf) (1元) - 21元 (4元) (4元) (2元) (2元) (4元) (4元) (4元) (4元) (4元) (4元) (4元) (4	

3. Propose "Action Plan": Presentation of Country Report, Discussion, Presentation

[Finalization Phase]Submission of the "Final Report" describing the progress of

PRTD Solution Sector : Environmental Management 1084146

Sub-Sector: Urban Solid Wastes 29 participants

Spanish

Target Countries: Central and South American Region

implementing the Action Plan within 3 months

OBJECTIVE

[Objective]Comprehensive master plan or related action plan on SWM will be formulated, and accordingly, the SWM system shall be improved. Thus, current problems/ challenges in the said field will be solved and recyclable society will be further promoted in Central and South America.

[Expected Results]

of Action Plan

1)Understanding the outline and charactaristics of administrative waste management in Japan and extracting hints for improvement comparing with the status of respective country.

2)Understanding technologies for waste treatment and recycling.

3)Mastering know-how on encouragement for environmental awareness practicing by themselves focusing on waste management.

4)Presenting each of their plan in national/local government to be improved on waste management system for establishing a sound Material-Cycle Society and their

TARGET ORGANIZATION / GROUP

[Target Organization]Central and local governmentwho are facing the solid waste management problems in Central and South American countries. Local govetnment officials are engouraged to participate in.

REMARKS and

WEBSITE

·administrative officer in Environmental management section, who understands technical matter(technical manager or researcher is not appropriate for this course)

·5years or more experience in waste management preferred to be a graduate of university

role and duty accordingly.		
CONTENTS	PROGRAM PERIOD	May / 17 / 2010 ~ Jul / 3 / 2010
[Core Phase in Japan] 1)Understanding Japanese policy, treatment system and recycling laws on waste management. Presenting current situation and problems of each country, local area and workplace through Job report in order to share with participants and clarify each problem.	IMPLEMENTING PARTNER	International Center for Environmental Technology Transfer (ICETT)
	JICA CENTER	JICA Chubu
	COOPERATION PERIOD	2010~2012
2)Verifing 3R's methods, management system & technology for plastics, domestic appliances & automobile based on Japanese recycling laws. 3)Understanding each role and duty for encouraging environmental awareness in local government, NPO, School, household, enterprises and community. Considering practical 3R's activities in small scale unit involving the local people for establishing a sound Material-Cycle Society. 4)Deliberating and making framework of masterplan or action plan as a result of the course to solve their problems and presenting the plan. [Finalization Phase in home country] Implementation of Action Plan	REMARKS and WEBSITE	

1084017 Capacity Development for Local Government in Comprehensive Solid Waste PRTD Solution Management in the Republic of Peru ペルー国向け地方自治体のための固形廃棄物総合管理 Sector: Environmental Menagement Sub-Sector : Urban Solid Wastes 15 participants Spanish Target Countries: PERU TARGET ORGANIZATION / GROUP **OBJECTIVE** [Target Organization]Local Gov'ts which are the [Objective] A concreat Master Plan or Action Plan will be formulated or revised in each local target of Yen Loan project on waste management. government which the participants belong to. [Target Group] ·administrative officer in Environmental [Expected Results] 1)To extract clues for improvement through understanding outline and features of management section, who understands technical matter(technical manager or researcher is not the Japanese solid waste management and comparing to own country. 2)To understand technics related to treatment of the solid waste and recycling. appropriate for this course) · 5 years or more experience in waste management 3)To aquire know-how for promoting ebvironmental consciousness through preferred to be a graduate of university experiences 4)To present the plan for improving the system of the solid waste management in own organization and actual activities and responsibility of participants. Jan /31/2011 ~ Mar /13/2011 CONTENTS [Preliminary Phase] Formulation of Inception Report IMPLEMENTING International Center for Environmental PARTNER Technology Transfer [Training Program in Japan] 1) Find out the current problems and the improving plan among participants and JICA CENTER IICA Chubu overview of Solid Waste Management in Japan COOPERATION 2) Solid Waste Management Technologies $2010 \sim 2012$ **PERIOD** 3) Environmental Education and awareness raising 4) Action Plan Development [Finalization Phase] Implementation of Action Plan REMARKS and WEBSITE 1084074 Dissemination of Education for Sustainable Development through environmental PRTD Solution 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 Sector : Environmental Management Sub-Sector : Urban Solid Wastes 6 participants English Target Countries: Nauru, Solomon Is., Marshall, samoa, Tonga, Palau TARGET ORGANIZATION / GROUP **OBJECTIVE** [Target Organizations] [Objectives] Ministries related ESD (such as Ministry of Under the theme of the waste disposal problem which is the common characteristic Environment, Education, Economy, Foreign Affairs in Oceanian countries, ESD promotion plan will be formulated as suit the each and so on) [Outputs] [Target Group] 1)Current Duties: be an officer, technical officers in (1) To understand the Japan's environmental policy and projects. the administrative bodies who is presently engaged (2)To understand the education for community and human development in a in the field of environmental policy or environmental sustainable way through environmental issues. education(Participants from not only the Ministry of (3)To understand waste disposal problems, international trends and an Environment and Education but also other environmental education. ministries and agencies are acceptable) (4)To learn planning of problem solution and business promotion method utilizing 2) Educational Background: be equal or surpassing the regional characteristics. to a graduate of university (5)To formulate action plans for sustainable development of a region in each 3)Age: be between the ages of 26 and 40 years country. Oct / 3/2010 ~ Oct / 23/2010 CONTENTS 1. • To take lectures about outline of basic environment plan of central and local **IMPLEMENTING** Learning and Ecological Activities Foundation for Children PARTNER government in Japan. ·To take lectures about autonomy's activities from Nishinomiya City. JICA CENTER 2. To take lectures about basic notion of ESD JICA Hyogo ·To visit the sites of education and activity of ESD in Nishinomiya City COOPERATION 3. •To visit Nishinomiya Waste Treatment Facility and private waste treatment 2008~2010 **PERIOD** facility ·To take lectures about economic activity related to waste products and international trend 4. Visit a school and local community to learn environmental education for waste REMARKS products ·To have a workshop of business solution about regional development and WEBSITE 5. To make up an action plan through a workshop

