

**Committee Report for the Promotion of Cooperation
on
Climate Change Mitigation Measures
and
Implementation of CDM/JI**

March 2002

Japan International Cooperation Agency

MPN

JR

02-120

**Committee Report for the Promotion of Cooperation
on
Climate Change Mitigation Measures
and
Implementation of CDM/JI**

March 2002

Japan International Cooperation Agency

Introduction

Climate change is a physical phenomenon which not only directly affects global climate systems, but also threatens communities, economic activities and cultural traditions. After intensive international negotiations, the first framework for addressing climate change on an international scale was established based on the Framework Convention on Climate Change that entered into force in 1994. Developed countries are charged with the responsibility of enacting policies and taking measures to limit the emission of greenhouse gases (GHG). In developing countries, it is recognized that a certain level of increase in energy consumption is unavoidable during economic growth, but there is also a recognition of the need to take measures against climate change as part of the effort to achieve sustainable development.

The Kyoto Protocol, which was adopted at the Third Conference of the Parties (COP3), imposes quantitative targets for GHG emission reductions on developed countries, and establishes a framework to realize cost-effective GHG emission reductions on a global level, known as the “Kyoto Mechanisms.” These include emission trading, joint implementation (JI), and a clean development mechanism (CDM). In particular, the CDM is expected to promote the transfer of technology and funds in order to attain sustainable development in developing countries. Here in Japan, with our extremely high standard of energy efficiency, reductions in GHG emissions will require further expense. In spite of various efforts, including revisions to the energy conservation law, laws to advance countermeasures to climate change, and the Federation of Economic Organizations’ voluntary action planning, the emissions have been increasing, and further substantial actions will be required to achieve the reduction target. In light of this situation, the Kyoto Mechanisms, in addition to the domestic mitigation activities, should be used to their fullest extent in order to meet the reduction targets in an economically sound way.

Therefore, it is necessary for JICA to discuss what kind of contribution to climate change mitigation measures is possible within the international framework in cooperation with relevant domestic agencies, and what kind of contribution to sustainable development in developing countries can be made, keeping in mind the use of the Kyoto Mechanisms.

In addition to collecting and analyzing work related to climate change mitigation measures, this Committee has been working to gain an understanding of the activities both inside and outside Japan through opinion exchanges and information-sharing with domestic agencies that are involved in related efforts. The Committee has also held discussions for the purpose of investigating how to conduct future climate change mitigation measures and a CDM, as well as for conducting on-site surveys in various developed and developing countries. The results of these activities are presented in this report.

The contents of this report are entirely the opinions of the individual committee members, and do not represent the opinions of any other organizations to which these members belong.

Coordination Committee Member List

Chairman	Mitsutsune Yamaguchi	Professor of Economics, Keio University
Committee member	Jusen Asuka	Associate Professor, The Center for Northeast Asian Studies, Tohoku University
	Kotaro Kimura	Executive Director, Global Industrial and Social Progress Research Institute
	Osamu Kawaguchi	Director General, International Cooperation Center, New Energy and Industrial Technology Development Organization
	Hiroki Kudo	Group Manager, Environment Group, Institute of Energy Economics, Japan
	Naoki Mori	Director, Environment and Social Development Department, Japan Bank for International Cooperation
Observer	Tatsuo Arai	Counsellor for Environmental Affairs, Ministry of Economy, Trade and Industry
	Shinji Kakuno	Staff Specialist for Technology Cooperation, Technical Cooperation Division, Trade and Economic Cooperation Bureau, Ministry of Economy, Trade and Industry
	Takashi Yamaura	Technical Cooperation Division, Trade and Economic Cooperation Bureau, Ministry of Economy, Trade and Industry
	Manabu Inoue	Assistant Director, Global Environment Affairs Office, Environmental Policy Division, Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry
	Tetsuya Shimokawa	Assistant Director, Global Environment Affairs Office, Environmental Policy Division, Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry
	Shuichiro Yoshida	Assistant Director, General Policy Division, Agency for Natural Resources and Energy
	Takeo Ijuin	International Expert, Policy Planning Division, Energy Conservation and Renewable Energy Department, Agency for Natural Resources and Energy
	Shinichi Fujii	Technical Official, Policy Planning Division, Energy Conservation and Renewable Energy Department, Agency for Natural Resources and Energy
	Atsushi Yasuda	Climate Change Division, Multilateral Cooperation Department, Foreign Policy Bureau, Ministry of Foreign Affairs
	Yosuke Igarashi	Climate Change Division, Multilateral Cooperation Department, Foreign Policy Bureau, Ministry of Foreign Affairs
	Masahiro Shiota	Development Cooperation Division, Economic Cooperation Bureau, Ministry of Foreign Affairs
	Kenichi Suzuki	Development Cooperation Division, Economic Cooperation Bureau, Ministry of Foreign Affairs
	Shiho Kanie	Research and Programming Division, Economic Cooperation Bureau, Ministry of Foreign Affairs
	Jun Takamoto	Research and Programming Division, Economic Cooperation Bureau, Ministry of Foreign Affairs
	Takeshi Sekiya	Deputy Director, Climate Change Policy Division, Global Environment Bureau, Ministry of the Environment
	Kenji Komaki	Deputy Director, Climate Change Policy Division, Global Environment Bureau, Ministry of the Environment
	Eisho Sato	Deputy Director, International Forestry Cooperation Office, Planning Division, Forestry Agency, Ministry of Agriculture, Forestry and Fisheries
	Yasuko Kameyama	Senior Researcher, Social and Environmental Systems Division, National Institute for Environmental Studies
	Hideo Okada	Secretary General, Overseas Environmental Cooperation Center
	Shigemitsu Tashiro	Director Planning and Coordination Division, Industry and Technology Department, Japan External Trade Organization (JETRO)
	Wakana Kusaka	Deputy Director, Technological Cooperation Division, Industry and Technology Department, Japan External Trade Organization (JETRO)

