

Scientific Study on REDD-plus Related Activities and Transition to Low Carbon Society

Ministry of the Environment Japan
20 May 2011, Tokyo
TGO-MOEJ meeting

REDD +

Drivers, MRV, Finance, Capacity Development, Safeguard

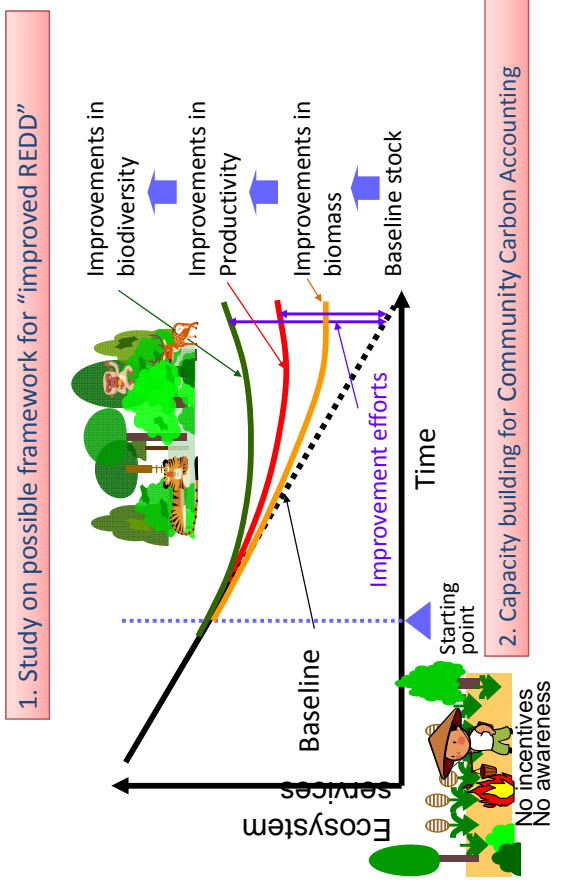
Study on MRV, community involvement and ecosystem service for REDD+

◆ The Ministry of Environment, Japan (MOEJ) sponsors scientific studies on the ground relating to REDD+ activities conducted by Japanese institutes in partnership with organizations in developing countries.

◆ The studies in 2010 focus on MRV, community involvement, biodiversity, etc.

Country	Institute	Projects Summary
Malaysia Indonesia	Hiroshima Univ.	- Assessment of REDD+ activity in terms of Ecosystem Service - Study on Mechanisms of community involvement
Malaysia	Kyoto Univ.	- Study on methodology of MRV for Degradation - Study on practical Biodiversity monitoring for REDD +
Indonesia Cambodia PNG	IGES	- Development and Demonstration of Community Based Carbon Accounting for REDD+
Laos, Peru Ethiopia	Kyoto Univ.	- Study on Mechanisms of community involvement - Study on improvement of cultivation practice for REDD+

Towards implementation of effective REDD+ projects



Study on possible framework for “Improved REDD”

Objective

- To establish a framework that would achieve co-benefits between carbon stock enhancement and conservation of biodiversity -“Improved REDD”

Project outline

- Extract conditions to achieve co-benefits between carbon stock enhancement and conservation of biodiversity while avoiding potential negative impacts to biodiversity

Key findings

- Introduction of sustainable forest management (e.g. RIL) is most effectively optional in the production forest for the achievement of co-benefits
- To avoid the hypocrisy effects and to achieve co-benefits, project-based approach is desired

Capacity building for Community Carbon Accounting

Objective

- To develop approaches to involve local communities in REDD+ project development and implementation through forest carbon accounting in community level

Project outline

- Workshops and trainings for field based action research with local communities and partners in Cambodia, Indonesia, and PNG

Key findings

- Community understanding of Climate Change, REDD+ and the value of their forests enhanced through CAA participation
- Local community were enabled to conduct CCA through explanation, demonstration and assisted practice – still ongoing support required to ensure accurate measurement and reporting
- Clear landownership, strong community institutions, local government support and an interest amongst the community in sustainable forest management are essential

Objectives of LCS-RNet

- Promotion of information exchange and research cooperation that cover various issues relating to low-carbon societies.
- Promotion of understanding about LCS through dialogues between researchers and various stakeholders including policymakers, businesses, civil society, academia, and other sectoral actors on low-carbon societies, and
- Contribution to international policy-making processes on climate change including G8 process by providing research outcomes and recommendations.