CObjective> Plans towads solid waste management with community participation will be approved in organizations. (Outputs> (1) Being albe to explain basic legal frameworks and systems in central / local governments. (2) Being able to explain environmental education and related activities with community participation (3) Being able to apply and carry out adequate final disposal method (4) Being able to perform composting of organic waste (5) Action plan is formulated, and its implementation is reported through final report. CONTENTS PROGRAM PERIOD Sep / 5/2010 - Kitakyushu Internal	Solid Waste Management with Community Participation 市民参加型廃棄物管理研修		PRTD Solution Sector : Environmental Management -Sector : Urban Solid Wastes	1084224
CObjective> Plans towads solid waste management with community participation will be approved in organizations. (Outputs> (I) Being albe to explain basic legal frameworks and systems in central / local governments. (2) Being able to explain environmental education and related activities with community participation (3) Being able to apply and carry out adequate final disposal method (4) Being able to apply and carry out adequate final disposal method (5) Action plan is formulated, and its implementation is reported through final report. CONTENTS CONTENTS PROGRAM PERIOD Sep / 5/2010 - PROGRAM PERIOD Sep / 5/2010 - WPLEMENTING Kitakyushu Internat Techno-Cooperative Cooperative Cooperative Cooperative Cooperative Cooperative Systems and rules in final disposal dump in Japan Semiaerobic landfill CLandfill in developing countries Theory of organic waste comosting Case study of organic waste comosting Company is offered to govern organizations which are engaged management or environmental edicitizens. This program is offered to govern organizations which are engaged management or environmental edicitizens.	Target Countries: ASEAN countries		10 participants 🖊	English .
Plans towads solid waste management with community participation will be approved in organizations. (Outputs) (1) Being albe to explain basic legal frameworks and systems in central / local governments. (2) Being able to explain environmental education and related activities with community participation (3) Being able to apply and carry out adequate final disposal method (4) Being able to perform composting of organic waste (5) Action plan is formulated, and its implementation is reported through final report. CONTENTS CONTENTS PROGRAM FERIOD Sep / 5/2010 - MPLEMENTING PARTNER Kitakyushu Internat Techno-Cooperative Technologies in recycling solid waste and industrial waste OTechnologies in treating medical waste and hazardous waste OEnvironmental education and enlightment in local government OEnvironmental education and enlightment in local government OSemiaerobic landfill OSemiaerobic landfill CLandfill in developing countries OTheory of organic waste comosting OBasic procedure of organic waste comosting OBasic procedure of organic waste comosting OFormulation and presentation of action plan	OBJECTIVE	TARG	ET ORGANIZATION / GR	OUP
CONTENTS CONTENTS PROGRAM PERIOD Overview of waste management and its legal frameworks in Japan. OTrash separation, collection and treatment system in local governorates. OTechnologies in recycling solid waste and industrial waste OTechnologies in treating medical waste and hazardous waste OEnvironmental education and enlightment in local government ODiscussion on environmental activities by related facilities and organizations OSemiaerobic landfill OLandfill in developing countries OTeory of organic waste comosting OBasic procedure of organic waste comosting OFormulation and presentation of action plan PROGRAM PERIOD MPLEMENTING Kitakyushu Internat Techno-Cooperative JICA CENTER JICA Kyushu COOPERATION PERIOD 2010~2012 REMARKS and WEBSITE	Plans towads solid waste management with community participation will be approved in organizations. (Outputs) (1) Being albe to explain basic legal frameworks and systems in central / local governments. (2) Being able to explain environmental education and related activities with community participation (3) Being able to apply and carry out adequate final disposal method	organizations w management or citizens.	hich are engaged in solid environmental education	d waste
