New Mechanisms Express August 2011

- Promoting New Market Mechanisms for Climate Change Mitigation -

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Latest Events and an E-mail Newsletter on New Mechanisms

Official Side Event on New Mechanisms at UNFCCC SB34

On June 11, 2011, the Ministry of the Environment, Japan (MOEJ), the Global Environment Centre Foundation (GEC), and the Overseas Environmental Cooperation Center, Japan (OECC) jointly organized the "First Findings of New Mechanisms FS: based on Lao-Japan Cooperation in Transport Sector" as an official side event of the 34th Subsidiary Body (SB34) of the United Nations Framework Convention on Climate Change (UNFCCC) in Bonn, Germany. The side event featured presentations from MOEJ, government officials of Lao PDR, Mitsubishi UFJ Morgan Stanley Securities Co., Ltd. (a FS implementing organization)*, GEC and OECC. For details: http://regserver.unfccc.int/seors/reports/archive.html?session_id=SB34



A New Mechanisms Information Platform E-Mail Newsletter

This new newsletter delivers information of the latest trends as well as domestic and overseas events etc. on new mechanisms (English and Japanese).

Registration : http://mmechanisms.org/e/mailmagazine.html ; Contact informtaion: info@mmechanisms.org



Case Report on a Feasibility Study for Building New Mechanisms

New Mechanisms Express presents a series of "Case Report on a Feasibility Study" by implementing organizations.

Please give us an outline of your Feasibility Study in FY2010.

We conducted a "Feasibility Study on Sustainable Peatland Management under NAMAs" on approximately 10,000 hectares of irrigated land in Jambi Province of Sumatra, Indonesia. The peatland management project seeks to reduce CO₂ emissions by restoring the water table in the project site and suppressing aerobic decomposition of peat through the installation of water gates and other facilities, and improvement of existing water gate management (see figure below).



Mr. Hiroyuki Kurita, General Manager and Dr. Akihiko Hirayama, Senior Manager GHG Project Department, Shimizu Corporation

What are the characteristics of the sustainable peatland management project in Indonesia?

In 2005, while 38% of GHG emissions in Indonesia was from peatlands, 15% of this was caused by aerobic decomposition associated with dry peat. Therefore, Indonesia considered peatland management as an important initiative of both NAMA and REDD. Meanwhile, Indonesia s Ministry of Public Works plans to develop agricultural land in coastal lowlands, including peatland areas, as a measure to ensure food security under a national program extending over the next several decades. However, there is concern that if such development leads to drainage through construction of conventional large-scale canals, it could cause areas of peatland to dry, resulting in large-scale GHG emissions. On the other hand, water table management utilizing Shimizu Corporation's technologies in irrigated agricultural areas is attracting considerable interest in Indonesia because it can prevent decomposition caused by peatland drying, thereby reducing GHG emissions, and is expected to produce higher rice crop yields.



What about future plans?

Since the target peatland of this project is vast and susceptible to influences of the natural environment, precise monitoring and calculation of its emissions reduction like those required by the conventional CDM are problematic. With this in mind, under the FS in 2011, we intend to establish monitoring methods suitable for local conditions and to develop methodologies in the context of new mechanisms. Moreover, we believe that realizing future projects will require initiatives for bilateral offset credit mechanisms by the Japanese government and a stronger partnership with local counterparts through public-private sector collaboration.

* A case report of a "Feasibility Study on NAMA in the Transport Sector of Laos" were presented by Mitsubishi UFJ Morgan Stanley Securities Co., Ltd., in the New Mechanisms Express's February issue : http://www.mmechanisms.org/document/new_Mecha-Express/new_Mecha-Express_201102_eng.pdf

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Selection & Adoption Results of Feasibility Studies on New Mechanisms and CDM/JI in FY 2011 (35 Studies)

Outline of the Results of Feasibility Study Selection and Adoption

On July 14, 2011, MOEJ selected and adopted 29 Feasibility Studies (FS) on New Mechanisms and 6 FS on CDM/JI. These studies are expected to provide input into international negotiations concerning the Bilateral Offset Credit Mechanisms (BOCM) that the Japanese government proposes to be applicable from 2013 onward (implementation of projects to reduce GHG emissions and credit generation schemes through NAMA*1 and REDD+*2) and contribute to the formulation of international rules. Each study will feature the items shown at right, with due considerations of circumstances in host countries.