Background

Recognising the necessity of the promotion of research on low-carbon societies (LCS) and the information exchange to help more countries to develop their own roadmaps towards LCS, participating Environmental Ministers in the G8 Environmental Ministers Meeting (EMM) held in Tokyo, May 2008, supported the idea to create an international network of research institutions to set up LCS-RNet and also considered objectives, possible activities, and organisational matters. The progress was reported back to the G8 EMM government contact points in March 2009.

In the beginning of April, the Researchers Meeting of LCS-RNet (RNet) was held in Tokyo, Japan, where the research technologies which were a part of the G8 EMM process under the leadership of the Italian presidency in 2009, where the official kick-off of the LCS-RNet was announced.

As of April 2010, 19 research institutions, nominated by 14 countries, are participating in LCS-RNet.

What is Low Carbon Societies?

The low-carbon society may be defined as, but not limited to, a society that:

- uses systems that are compatible with the principles of sustainable development, ensuring that the development needs of all groups within society are met;
- makes an equitable contribution towards the global effort to stabilise atmospheric concentrations of carbon dioxide and other greenhouse gases at a level that will avoid dangerous climate change through deep cuts in global emissions;
- demonstrates high levels of energy efficiency and uses low-carbon energy sources and production technologies; and
- adopts patterns of consumption and behaviour that are consistent with the principles of sustainable development.

This is from the working definition of Japan-UK Joint Research project on LCS.

LCS-RNet recognises that there are various definitions of LCS and it is not a purpose of LCS-RNet to define LCS with a single common context. Each country and society has its own view of the future society that achieves low carbon emissions with sustainable development.

Platform of LCS research

The basic nature of LCS-RNet is a platform to support and encourage information sharing and voluntary cooperation among research institutions specifically in the field of LCS research. LCS-RNet also facilitate the interaction between researchers and various stakeholders, and delivers their findings to policy-makers to assist science-based policy making in transitioning to low-carbon societies.

Non-binding network

LCS-RNet is a non-binding network, and its activities and outcomes are independent from official views of any government, and while policy research should not be policy making, the network will not hamper individual research activities in any way.



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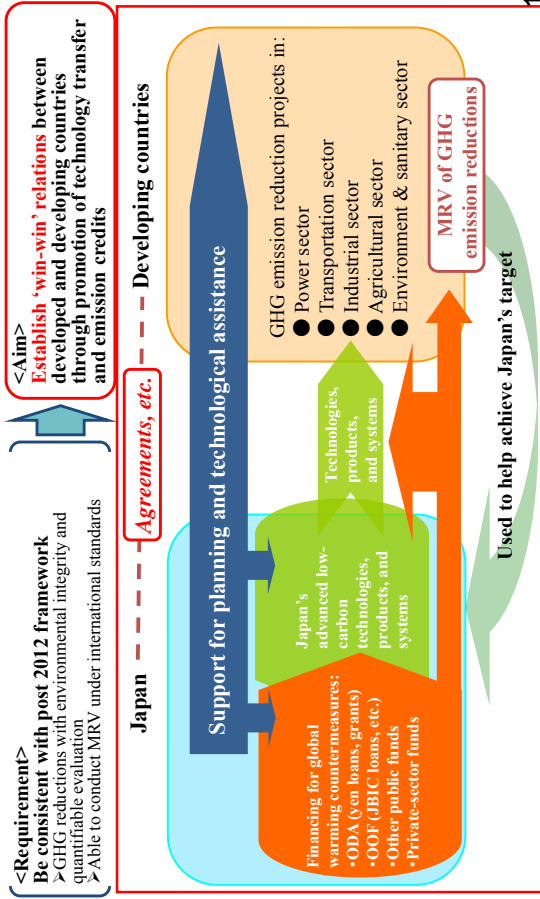


International Research Network for Low Carbon Societies

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Image of Bilateral Offset Credit Mechanism

GHG reductions in developing countries - implemented by provision of advanced technologies and/or products from developed countries with **bilateral agreements** - are evaluated and certified as emission reduction credits to offset the emissions of the developed countries.