Overview of waste management and its legal frameworks in Japan. Otrash separation, collection and treatment system in local governorates. Otechnologies in recycling solid waste and industrial waste Otechnologies in treating medical waste and hazardous waste Otherwise in treating medical waste Otherw	(5) Action plan is formulated, and its implementation is reported through final		edisk og skaletisk s Referense skaletisk skaletisk skaletisk skaletisk skaletisk skaletisk skaletisk skaletisk skaletisk skaletisk Referense skaletisk	
OTrash separation, collection and treatment system in local governorates. OTechnologies in recycling solid waste and industrial waste OTechnologies in treating medical waste and hazardous waste OEnvironmental education and enlightment in local government OEnvironmental activities by related facilities and organizations ODiscussion on environmental activities with citizens OSystems and rules in final disposal dump in Japan OSemiaerobic landfill OLandfill in developing countries OTheory of organic waste comosting OEase study of organic waste comosting OBasic procedure of organic waste comosting OFormulation and presentation of action plan	CONTENTS	PROGRAM PERIOD	Sep / 5/2010 ~ Oct	/ 30/2010
OTechnologies in treating medical waste and hazardous waste OEnvironmental education and enlightment in local government OEnvironmental activities by related facilities and organizations ODiscussion on environmental activities with citizens OSystems and rules in final disposal dump in Japan OSemiaerobic landfill OLandfill in developing countries OTheory of organic waste comosting OCase study of organic waste comosting OBasic procedure of organic waste comosting OFormulation and presentation of action plan	OTrash separation, collection and treatment system in local governorates.		Kitakyushu International Techno-Cooperative Asso	ciation (KITA)
OEnvironmental activities by related facilities and organizations ODiscussion on environmental activities with citizens OSystems and rules in final disposal dump in Japan OSemiaerobic landfill OLandfill in developing countries OTheory of organic waste comosting OCase study of organic waste comosting OBasic procedure of organic waste comosting OFormulation and presentation of action plan	OTechnologies in treating medical waste and hazardous waste	JICA CENTER	JICA Kyushu	
OSystems and rules in final disposal dump in Japan OSemiaerobic landfill OLandfill in developing countries OTheory of organic waste comosting OCase study of organic waste comosting OBasic procedure of organic waste comosting OFormulation and presentation of action plan	OEnvironmental activities by related facilities and organizations		2010~2012	
OTheory of organic waste comosting OCase study of organic waste comosting OBasic procedure of organic waste comosting OFormulation and presentation of action plan	OSystems and rules in final disposal dump in Japan OSemiaerobic landfill			
OBasic procedure of organic waste comosting OFormulation and presentation of action plan	OTheory of organic waste comosting			
	OBasic procedure of organic waste comosting OFormulation and presentation of action plan			
Establishment of Sound Material Cycle Society for ASEAN Countries PRTD So	A STANCE		PRTD Solution	1084006