	Tadahiko Nishi	Advisor, Technological Cooperation Division, Industry and Technology Department, Japan External Trade Organization (JETRO)
	Hiromi Chihara	Senior Advisor, Institute for International Cooperation, Japan International Cooperation Agency
	Senro Imai	Senior Advisor, Institute for International Cooperation, Japan International Cooperation Agency
JICA	Hisashi Mochizuki	Vice-President
	Takayuki Ando	Deputy Director, Global Issues Division, Planning and Evaluation Department
	Yoshiki Maruyama	Managing Director, Mining and Industrial Development Study Department
	Shiro Hori	Director, Planning Division, Mining and Industrial Development Study Department
	Masahiro Shibatani	Deputy Director, Planning Division, Mining and Industrial Development Study Department
	Kiyoshi Masumoto	Deputy Director, Planning Division, Mining and Industrial Development Study Department
	Takumi Ueshima	Director, Industrial Development Study Division, Mining and Industrial Development Study Department
	Hiroyuki Katayama	Deputy Director, Industrial Development Study Division, Mining and Industrial Development Study Department
	Hiroshi Kurakata	Director, Energy and Mining Development Study Division, Mining and Industrial Development Study Department
	Shobu Nagatani	Deputy Director, Energy and Mining Development Study Division, Mining and Industrial Development Study Department
	Fumiko Yamada	Staff member, Energy and Mining Development Study Division, Mining and Industrial Development Study Department
	Ko Goto	Staff member, Energy and Mining Development Study Division, Mining and Industrial Development Study Department
	Yasuhiro Kawada	Staff member, Energy and Mining Development Study Division, Mining and Industrial Development Study Department
	Takanori Tanaka	Deputy Managing Director, Mining and Industrial Development Cooperation Department
	Masaaki Kato	Director, Second Technical Cooperation Division, Mining and Industrial Development Cooperation Department
	Makoto Iwase	Staff member, Second Technical Cooperation Division, Mining and Industrial Development Cooperation Department
	Etsuko Ide	Associate Expert, Second Technical Cooperation Division, Mining and Industrial Development Cooperation Department
Consultant	Kazuhito Yamada	Pacific Consultants International
	Mariko Fujimori	Pacific Consultants International

Committee Holding Condition

Committee	Main matters discussed
First (2001.12.4.)	<ul style="list-style-type: none"> • Explanation of the Committee's purpose • Latest trend at COP7 in relation to climate change mitigation measures in developing countries • Arrangement of domestic and international trends in relation to climate change mitigation measures in developing countries and the CDM/JI <ul style="list-style-type: none"> (1)Overall picture of climate change mitigation measures in developing countries (2)Trends related to the CDM/JI (3)Climate change mitigation measures in developing countries and relations between the CDM/JI and JICA programs • On-site surveys to help understand the latest activities of advanced countries and confirm developing countries' needs • About the direction of discussion at this Committee
Second (2002.1.29.)	<ul style="list-style-type: none"> • About the AIJ program at the NEDO • Report on the results of the first on-site survey (survey on advanced countries) • About the second on-site survey (developing countries) • About the second CDM Executive Board • JICA's desired climate change mitigation measures /CDM project in the future (draft)
Third (2002.3.18.)	<ul style="list-style-type: none"> • Report on the results of the second on-site survey (developing countries) • About Committee Report for the Promotion of Cooperation on Climate Change Mitigation Measures and Implementation of the CDM/JI (draft)