<Requirement>

Be consistent with post 2012 framework
 >GHG reductions with environmental integrity and quantifiable evaluation
 >Able to conduct MRV under international standards

<Aim>

Establish 'win-win' relations between developed and developing countries through promotion of technology transfer and emission credits

Japan --- Agreement, etc. --- Developing countries

Support for planning and technological assistance

Financing for global warming countermeasures:
 •ODA (on loans, grants)
 •OOF (BIC loans, etc.)
 •Other public funds
 •Private-sector funds

Japan's advanced low-carbon technologies, products, and systems

Technologies, products, and systems

GHG emission reduction projects in:

- Power sector
- Transportation sector
- Industrial sector
- Agricultural sector
- Environment & sanitary sector

MRV of GHG emission reductions

Used to help achieve Japan's target

Progress in International Negotiations

Cancun Agreements (COP 16 Decisions)

It was agreed that the Conference of the Parties (COP) "decides to consider the establishment, at its seventeenth session, one or more market-based mechanisms".

High-Level Agreements on Bilateral Cooperation

[India]

At their meeting on October 25, 2010, the prime ministers of Japan and India agreed to enhance bilateral discussions to build a framework for bilateral cooperation in the area of climate change.

Except from the joint statement: "The two Prime Ministers also reaffirmed the importance of strengthening bilateral discussions on climate change on various occasions, including a possible establishment of a framework of comprehensive bilateral cooperation."

[Vietnam]

At their meeting on October 31, 2010, the prime ministers of Japan and Vietnam agreed to start consultation on the establishment of a bilateral carbon offset scheme and other initiatives in the area of climate change.

Except from the joint statement: "The two sides agreed to task relevant agencies of the two countries to exchange views for the realization of these objectives* including the potential establishment of bilateral offset credit mechanism."

* Making the environment and economy compatible, thereby addressing the climate change issues while achieving sustainable growth.

Multilateral Agreement

In Action Plan for "A Decade toward the Green Mekong" Initiative formulated on October 29, 2010, Japan and the Mekong region countries agreed to "**promote the development of bilateral offset mechanisms.**"

Government Decisions regarding the Bilateral Offset Credit Mechanism

Bill for the Basic Act on Global Warming Countermeasures (Excerpt)

(Cabinet Decision made on March 12, 2010 and October 8, 2010)

(Measures for International Cooperation)

"Article 29: Recognizing the importance of promoting global warming countermeasures under international cooperation, the government shall work for the establishment of a fair and effective international framework ensuring the participation of all major countries in efforts to prevent global warming, and implement measures to ensure international cooperation for the prevention of and adaptation to global warming, to establish a new framework for providing international financial support, to create a mechanism for properly valuing contributions to GHG emission reduction efforts overseas such as through the provision of relevant technologies and/or products, and to promote other forms of international cooperation, while at the same time providing information and taking other necessary steps to promote international cooperation initiatives of local governments and private-sector entities to prevent and adapt to global warming."

New Growth Strategy: Blueprint for Revitalizing Japan (Excerpt) (Cabinet decision made on June 18, 2010)

(1) Strategy for becoming an environment and energy power through "green innovation"

[Targets to reach by 2020]

- "Create over ¥50 trillion in new environment-related markets" and "1.4 million new environment sector jobs."

- "Reduce worldwide GHG emissions by at least 1.3 billion tons (equivalent to the total emissions of Japan) by using Japanese private-sector technologies."

<Timetable>

- "Establish a mechanism that can appropriately evaluate Japanese companies' contributions to GHG emissions reduction efforts overseas, for instance, through the provision of their low-carbon technologies, infrastructure, and products."

MOEJ Initiatives for the Promotion of Market Mechanisms

(1) Feasibility Studies for CDM/JI Projects

- Call for potential CDM/JI project proposals from Japanese entities and select ones, and request them to develop project design documents (PDDs) and to proceed to the UNFCCC procedures.
- About 20 projects are selected each fiscal year.
- Three projects (in Thailand, Laos, and Indonesia) have been selected as new mechanisms feasibility studies in FY2010.