OBJECTIVE TARGET ORGANIZATION / GR		ET ORGANIZATION / GROUP
[Objective] Policy related to 3R and environmental education at national and local level is formulated for promoting establishment of sound material cycle society. [Expected Results] (1) Participants will be able to explain the overview of the system for establishment of sound material cycle society in central and local government of Japan. (2) Participants will be able to explain the measures to understand concrete efforts implemented by local government and private company. (3) Participants will be able to explain the environmental education activity and management of final disposal site. (4) Participants will be able to formulate action plan for introduction of practical 3R and environmental education activities.		government and NGO relating to nagement, 3R and environmental
CONTENTS	PROGRAM PERIOD	Jan /10/2011 ~ Feb /19/2011
Participants will learn followings through lectures, site visits and practices; (1)Introduction of legal system for sound material cycle, Introduction of 3R system and environmental management in Japan, Administration of industrial waste	IMPLEMENTING PARTNER	Kitakyushu International Techno-cooperative Association (KITA)
management, International waste material flow in Asian countries	JICA CENTER	JICA Kyushu
(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,	COOPERATION PERIOD	2009~2011
(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	REMARKS and WEBSITE	KITA website: http://www.kita.or.jp/english/e_inde x.html

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 1084305 PRTD Solution Sector: Environmental Management Sub-Sector : Urban Solid Wastes 12 participants English Target Countries: Caribbean Coutries TARGET ORGANIZATION / GROUP **OBJECTIVE** [Course Objective] [Target Organization] Ministries, Agencies and NGOs concerned with The issues on sustainable solid waste management in small islands which participating organization are facing will be directed, and the practical measures to solid waste management the issues will be formulated. [Target Group] 1) Current Duties: Be involved (currently or [Expected Module Output] (1) Issues on sustainable solid waste management in participating country will be possibly in the near future) in solid waste management (2) Issues on sustainable solid waste management will be solved, regarding 2) Experience in the relevant field: have more than five (5) years' practical experience in the above Okinawa's case. (3) Issues on establishing participatory solid waste management will be solved. (4) To be able to formulate an institutional action plan which aims for solving a issue in sustainable waste management. (5) The action plan will be shared and submitted in participating organization. Jun / 1/2010 ~ Jul / 10/2010 CONTENTS (Activity in Preliminary Phase in home country> **IMPLEMENTING** Okinawa Citizens' Recycling Movement Formulating a Job Report describing the present situation of solid waste PARTNER management in the participants' countries, and participants' detailed work and JICA CENTER JICA Okinawa roles of their organization. (Activity in Core Phase in Japan) This program consists of lecture, field work,

observation tour and discussion. (1) Formulation and presentation of Job Report

(3) Necessity for citizens and companies to cooperate, Recycling, Environmental

management, Discussion on the direction for solution creation, Formulation and

(2) Solid Waste Management Legislation in Japan, Outline of Solid Waste Administration in Okinawa, Waste management in Japan, Waste management in developing nations, Current situation and issues of final disposal site, Fukuoka Landfill Method, Role of municipality, Naha Clean Center and Recycle-plaza

education (4) Discussion on the plan which aim sustainable solid waste

(5) Share and modify the action plan in respective organizations

presentation of an action plan

(Activity in Finalization Phase in home country)

COOPERATION

PERIOD

REMARKS

and

WEBSITE

2009~2011

This course will be implement twice

for JFY2010. The second course is

scheduled from 26th Oct. to 4th

Dec. in the same content.

Creation of Recycling Society based on Hazardous Waste Management and Appropriate Disposal in Asia 有害廃棄物管理・適正処理を基盤とするアジアの循環型社会形成		PRTD Solution Sector: Environmental Management Sector: Industrial Solid Wastes 10 participants	108 42 09 English
OBJECTIVE	TARG	ET ORGANIZATION / GRO	OUP
Issues for implementation/improvement of the Hazardous Waste Management and the waste recycling are identified, and the policy direction becomes clear. To be able to explain the issues of hazardous waste, including their background and exsiting counter measurs. Respective duty and issues within his/her organization will be confirmed/identified. To understand the waste management administration system for recycle-based society, and be able to compare the case of Japan with respective country's situations. To understand the technology of hazardous waste disposal(Waste collection, Transportation, Intermediate Processing, Final Disposal, Reuse, Recycling) and be able to compare the case of Japan with their respective country's situations. Based on the problem analysis of each organization, which participants come from, the action plans in resepctive country will be prepared. Discussions on the future plans for improvement of Hazardous Waste Management administration are undertaken and clear future directions are presented.	in charge of haz and central gov 2) Educational or possess equi field 3) Language: ha and written Eng 250 or more 4) Health: must and mentally, t	t be in good health, both o undergo the course serving any form of milits	nt in LGU y graduates tions in this d of spoken DEFL CBT physically
CONTENTS	PROGRAM PERIOD	Jul /13/2010 ~ Aug	/ 14/2010
Make the Job Reports, presentations and discussions. Discuss for problem resolution of trainee by learning the policy for formulation the	IMPLEMENTING PARTNER	Japan Environmental Sanit	ation Center
recycle-based society by the national and local government, the system for waste management administration and role of stakeholder.	JICA CENTER	JICA Yokohama	
Discuss problem resolutions of trainees by learning the efforts about the hazardous waste disposal technology used by local government and private companies through lectures, field visits and practical work.	COOPERATION PERIOD	2010~2012	
Preparation and presentation of country reports, interim discussions and provision of advise for action plans. To make and submit the Final Reports.	REMARKS and WEBSITE		