On-site Survey

Period	Visited country	Main visited places
2001.12.10.	Germany	Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Japanese Consulate General
2001.12.11.-12.12	Netherlands	Energy Research Centre of the Netherlands (ECN), Ministry of the Environment (VROM), Senter Internationaal, Ministry of Economic Affairs (EZ), Japanese Embassy
2001.12.13.-12.14.	Sweden	Swedish National Energy Administration (STEM), Swedish International Development Cooperation Agency (SIDA), Japanese Embassy
2001.12.17.-12.18.	Latvia	Ministry of Environmental Protection and Regional Development of the Republic of Latvia (MOEPRD), PCF project site, Liepaja RAS, Liepaja City Council, Japanese Embassy
2002.2.11.-2.12.	Indonesia	Ministry of Industry and Trade, Ministry for the Environment, Ministry of Energy and Mineral Resources, Ministry of Forestry, Japanese Embassy, JICA Office
2002.2.14.-2.15.	Thailand	Office of Environmental Policy and Planning, Ministry of Industry, National Energy Policy Office, Thailand Environment Institute, Petroleum Authority of Thailand, Royal Forestry Department, Japanese Embassy, JICA Office

Committee Report for the Promotion of Cooperation on Climate Change Mitigation Measures and Implementation of the CDM/JI Synopsis

1 . Current understanding on climate change mitigation measures in developing countries

Desired directions for Japanese support of developing countries related to climate change mitigation measures

- (1) As a result of the survey for the committee, the following directions for Japan's contribution to support developing countries in relation to climate change mitigation measures.
 - Incorporate climate change mitigation measures in Japan's key sectors of development assistance while further promoting activities related to the Kyoto Initiative;
 - Provide effective support through the establishment of a new framework, while maximizing the utilization of Japan's ODA efforts;
 - Place priority on supporting climate change mitigation measures that are easy for developing countries to accept, and have multiple ancillary benefits, including the climate change mitigation measures, while also meeting the current development needs of the developing countries;
 - Support developing countries with proactive use of CDM support, and advance the implementation of climate change mitigation measures .

2 . International Trends on Climate Change Mitigation Measures and the Kyoto Mechanisms

Noteworthy trends related to the Kyoto Mechanisms

- (1) Carbon credit prices: As a result of the U.S. announcement to refuse to ratify the Kyoto Protocol, there was a steep drop in the price of the carbon credits.
- (2) Ambitious activities: Activities include ERUPT/CERUPT by the government of the Netherlands, and the World Bank, Prototype Carbon Fund (PCF).

Importance of the Kyoto Mechanisms for Japan and its utilization strategies

- (1) GHG emissions in Japan were 6.8% higher in 1999 than they were in 1990. There is a need to utilize other options in combination with the domestic efforts in order to achieve the reduction targets. Therefore, it is extremely important to make appropriate use of the functions of the Kyoto Mechanisms in Japan's emissions reduction efforts
- (2) The directions of the international negotiations and agreements on the second commitment period are difficult to forecast at the present time. Therefore, for Japan's Kyoto Mechanism utilization strategy, it is necessary to discuss what measures should be implemented in order to flexibly respond to later, uncertain situations, while also investigating the measures that are to be implemented quickly in order to meet the first commitment period targets.

3 . Support Measures to Promote CDM Implementation

- (1) Problems with the CDM framework
 - In many cases, the developing countries that will be the host countries may be too weak to handle the monitoring technology and statistical data that are crucial for implementing the CDM, and training programs for technical personnel are still being developed. In addition, for the CDM there is a "share of proceeds" that shall go to an adaptation fund. So in comparison to JI, it is likely that the priority on the CDM will be lower.