(2) Kyoto Mechanisms Information Platform

- Manage help desk for Japanese entities to provide consultation in implementing CDM/JI projects
- Operate the Kyoto Mechanisms Information Platform website to provide the latest news and information from within and outside Japan
- Inquiries for new mechanisms are received in FY2010.
- Seminars on new mechanisms organized in February 2011, in Japan

(3) CDM Capacity Building Activities

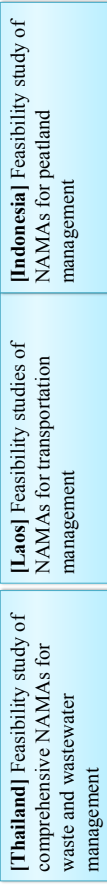
- Support the designated national authorities (DNAs) and private entities in Asian countries to make enabling circumstances for implementing CDM projects.
- Develop and disseminate publications and databases for the CDM.
- Consultations with developing country DNAs launched in FY2010 on capacity building for new mechanisms.
- Presentations on the status of international negotiations on new mechanisms in workshops.

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(1) Feasibility Studies on New Mechanisms

- Since FY1999, CDM/JI feasibility studies have been performed on 183 projects, of which 11 projects have been registered as CDM projects by the CDM Executive Board.
- Starting from FY2010, feasibility studies have been undertaken (by the Global Environment Center Foundation) for projects involving new mechanisms with an aim to accumulate knowledge and experience concerning the new mechanisms.

New mechanism feasibility study projects implemented in FY2010



Initiatives related to Bilateral Offset Credit Mechanism

- For each of the above three projects, a **taskforce** has been set up and a feasibility study is now being performed under the guidance of the taskforce.
 - Each taskforce is composed of university professors, researchers, consultants, and other experts specialized in the respective technology areas concerned and/or in CDM schemes.
- Establishes **host country's committee** for each FS, which has government officials and other experts from each host country, in order for a Japanese FS implementer to directly collect national perspectives on the new mechanisms.
 - Host country's committees are to be held in the host country.
 - Host country's committee members are invited to MOEJ by FS implementers.
- **About 30 projects** are to be expected as new mechanism feasibility study projects in FY2011.
 - Symposiums will be held in Tokyo and Osaka to disseminate the results of feasibility studies.

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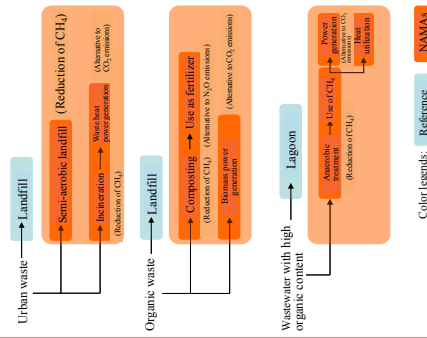
CDM/JI and New Mechanism Feasibility Studies (FS) in FY2010

Category	Implementing Organization	Description of Feasibility Study
(1) Development of new mechanisms or new areas	Hitech Zosen Corporation	CDM FS on Eucommia afforestation in Henan Province, China
	PEAR Carbon Offset Initiative, Ltd.	CDM FS on a biogas utility program in in rural Bangladesh
(2) Development or improvement of methodologies	Mitsubishi UFJ Research and Consulting Co., Ltd.	CDM FS on the production of Jaropha BDF and its use as automobile fuel in Vietnam
	Kyushu Electric Power Co., Inc.	CDM FS of a program promoting the use of energy-efficient textile tenter frames in dye houses in Zhejiang Province, China
	Japan Weather Association	CDM FS of a program promoting the installation of idle-reduction devices on local buses in Shandong Province, China
	Pacific Consultants Co., Ltd.	CDM FS on the CO ₂ emission-reducing effect of the introduction of motorcycle maintenance techniques in Vietnam
	Ishikawa Kanryo Engineering Co., Ltd.	CDM FS of a household waste treatment program in Vietnam aimed at avoiding landfill disposal
(3) High feasibility	Yachiyo Engineering Co., Ltd.	Combined CDM FS for intermediate waste treatment and methane gas power generation projects in Ipoh, Malaysia
	Eight-Japan Engineering Consultants Inc.	CDM FS on the use of pineapple processing waste and wastewater for power generation in Mindanao, the Philippines
	EJ Business Partners Co., Ltd.	CDM FS on the use of gas from waste disposal sites/sewage sludge for power generation in Xiamen, China
	EX Corporation	CDM FS on switching to Gliricidia wood chips in plants currently using industrial thermal fuel in Sri Lanka
	Industrial Decisions Inc.	CDM FS on rice husk power generation in Chantaburi Province, Thailand
	Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.	CDM FS on wind power generation in Galapagos Islands, Ecuador
	E&E Solutions Inc.	CDM FS of an energy saving program using coke-oven gas in Yunnan Province, China
[New Mechanism Feasibility Studies]	Tejira Corporation, Japan	CDM FS on waste gas and heat power generation in Shanxi Province, China
	PEAR Carbon Offset Initiative, Ltd.	CDM FS on power generation utilizing ventilation air methane (VAM) from the Dafosi coal mine in China
Category	Implementing Organization	Description of Feasibility Study
New mechanism	Pacific Consultants Co., Ltd.	FS of comprehensive NAMAs for waste and wastewater management in Thailand
	Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.	FS of NAMAs in transportation management in Laos
	Shimizu Corporation	FS of NAMAs for peatland management in Indonesia