[Study items]

- 1) Method for setting up a reference scenario
- 2) Monitoring method (including proposals for new methods)
- 3) Method for calculating amount of emissions reduction (including proposals for new methods)
- 4) MRV (Measurable, Reportable, and Verifiable) method for the effects of emissions reductions
- 5) Measures to ensure environmental integrity
- 6) Contribution to sustainable development
- 7) Evaluation of co-benefit effects (based on the latest version of the "Manual for Quantitative Evaluation of the Co-Benefits Approach to Climate Change Projects" [issued by MOEJ]; quantitative evaluation whenever possible [study of estimation and measurement methods])

Implementing Entities for Feasibility Studies on New Mechanisms and on CDM/JI in FY 2011



	Host Country(ies) Category	FS Title	FS Entity	Host Country(ies) Category	FS Title	FS Entity	Host Country(ies) Category	FS Title	FS Entity
< Categories >	Viet Nam REDD+	New Mechanism Feasibility Study for REDD+ through Revegetation at Denuded Lands and Woody Biomass-based Power Generation in Son La Province, Viet Nam	Sumitomo Forestry Co., Ltd.	Thailand Waste Management	New Mechanism Feasibility Study for Waste Management Activities in Thailand	Pacific Consultants Co., Ltd.	Malaysia Transportation	CDM PoA Feasibility Study for Fuel Efficiency Improvement through Introduction of Digital Tachograph to Cargo Trucks in Malaysia	Nippon Express Co., Ltd.
REDD+ Energy Efficiency/ Energy Saving Biomass Utilisation Waste Management Transportation Renewable Energy Others	Viet Nam Others	New Mechanism Feasibility Study for CO ₂ Abatement through Utilisation of Blast Furnace Slags as Blending Material for Cement in Viet Nam	Mitsubishi Research Institute, Inc.	Thailand Transportation	New Mechanism Feasibility Study for Development of Mass Rapid Transit (MRT) Network in Bangkok, Thailand	Japan Weather Association	Indonesia Waste Management	New Mechanism Feasibility Study for Energy Application of Wastes and Wastewater Originated in Processing of Agricultural Products in Indonesia	Chugai Technos Corporation
	Viet Nam Energy Efficiency Improvement	CDM Feasibility Study for Energy Efficiency Project through Installing High Efficiency Air Conditioners in Viet Nam, with New CDM Methodology Development	Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.	Thailand Renewable Energy	New Mechanism Feasibility Study for Renewable Energy Development by Wind Power Generation in Low Wind Speed Conditions in Thailand	Yonden Engineering Co., Inc.	Indonesia, and Viet Nam Transportation	New Mechanism Feasibility Study for Development of Mass Rapid Transit (MRT) Systems in Jakarta, Indonesia, and Hanoi and Ho Chi Minh, Viet Nam	Mitsubishi Research Institute, Inc.
	Lao PDR Transportation	New Mechanism Feasibility Study for Urban Transport Management in Vientiane, Lao PDR	Katahira & Engineering International	Thailand Energy Efficiency/ Energy Saving	New Mechanism Feasibility Study for Promotion of Energy Efficiency Improvement through Institutional Development of Building and Energy Management Systems (BEMS) with Certificated Carbon Credits in Thailand	Yamatake Corporation	Indonesia REDD+	New Mechanism Feasibility Study for REDD+ in Central Kalimantan Province, Indonesia	Mitsubishi UFJ Research & Consulting Co., Ltd.
CDM/JI	Cambodia REDD+	New Mechanism Feasibility Study for REDD+ in Prey Long Area, Cambodia	Conservation International Japan	Thailand Others	New Mechanism Feasibility Study for CO ₂ Reduction through Utilising Off-Peak Power from Storage Batteries and Introducing Electric Vehicles in Thailand	Mizuho Information & Research Institute, Inc.	Indonesia REDD+	New Mechanism Feasibility Study for REDD+ and Bio-Fuel Production and Utilisation in Gorontalo Province, Indonesia	Kanematsu Corporation
	Cambodia Biomass Utilisation	CDM Feasibility Study for Biomass-based Power Generation Project in Cambodia, with Development of Standardised Baseline of Off-Grid Electricity Generation	Japan NUS Co., Ltd.	Malaysia Waste Management	New Mechanism Feasibility Study for Energy Generation by Waste Management Activities, through Anaerobic Digestion as Model Technology, in Malaysia	Ichikawa Kankyo Engineering Co., Ltd.	Indonesia REDD+	New Mechanism Feasibility Study for Avoidance of Peat Aerobic Degradation by Peatland Rewetting and Rice Husk-based Power Generation Associated with Rice Production Increase in Jambi Province, Indonesia	Shimizu Corporation