(2) Role that should be filled by public funds for the CDM

- It will be difficult for private entities alone to handle the removal of the barriers caused by weak technical, organizational and system capacity, as well as the proper provision, distribution and communication of information to the candidate for the national CDM authority and to the ministries and agencies implementing CDMs in developing countries. It would be worthwhile to use public funds to address these issues.
- Since there is discussion over the framework for support of Japanese private entities in implementing CDM projects, there is an opinion that, in the short term, there will be few CDM projects conducted by private entities. Accordingly, there is a need for a means of support that enables CDM projects to be smoothly implemented by private entities. In addition, implementation of CDM projects through public funding for the first commitment period may be worth investigating from the perspective of accumulating know-how and experience that will benefit private entities.
- If there were an inequitable geographical distribution of CDM projects, and a demand to ensure fairness from countries and regions with few opportunities, it could be handled by implementing the CDM projects for these regions primarily with public funds.

(3) Implementation options of the CDM using public funds

- In order to meet the first commitment period's targets for the Kyoto Protocol under the existing time constraints, the following options are available, including devising a means of spending public funds to obtain carbon credits. Investigations on the options that have the highest necessity should start right away, and it is recommended that effective and appropriate combinations of these options be considered in order to meet the targets.
- (i) Direct CDM project implementation with public funds
 - (ii) Directly obtaining carbon credits with public funds: Using public funds to build a framework like ERUPT/CERUPT or PCF, implementing CDM projects with the participation of private entities, and obtaining the carbon credits.
 - (iii) Support of CDM projects by private entities using public funds: Supplement the activities of private financial institutions, such as low-interest loans and tax concessions, conduct training on CDM-related technology and systems for the private sector in the developing countries, conduct surveys on CDM potential, offer to act as a go-between for negotiations with the relevant agencies of the host country's government

(4) Potential for ODA utilization for CDM

- With regard to ODA utilization for CDM projects, there is a limitation based on the Marrakech Accord stating that "there must not be a diversion for the ODA." Nevertheless, considering the past and present performance of both the capacity building in developing countries supported by Japan and the projects that have the same GHG reduction effect as CDM projects conducted through the grant for global environmental issues, as well as the Special Environmental Items for loans for the Kyoto Initiative, there is a demand to continue to appropriately utilize the ODA and support the effective implementation of CDM projects in ways that benefit both Japan and the developing country.
 - Examples of ODA use for CDMs are as follows:
- (i) Information provision, distribution and promotion of understanding
 - CDM workshops and seminars for candidates of national CDM authority as well as the CDM implementing agencies in developing countries;
 - Dissemination of information among stakeholders in the developing countries other than the government agencies of the host countries, such as the local people and NGOs
 - (ii) Support for preparation of an infrastructure for climate change mitigation measures in developing countries

<Technology transfers and personnel training>

- Preparation of data related to GHG emissions and sequestration, monitoring of GHG emissions and sequestration, and preparation of statistical systems and databases.
- Implementation of CDM strategy studies in developing countries

<Support of organization and system preparation>

- Support of the establishment of the national CDM authority, preparation of the infrastructure to receive implementing agencies, and assist in building an effective coordination system between these organizations
- Preparation of a legal system related to CDMs
- Support for the development of operational entities (OE)

(iii) Support for the activities of private entities

- Training by Japanese specialists targeting the private sector in developing countries
- Publication and release of CDM-related data obtained for preparation of the foundations for climate change mitigation measures in the developing countries

(iv) CDM project implementation

- Investigate ways of effectively using ODA

(v) Linkage between various types of support: Unification of development strategies and climate change mitigation measures /CDM in developing countries

- Linking current development assistance programs with climate change mitigation measures, such as GHG reduction with ancillary benefits for economic development and poverty alleviation
- Mainstreaming activities related to climate change mitigation measures into assistance for the sustainable development of developing countries

(5) Potential for cooperation between related domestic organizations

- Public organizations most closely related to CDM projects in energy and industry sectors are NEDO, JETRO, JBIC, and JICA. -It is recommended that the three options indicated in section (3) “CDM options using public funds” be effectively implemented in parallel with the infrastructure development, such as technology transfers and capacity building, through cooperation among these organizations, thereby taking advantage of the characteristics of each.

(6) Future Issues

- (i) In order to establish cooperation guidelines for implementing the CDM and making use of the combined strength of the various agencies, it is necessary to quickly investigate concrete policies to effectively coordinate the areas that can be supported by the various organizations.
- (ii) For the implementation of the CDM, it is necessary to clarify the areas that will be difficult to handle and the areas that can be addressed by each of the organizations. In order to effectively utilize public funds to achieve Japan’s emissions reduction targets, it is important to investigate the cost-effectiveness of acquiring carbon credits through CDM projects, based on the examples from other developed countries.