Cleaner Production through Productive Maintenance 生産保全によるクリーナープロダクション Solution 1080888 PITD Sector: Environmental Management Sub-Sector : Cleaner Production 17 participants English TARGET ORGANIZATION / GROUP **OBJECTIVE** <target organization> (Objective) This program is offered to engineers engaged in Integrated plan to introduce cleaner production based on productive maintenance facility maintenance management in energy-related will be formulated, and proposed to target organizations. facilities or institutions related to promotion of CP. [Expected Results] (1)Participants will be able to explain the basic concept of CP technology for productivity improvement and energy conservation in Japan. (2) Participants will be able to explain the management measures for effective maintenance site and prevention of occupational and maintenance accident. (3)Participants will be able to explain maintenance technology and training methodology for energy conservation and productivity improvement in Japan. (4)Participants will be able to formulate action plan for introduction of CP technology. 1/2010Nov / 20 / 2010 CONTENTS Participants will learn followings through lectures, site visits and practices; IMPLEMENTING Kitakyushu International (1) · Global environmental issue and basic knowledge of cleaner production PARTNER Techno-cooperative Association ·History and current situation of environmental management in Kitakyushu city · Necessity of maintenance management JICA CENTER IICA Kyushu (2) Management measures in productivity and maintenance site COOPERATION ·Methodology of how-to advance and improve maintenance management in each $2009 \sim 2011$ PERIOD element of job ·Methodology for prevention of occupational and maintenance accident and risk management (3) History and background of maintenance management for productivity The program will be implemented

improvement and energy conservation

·Technology and Training methodology for maintenance management

Introduction of technology, methodology and supporting tool

(4) Presentations and formulation of progress report

REMARKS

and

WEBSITE

twice for Japan fiscal year 2010: first

from Aug. 2010 to Nov. 2010, and

second from Jan. 2011 to Apr. 2011,

Gleaner 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	\$ub-	PRTD Solution 1084155 Sector : Environmental Management Sector : Cleaner Production
		13 participants / Spanish
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
Objectives have 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 be able to explain the concept and specific usage method of Cleaner Production techniques. (2) To be able to design or improve equipment to allow the reduction of environmentally—harmful waste products and keep resource and energy usage to a minimum. (3) To be able to keep the release of environmental pollutants and raw material and energy loss associated with equipment trouble to a minimum through improving reliability of equipment, and maintaining efficiency. (4) To be able to create an action plan for the introduction of Cleaner Production techniques.	[Target Organizations] Organizations belonging to the field of process industries such as chemical, petroleum refinery and steel, food and ceramic plant [Target Group] Managers or engineers in the field of process industries	
CONTENTS	PROGRAM PERIOD	Aug / 9/2010 ~ Nov / 26/2010
(1) Recent situation of global environment, Cleaner Production, TPM, 5S, Kaizen Activity, New QC Seven Tools, PCM, Plant Visit (2) Selection of Equipment, Selection of Motors, Selection of Materials, Corrosion		Kitakyushu International Techno-cooperative Association
and Protection, Sequence Control, Process Control, Plant Visit	JICA CENTER	JICA Kyushu
(3) Maintenance Management, Maintenance in Actual Plant, Visual Maintenance Management, Diagnosis TechniquePlant Visit (4) Orientation of training course, instruction of making action plan, instruction of presentation, presentation of action plan (5) Report to JICA the progress of knowledge/skills sharing among the respective organization.	COOPERATION PERIOD	2008~2010
	REMARKS and WEBSITE	This seminar will be implemented twice for JFY 2010. The second one is scheduled from early Feb 2011 to late May 2011 in the same

company for 3R, Reclaimer of scrap metal, Separation and collection of waste		
Tropical Biomass and Bio-fuel Utilization 熱帯バイオマスおよびバイオ燃料利用	Sub-	PITD Trainers 1080032 Sector : Environmental Management -Sector : Global Manning
Target Countries: Countries located in the tropical and subtropical area.		6 participants 🖊 English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
[Course Objective] The technologies for the effective utilization of biomass/bio-fuels that suit the condition of the home country in the tropics and the subtropical area are shared in the organization. [Expected Module Output] (1) To be able to explain the approaches to create the sustainable and re-cycling oriented society using biomass/bio-fuels. (2) To be able to estimate the amount of the biomass resources or bio-fuels. (3) To master the Individual technologies for the planning of biomass/bio-fuels utilization. (4) To be able to make a plan for effective utilization system of biomass/bio-fuels based on the above-mentioned (1) to (3). (5) The action plan made in the training in our country is shared in the trainee's belonging organization, and it is corrected if necessary.	[Target Organization] Administrative body and NPO engaged in tropical biomass and bio-fuel utilization [Target Group] (1) Be administrative officials presently engaged in planning of biomass utilization / research officials involved in planning process of biomass utilization presently work as an adviser to planning and promoting biomass utilization (2) Age: be between 25 and 35 years of age.	
CONTENTS	PROGRAM PERIOD	Sep / 28 / 2010 ~ Nov / 27 / 2010
<activity country="" home="" in="" phase="" preliminary=""> Formulating a Job Report describing the present situation of biomass resources and</activity>	IMPLEMENTING PARTNER	The faculty of agriculture, University of the Ryukyus
its utilization in the participants' countries, and participants' detailed work and roles of their organization.	JICA CENTER	JICA Okinawa
<activity core="" in="" japan="" phase="">This program consists of lecture, field work, observation tour and discussion. Environmental problems such as global warming and energy problem, Basic </activity>	COOPERATION PERIOD	2010~2012
frameworks of Biomass Nippon and Biomass Asia (2) Estimation of the total amount and usable biomass/bio-fuels resources (3) Production, collection and transportation of unused biomass and energy crops, Energy conversion technologies, Conversion of biomass as materials and its utilization, Measurement, monitoring and evaluation (4) PDCA of biomass/bio-fuels utilization system, Formulation and presentation of action plan. (Activity in Finalization Phase in home country) (5) Share and discuss, modify the action plan in respective organizations	REMARKS and WEBSITE	