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Feasibility Study of Comprehensive NAMAs for Waste and Wastewater Management in Thailand

- **Actions:** Introduce Japanese waste and wastewater management technologies to Thailand to help reduce GHG emissions
- [Case examples]
 - ◆ Reduce methane gas emissions from urban waste landfills by introducing a semi-aerobic landfill system
 - ◆ Use composting technology to turn organic waste into fertilizer and avoid methane gas emissions
 - ◆ Collect methane gas from the anaerobic treatment of wastewater with high organic content, and use the gas and heat for power generation and other purposes as substitutes for fossil fuel
- Estimated emission reduction:
 - ◆ If the semi-aerobic landfill system is introduced in all existing landfills in Thailand:
 - ⇒ 6.5 million to 11.5 million t-CO₂ between 2011 and 2020
- Host country counterpart: Thailand Greenhouse Gas Management Organization (TGO) Bangkok Metropolitan Administration (BMA)



Color legends: █ Reference █ NAMAs
GHG emission reductions achieved through NAMAs

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Feasibility Study of NAMAs for Transportation Management in Laos

■ Actions:

This feasibility study involves identifying specific projects that are likely to reduce GHG emissions and estimating the amount of emission reductions with respect to the Urban Transport Master Plan (road networks, public transportation systems, and traffic management) in the capital city of Vientiane, where an increasing volume of traffic is raising concerns over traffic congestion and air pollution.

[Master Plan Outline]

- ❑ Reducing travel distance by improving road networks
- ❑ Decreasing the number of vehicles by enhancing public transportation systems (BRT, LRT, etc.)
- ❑ Implementing effective traffic management (parking restrictions, traffic volume control, etc.)

■ Estimated emission reduction:

- ◆ Approximately 440,000 t-CO₂ between 2012 and 2020

■ Host country counterpart:

Ministry of Public Works and Transport (MPWT)
Water Resources and Environment Administration (WREA)



Current status of traffic conditions in Laos



Public transportation systems in other country

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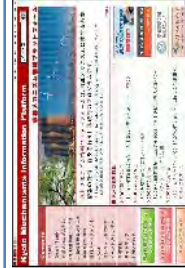
(2) Development and Operation of Information Platform

Starting from FY2004, the Kyoto Mechanisms Information Platform website, developed and operated by the Overseas Environmental Cooperation Center, Japan (OECC), has been serving as the integrated portal offering information concerning the Kyoto Mechanisms, including rules and information regarding projects and events.

- The platform also issues an online magazine *Kyomecha Express* (in Japanese) to provide timely information.
- Utilizing the platform, consultation services (Help Desk) are made available to accept and answer inquiries from Japanese and overseas businesses regarding Kyoto Mechanisms.

Website visits and inquiries

- The Kyoto Mechanisms Information Platform has received average 290,000 visitors (unique visitors) per year.
- A total of 821 inquiries (average 117 inquiries per year) have been received to date.



Initiatives related to Bilateral Offset Credit Mechanism

- Help Desk also accepts and answers inquiries regarding new mechanisms, including those regarding the Bilateral Offset Credit Mechanism such as:
 - What benefits will the Mechanism bring to our company? Which country should we choose as the destination and host country for investment through the Mechanism?

MOEJ plans to organize **seminars on new mechanisms** including the Bilateral Offset Credit Mechanism in Tokyo, inviting government officials from a developing countries, in FY2011.

- **A new information platform**, specifically for new mechanisms was set up recently.
 - <http://www.mmechanisms.org/e/index.html>
 - The new platform will disseminate information and collect views on the Bilateral Offset Credit Mechanism.