Content

Introduction

Coordination Committee Member List

Committee Holding Condition

On-site Survey

Committee Report for the Promotion of Cooperation on Climate change

Mitigation Measures and Implementation of the CDM /JI Synopsis

Structure of This Report	1
1. Current Awareness of Climate Change Mitigation Measures in Developing Countries	
(1) Sustainable development and climate change in developing countries.....	3
(2) Trends in development assistance related to climate change mitigation measures change mitigation measures by DAC countries.....	4
(3) Japanese development assistance of developing countries related to climate change mitigation measures	6
(4) Perspective of development assistance regarding climate change mitigation measures.	8
(5) Recommended directions of Japanese development assistance regarding climate change mitigation measures	10
(6) JICA assistance policy of climate change mitigation measures in developing countries	11
2. International Trends on Climate Change Mitigation Measures and the Kyoto Mechanisms	
(1) Marrakech Accord summary.....	14
(2) Noteworthy trends related to the Kyoto Mechanisms	18
(3) Importance of the Kyoto Mechanisms for Japan and its utilization strategies	19
3. Support Measures to Promote CDM Utilization	
(1) Problems with the CDM framework.....	22
(2) Necessary role of public funds for CDM	23

(3)	Implementation options of CDM using public funds.....	25
(4)	Potential for ODA utilization for CDM	26
(5)	Potential for cooperation between related domestic organizations	29
(6)	Pending issues.....	32

Abbreviations

BHN	Basic Human Needs
CDM	Clean Development Mechanism
CERUPT	Certified Emission Reduction Unit Procurement Tender
COP	Conference of the Parties to the UNFCCC
COP/MOP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
DAC	Development Assistance Committee
ERUPT	Emission Reduction Unit Procurement Tender
ET	Emissions Trading
GEF	Global Environment Facility
GHG	Greenhouse Gas
ISD	Initiatives for Sustainable Development (ISD) toward the 21st Century
JBIC	Japan Bank for International Cooperation
JETRO	Japan External Trade Organization
JI	Joint Implementation
JICA	Japan International Cooperation Agency
NEDO	New Energy and Industrial Technology Development Organization
ODA	Official Development Assistance
OE	Operational Entities
OECD	Organization for Economic Co-operation and Development
PCF	Prototype Carbon Fund
UNCED	United Nations Conference on the Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
WSSD	World Summit on Sustainable Development (Johannesburg Summit 2002)

Structure of This Report

The structure of this report is illustrated in the flowchart on the following page.

The background data on **[1. Current awareness of climate change mitigation measures in developing countries]** for this investigation was organized, and the discussions proceed with the primary aim of considering the perspective of how JICA handles the climate change mitigation measures and gives directions. First, the relationship between climate change and sustainable development in developing countries, as well as the DAC mechanism are studied. Then, the scope of Japan's efforts related to climate change mitigation measures in developing countries is summarized, and the “Perspective of development assistance regarding climate change mitigation measures ,” which is the foundation of the discussions in this report, is clarified. This report presents some guidelines for JICA’s assistance of climate change mitigation measures in developing countries based on the suggested “Recommended directions of Japanese development assistance regarding climate change mitigation measures .”

For section **2. International trends on climate change mitigation measures and the Kyoto mechanisms**, the latest trends on the important Kyoto Protocol and Kyoto Mechanisms for climate change mitigation measures in developing countries were collected and organized, and Japan’s action strategy for the Kyoto Mechanisms is surveyed. First, the important items related to the Kyoto Mechanisms from the Seventh Conference of the Parties to the UNFCCC (COP7), at which the application rules for the Kyoto Protocol were determined, are reviewed, and the noteworthy trends as well as points to watch in the future are identified from both the protocol and the latest information on the mechanisms. Based on this, a broad outline of the utilization strategy and the importance of the Kyoto Protocol for Japan are clarified.

With regard to the **3. Support measures to promote CDM implementation**, the focus was placed on finding the right way to establish coordination between JICA and other related domestic organizations for Japan's CDM-focused assistance of developing countries. After identifying the structural issues related to the CDM, the roles that should be played by public funding are investigated from the perspective of utilizing the CDM, and the current possible options for using public funds for the CDM are identified. Then, there is the possibility of utilizing the ODA, which is deeply connected to supporting developing countries. With regard to the possibility of using the ODA, investigations were made based on recent international discussion trends, assuming the Marrakech Accord decision stating that “Public funding contributions to CDM efforts must not be diverted for ODA use.” Finally, in addition to identifying the potential for cooperation among the related domestic organizations in Japan as a means of support to promote the utilization of the CDM, potential issues are also presented.

Structure of this report