Development of Strategies on Climate Change 地球温暖化対策コース	Sub	PITD Solution 1080572 Sector: Environmental Management -Sector: Global Warming 15 participants / English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
[Objective] To propose and make policies (draft) on Climate Change adaptation and GHG emissions. [Expected Results] (1)To understand the concept of integration and mainstreaming of Climate Change concerns into sustainable development policies. (2)To understand how national communications are prepared as articulated in the UNFCCC Art.12 and other decisions (3)To understand methodologies to prepare a GHG inventory (4)To understand mitigation (including through market mechanisms) and adaptation of Climate Change (5)To develop Action Plan (draft)	involved in Clir point of UNFC [Target Group Current Duties governmental of Experience in t	ocal) governmental office which is nate Change issues and/or focal CC] :officer of national (or local)
CONTENTS	PROGRAM PERIOD	Jan / 10 / 2011 ~ Mar / 5/2011
[Preliminary Phase] To make Inception Report [Core Phase in Japan] (1)~(4) To acquire the necessary skills and techniques on Climate Change issues	IMPLEMENTING PARTNER	Not yet determined
through lectures, discussions, practical exercises, site visits, etc.	JICA CENTER	JICA Tsukuba(Training&Partnership)
•relevance between Climate Change and development activities and policy tools to adopt integrated approach •co-benefits approach which achieve GHG emission reductions as well as environmental improvement •the Climate Change	COOPERATION PERIOD	2010~2012
	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	The second of th

have applied the knowledge obtained through the training course to domestic

policies

PITD Solution Sector : Environmental Management Sub-Sector : Global Warming

1080937

10 participants

English

度と地球温暖化対策~モントリオール議定書と京都議定書規制対象物質

TARGET ORGANIZATION / GROUP **OBJECTIVE** [Target Organizations] [Objective] International regulations for high-GWP gases (HCFC etc.,) and the technical Governmental organizations or related public direction for collection and destruction of fluorocarbons will be understood and organizations that are in charge of ozone layer capacity of implementing the fund project to reduce HCFC will be improved. protection and high-GWP gases reduction [Expected Results] Participants are able (1) To examine the recent activities, issues on ozone layer protection and [Target Group] high-GWP gases such as HCFC in respective countries, and make an inception -Administrative officers who are in charge of ozone report and its presentation. / (2) To explain the relation between the Montreal layer protection, high-GWP gases reduction, collection and destruction of fluorocarbons and Protocol and the Kyoto Protocol. / (3) To explain the recent Japan's activity, method, alternative technologies to convert HCFC in the area of cleaning, management of the project on multi-lateral fund of the Montreal Protocol. refrigerant, foam and fumigation, and also are able to explain the system and technologies on collection and destruction of fluorocarbons. / (4) To develop a -Individuals with sufficient command of spoken and written English in the aforementioned field. draft project plan utilizing the multi-lateral fund of the Montreal Protocol. / (5) To introduce each activity after participation in the training course to the next trainees one year later. Jan / 29/2011 Jan /16/2011 ~ CONTENTS ·Presentation on actual situation on high-GWP gases, recent approach and issues **IMPLEMENTING** Japan Industrial Conference for Ozone against global warming, introduction of on-going and up-coming projects **PARTNER** Layer and Climate Protection (JICOP) Linkages between the Montreal Protocol and Kyoto Protocol Trends in discussions at COP (Conference of Parties) JICA CENTER JICA Tokyo(Industrial Dev.&Finance) Recent Japan's activity, method, alternative technologies to convert HCFC COOPERATION Introduction on collection and destruction of fluorocarbons in commercial 2010~2012 PERIOD refrigerators and air conditioners Introduction of the social and economic system in which each stakeholders can fulfill their responsibilities Development of a draft project plan related to alternative technologies to convert HCFC or collection and destruction of fluorocarbons based on the knowledge and REMARKS experiences gained through the training course and WEBSITE Report of activity after returning to home country to monitor how the trainees