Host Country(ies) Category	FS Title	FS Entity	
India	New Mechanism Feasibility Study for Energy Savings	The Japan Research Institute, Limited	
Energy Enclency/ Energy Saving	by ounsing LED Lights at once buildings in India		
Sri Lanka	New Mechanism Feasibility Study for Development of Castor Seed Industry Cluster in Sri Lanka	PEAR Carbon Offset Initiative,	
Biomass Utilisation		Ltd.	
Sri Lanka	New Mechanism Feasibility Study for Development of Best Grid Electricity Mix Focusing on Renewable	Ex Corporation	
Renewable Energy	Energy Sources in Sri Lanka		
Sri Lanka	CDM Feasibility Study for Wind Power Generation for Hambantota International Convention Centre in Sri Lanka	Takasago Thermal Engineering Co., Ltd.	
Renewable Energy			
Bangladesh	CDM PoA Feasibility Study for Household Biogas	PEAR Carbon Offset	
Waste Management		Initiative, Ltd.	
Kazakhstan	CDM PoA Feasibility Study for Energy Utilisation of Broiler Chicken Manure in Ust-Kamenonorsk Kazakhstan	Ex Corporation	
Waste Management	onoron manufo in our namonogoron, nazavilotan		

FS Title

New Mechanism Feasibility Study for Multiple

Application of Energy Efficiency Improvement

Other Technologies in Mongolia

Measures at Coal Thermal Power Plants in Mongolia

New Mechanism Feasibility Study for Energy Saving

at Buildings by Utilising Geothermal Heat Pump and

New Mechanism Feasibility Study for Energy Saving by

New Mechanism Feasibility Study for Energy Efficiency

Improvement by Introducing Energy Management and

New Mechanism Feasibility Study for Electric Generation

based on Low-Level Coal Mine Methane and Integrated

New Mechanism Feasibility Study for Energy Efficiency

Furnaces to Aluminium Industry in India

Improvement by Introducing High-Performance Industrial

Energy Efficiency Improvement in Yunnan Province, China

Contol Systems at Factories in Shaanxi Province, China

Water-Saving Toilet Systems to Households in Dalian, China Securities Co., Ltd.

Reducing Water Consumptions through Diffusion of

Mongolia

Mongolia

China

China

China

India

FS Entity

Suuri-Keikaku

Co., Ltd.

Shimizu

Corporation

Mitsubishi UFJ

Morgan Stanley

Yaskawa Electric

Corporation

Tepia Corporation

Japan

Japan Industrial

Furnace Manufacturers

Association

ountry(ies) tegory	FS Title	FS Entity					
razil ^{EDD+}	New Mechanism Feasibility Study for REDD+ in Acre State, Brazil	Marubeni Corporation					
ombia able Energy	New Mechanism Feasibility Study for Renewable Energy Development Focusing on Geothermal Power Generation in Colombia	Mitsubishi Research Institute, Inc.					
exico Efficiency/ Jy Saving	New Mechanism Feasibility Study for Promotion of Energy Efficiency Improvement at Households through Introduction of Low-CO ₂ Houses and Diffusion of Energy-Efficient Appliances in Mexico	The Japan Research Institute, Limited					
Brazil	Latin A	merica					
Bar and	 *1: Nationally Appropriate Mitigation Actions for devel *2: Reducing Emissions from Deforestation and Fore Developing Countries Note: New Mechanism sectors and CDM/JI projects FS-targeted regions on the map using their color or noted that some projects may target a country's enti countries. 	 *1: Nationally Appropriate Mitigation Actions for developing countries *2: Reducing Emissions from Deforestation and Forest Degradation in Developing Countries Note: New Mechanism sectors and CDM/JI projects are plotted in the FS-targeted regions on the map using their color code. It should be noted that some projects may target a country's entire area or multiple countries. 					



Newly Launched Programme for Supporting the Development of MRV Systems in New Mechanisms

Outline of the Programme

During FY2011 MOEJ initiated a "Programme for Supporting the Development of MRV Systems in Asia, Central and Eastern Europe, Latin America and Africa towards Building New Mechanisms." This programme aims at conducting a study/survey on criteria for selecting methods and projects to evaluate contributions towards GHG emission reduction. Furthermore, on-site capacity building will be conducted to improve basic abilities of candidate verification bodies in developing countries as a part of the programme. In early July, we interviewed persons in charge of each programme group, according to the following questions.