Capacity Building for Policy Staff regarding Kyoto Mechanism 京都メカニズム担当者養成コース	Sub	PITD Solution Sector : Givironmental Menagement -Sector : Global Marming	1080793 English
OBJECTIVE	TARG	ET ORGANIZATION / GRO	**************************************
[Objective] Enhancement of capacity of national and local government staffs in designing policies in relation to the implementation of Kyoto Mechanisms [Expected Outputs] 1. To deepen the understanding on the influence of greenhouse gas accumulation on climate change 2. To deepen the understanding on the Kyoto Protocol and its flexible mechanisms 3. To deepen the understanding on environmentally friendly technologies, including for the energy conservation and introduciotn of renewable energies 4. To deepen the understanding on roles to be played by developing countries in implementing the CDM	Target Organi Designated Nat corresponding Points (NFP) at [Target Group] Administration	zations] ional Authorities (DNA) o organizations like Nationa nd CDM related offices.	or other I Focal or other
CONTENTS	PROGRAM PERIOD	May / 31 / 2010 ~ Jul	/ 17/2010
[Preliminary Phase] Formulation of Inception Report [Core Phase] Lecture, Practice, Observation, and Discussion on the following subjects.	IMPLEMENTING PARTNER	International Center for Env Technology Transfer (ICET)	vironmental Γ)
1. Influence of the accumulation of GHGs on the climate change.	JICA CENTER	JICA Chubu	
2. Kyoto Protocol and rules of Kyoto Mechanism 3. Technologies for GHGs emission reduction including technologies of energy conservation and renewable energy. 4. The roles of developing countries in the implementation of CDM projects [Finalization Phase] Organizational Approval of Action Plan, Submission of Progress Report.	COOPERATION PERIOD	2008~2010	
	REMARKS and WEBSITE	In this program, some lector be provided by the lectur India or China to underst role of host countries of Mechanism. The lecture from Credit be will be provided in the prov	ers from and the Kyoto ouyer also

REMARKS and WEBSITE

· Calculation analysis using the cliamte changescenario and verification with own

★Contesnts might be changed after preliminary survey

country's data.

Capacity Development for Adaptation to Climate Change -Climate Modering and PRTD Solution 1084141 Sector: Environmental Management 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 Sub-Sector : Global Warming Target Countries: Indonesia, Philippine, Thailand, Vietnum, Bangladesh 5 participants English **OBJECTIVE** TARGET ORGANIZATION / GROUP [Objectives] [Target Organizations] University of Technology and Engineering ,Meteorological Inatitute to develop a capacity for adaptation to climate change particularly forecast and impact assessment [Target Group] Meteorological Reseachers in charge of climate in the first two years: be focused on climate change forecast where a technique of change model ilng climate modeling based on the 'Earth Simulator' and a downscaling method will be learned in the last year:impact assessment by using the climate change forecast and CONTENTS under planning ★1st and 2nd year (1)Lectures **IMPLEMENTING** PARTNER under planning (a)Adaptation policy in Japan (b)Basic concept of Climate Change Model JICA CENTER JICA Tokyo(Economy&Env.) (c) and other related lectures COOPERATION 2008~2010 **PERIOD** (2)Exercise (a)Data analysis of Climate Change Model (b)Data modeling of Climate Change Applicants are expected to (c) and other related research nominate from same organization REMARKS and/or person each year(2years) as ★3rd year and. far as possible. The required Impact assesment (under planning) WEBSITE condition for 3rd year is under planning.