Questions:

1) How have your support activities progressed thus far?

2) Can you describe future challenges and prospects of capacity building?

Counterparts: Cambodia, China, India, Indonesia, Lao PDR, Mongolia, Philippines, Thailand, Viet Nam

1) IGES has provided capacity-building support for CDM in the selected Asian countries since 2003. We have just begun the MRV support activities for new market mechanisms in the Asian countries newly including Viet nam and Mongolia. At present, we feel that Japan is taking a lead in this field. After holding a series of workshops on MRV systems under J-VER scheme*3 and JEVTS*4, Thailand and Indonesia have started practical studies in case of taking similar approaches in the future. On the other hand, there are also some countries that are considering purposes and kinds of projects, and how to MRV them. Thus, the degree of the MRV support activities progress varies from country to country.

2) As J-VER and JVETS were developed in Japan, their required levels of MRV should be adjusted flexibly to meet the conditions in each country. Regarding a case of MRV in NAMAs, there is a gap between our idea of having MRV for market mechanisms and the ideas that developing countries have. Therefore, we will support the construction of feasible MRV systems which can also appropriately value environmental technologies in sectors that are not fully covered by the existing CDM. Moreover, we believe it will be necessary to seek to ensure that generated carbon credits have high credibility and quality as to make them internationally tradable, in addition to working towards building a flexible system that meets the needs of the developing countrise.



Dr. Yasushi Ninomiya Director Market Mechanism Group, Institute for Global Environmental Strategies (IGES)

Counterparts: Ghana, Kenya, Morocco, Mozambique, Senegal, South Africa, Tanzania, Uganda, Zambia



Mr. Tadanori Kumano General Manager Human Environment Department INGEROSEC Corporation

1) We dispatched preparatory study missions to collect on-site information and build human networks through the Africa Carbon Forum in Morocco etc., so that our support activities can be more effective. Our activities will emphasize collaboration closely with counterparts towards reasonable new mechanisms after 2013, sharing an idea of Bilateral Offset Credit Mechanisms by MOEJ. In this context, it is important for counterparts to understand the benefits from MRV by themselves based on their CDM experiences. In particular, a textbook prepared by the Latin American programme will be utilized for capacity building.

2) There are several issues in each country such as an excessive burden can be placed upon the experts due to the limited number of them. On the other hand, there is growing interest in mitigation efforts in Africa, where COP 17 will be held this year. We would like to maximize this opportunity to build and strengthen a partnership through a bottom-up process towards building new MRV frameworks.

Counterparts: Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay, Kazakhstan, Uzbekistan, Serbia

1) MRV-related approaches may come in a variety of forms among partner countries. Therefore, in this programme, we are preparing a textbook that summarizes (1) MOEJ initiatives on Bilateral Offset Credit Mechanisms, (2) 30 original methodologies that simplify CDM as much as possible, (3) a positive list, and (4) MRV methods. The methodologies cover a broad range of sectors—including energy, transport, energy saving, waste and wastewater etc. —so that individual countries can choose the best methodologies taking into consideration of their own national circumstances. Our on-site support activities will pursue MRV-related capacity building of local organizations, referring to concrete model cases, with the assistance by verification bodies in Japan.

2) Unlike East and Southeast Asia, this type of on-site programme has not yet been widely conducted by Japan in Latin America, Central and Eastern Europe, and Central Asia. Hence, we are looking forward to being newly inspired to build better MRV systems. Personally speaking, I believe that, in addition to GHG emissions reduction, these developing countries have great interest in co-benefit aspects such as products, materials, environmental measures, and economic development. Consequently, I would like to work with counterparts to establish frameworks which enable technologies and products, having high superiority in this regard, to be appropriately valued.



Mr. Yoshihiro Mizuno Manager PC-Institute for Global Environment Research Pacific Consultants Co.,Ltd.

*3 J-VER(Japan Verified Emission Reduction): http://www.env.go.jp/en/earth/ets/mkt_mech/j-ver_scheme.pdf *4 JVETS(Japan's Voluntary Emissions Trading Scheme): http://www.env.go.jp/en/earth/ets/jvets1105.pdf



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