Promotion of Project Formulation of Clean Development Mechanism in Central Asia and Caucasus Region 中央アジア・コーカサス地域 クリーン開発メカニズム案件形成促進		PRTD Solution 1084280 Sector : Environmental Management -Sector : Global Manning
Target Countries: Central Asia and Caucasus Region		4 participants / Russian
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
[Objective] The formulation and registration of CDM projects will be promoted in the respective countries. [Expected Outputs] 1. To grasp the problems which the CDM related organizations in their countries have in the process of project formulation (before coming to Japan). 2. The system to provide information for the stakeholders of CDM projects will be established in the respective DNAs. (the 1st year) 3. The guideline for the formulation of CDM projects considering the situations of the respective countries will be drafted. (the 2nd year) 4. The system to provide the consultation for the registration of CDM projects will be established in the respective DNAs. (the 3rd year) 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).	[Target Organization] Designated National Authorities (DNA) or other corresponding organization like National Focal Points (NFP) and CDM related offices. [Target Group] Those who has contact with private sector, and is engaged in the CDM project formulation and registration. Those who has experience in this field more than year.	
CONTENTS	PROGRAM PERIOD	Nov / 21 / 2010 ~ Dec / 22 / 2010
[Preliminary Phase] Formulation of Inception Report [Core Phase] Lecture, Practice, Observation, and Discussion on the following subjects.	IMPLEMENTING PARTNER	International Center for Environmental Technology Transfer (ICETT)
1. To deliberate about the way of information service considering credit buyer's	JICA CENTER	JICA Chubu
demand and experiences in leading host countries of CDM 2. To draft the guideline for proper CDM project formulation and registration application considering CDM project potential in the respective counties, demand of credit buyers and possible difficulties in the process from project formulation to the registration. 3. To acquire various perspectives needed for the project formulation consultation through PDD formulation practice. 4. To make the action plan. [Finalization Phase] Organizational Approval of Action Plan, Submission of Progress Report.		2009~2011

LONG-TERM 1081210 Nagoya University Global Environmental Leaders Program: Climate Change, Water Leaders and Waste Management and Biodiversity Conservation (Master's Degree: Sector: Environmental Management -Sector : Global Warming b珠温暖化対策、水·廃棄物対策、生物多様性-(長 4 participants English TARGET ORGANIZATION / GROUP **OBJECTIVE** Agencies of central/local governments, private [Objective] companies, or higher education bodies related to Policymakers and technitians will develop their capability of: 1) proposing and practicing approaches to solve the problems with a correct understanding of local climate policy and mitigation technology. situations, 2) coping with cross-sectoral and emerging problems, and 3) communication in the policy dialogues etc. that suits conditions of local society. [Expected Results] (1) To acquire the theories, advanced knowledge and the problem-solving way of thinking. (2) To improve practical abilities through the internship and seminars to solve the problems in the original countries of the participants. (3) To acquire the ability to wrap up and publicize special reports logically and make actions based on them. Sep / 17 / 2010 ~ Sep / 30/2012 CONTENTS This program aims to develop global environmental leaders who are able to propose **IMPLEMENTING** Global Environmental Leaders Program, practical measures to solve the problems of climate change. PARTNER Nagoya University JICA CENTER (1) The participants will take lectures, workshops and seminars under this course as JICA Chubu required by the curriculum model and acquire credits (at least eight) to obtain the COOPERATION 2009~2011 degree. **PERIOD** (2) The participants will have a training or internship for a certain period in partner organizations from the Chubu Consortium for Environmental Leaders Development (cooperating body of this program).

REMARKS

and WEBSITE

(3) The participants will complete a dissertation based on research instruction by

The dissertation should identify and analyze an important issue in their original

main and assistant supervisors.

country, and provide measures to be taken to solve it.

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		PITD Leaders 1080106 Sector : Environmental Menagement -Sector : Other Environmental Menagement Issues
		36 participants 🗡 English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
[Objective] This course aims at enhancing the capability of the officers in charge of Environmental and Social Considerations (ESC) to implement appropriate ESC and helping them to acquire the requirements for implementation of a Japanese ODA Loan project [Expected Result] (1) To be able to explain necessity of adequate environmental and social considerations referring to lessons from experience of ODA projects (2) To be able to explain outline of guidelines of environmental and social considerations required for a Japan's ODA loan project (3) To understand the fundamental ideas of EIA and to be able to explain their proper procedure of environmental and social consideration and technical points for their implementation (4) To identify the issues and measures to promote proper EIA in their countries	Project (or a province and accordance and EIA [Target group] <job title=""> Direction of the EIA field such that the EIA field such</job>	tion body of a Japan's ODA Loan roposed project), which requires e nd social consideration in 1 (2) the implementation body of the
CONTENTS	PROGRAM PERIOD	May / 23 / 2010 ~ Jun / 5 / 2010
[Preliminary Phase] Formulatino of Inception Report	IMPLEMENTING PARTNER	Overseas Environmental Cooperation Center, Japan(OECC)
[Core Phase] (1) Experience of environmental and social consideration for ODA projects and its	JICA CENTER	JICA Tokyo(Economy&Env.)
lessons, lessons and learns of large scale development project in Japan, Project economic analysis of a project and environmental and social consideration (2) Environment and Social Consideration of JICA	COOPERATION PERIOD	2008~2010
(3) Overviews of EIA (Social Environmental Assessment, EIA Process (Screening, Scooping, Mitigation, Public Hearing & Transparency / Accountability, Monitoring & Follow-up) (4) Country Report Presentation, Case Study, Environmental Assessment law in Japan (Comparative study), Writing on findings through the program	REMARKS and WEBSITE	