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Feasibility Study of NAMAs for Peatland Management in Indonesia

■ Actions:

Designating approximately 10,000 ha of peatland in Jambi Province on Sumatra Island, Indonesia, as the target area, this feasibility study calls for building sluice gates (or utilize existing ones) in the existing man-made canals thereby controlling and raising the ground water table to increase moisture content in peat soils. The construction of canals has caused the drying out of peat swamps, leading to an increase in CO₂ emissions from aerobic biodegradation of dried peat soils. Thus, rewetting dried peat soils works to mitigate CO₂ emissions by inhibiting biodegradation and preventing forest fires.

■ Estimated emission reduction:

455,000 t-CO₂ per year

■ Host country counterpart:

Ministry of Public Works (PU)
Provincial Government of Jambi
Jambi University

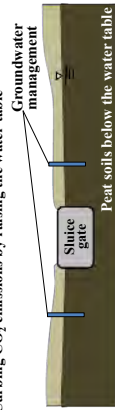
Before improvement

CO₂ emissions from peatland



After improvement

Curbing CO₂ emissions by raising the water table



Reducing CO₂ emissions by raising the water table within peat soils

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(3) Support for Capacity Building of Developing Countries

Starting from FY2003, Japan has been supporting CDM capacity building in Asian countries to help the establishment of institutional arrangements and procedures, and the building of capacity for implementing the CDM.

- For the implementation of the activity, the Institute for Global Environmental Strategies (IGES) signed MOU/LOI with each of the governments of Indonesia, the Philippines, Thailand, Cambodia, and Laos.
- Through continuous activities, there are trusting relationships with the host countries and Japan.

Status of joint activities (Figures represent a cumulative total since FY2003)

Country	China	India	Indonesia	Philippines	Thailand	Cambodia	Laos (from FY2009)
Counterpart (Host country DNA, excluding India)	National Development and Reform Commission (NDRC)	(TERU/WID)	National Council on Climate Change / MOE	Environmenta l Management Bureau, DENR	Thailand Greenhouse Gas Management Organization (TGO)	Climate Change Department (CCD), MOE	Water Resources and Environment Administration (WREA)
Number of workshops	16	37	34	27	23	21	4
Number of meetings	72	174	134	97	93	95	25

Initiatives related to Bilateral Offset Credit Mechanism

- Building on the existing CDM capacity building initiative, MOEJ plans to launch **capacity building for new mechanisms including the Bilateral Offset Credit Mechanisms** (starting from FY2011).
- Such capacity building may utilize experience of MOEJ for establishment, operation and improvement of **LEVER (Japan-verified emission reduction)**, which have unique features applicable to developing countries.
 - MOEJ also started capacity building especially for MRV in FY2011.
 - Such capacity building will be conducted in **Asia, Latin America and Africa** uniquely, to reflect specific circumstances and capacities of those countries for implementing MRV.

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Japan's Experience with Domestic Offset Credit System (J-VER)

Outline of J-VER

- MOEJ established a study group in March 2008 to consider institutional frameworks for a domestic offset credit system, followed by the establishment of the Japan-Verified Emission Reduction (J-VER) Scheme in November 2008 with Certification Center on Climate Change, Japan (CCCC) or 4CJ) serving as the secretariat.
- To date, 24 emission reduction methodologies, three forest sink methodologies, and one methodology in the agricultural sector have been approved.
 - Use of woody biomass, use of biodiesel fuel, improved transport efficiency achieved by the use of information technology, micro-hydropower generation, etc.
- J-VER Certification Committee is responsible for the registration of projects and the certification of credits.
- A total of 100 projects have been registered, and 88,420 t-CO₂ credits were issued from 48 projects.

Designing institutions from a new viewpoint based on CDM experience

- Using a **positive list** as a criteria for validation
 - Defining and validating the types of projects that should be promoted as a government policy, rather than assessing the "additionality" of each project
- Judgment based on **eligibility criteria**
 - Ensuring environmental integrity by applying designated eligibility criteria in judging whether or not a proposed project satisfies conditions prescribed in the positive list
- **Addressing a shortage of validators**
 - The secretariat performed internal validation to make up for a shortage of external validators. (This was only in the initial period, and validation is now carried out by external validators.)
- **Reducing monitoring requirements**
 - Exclude low emission sources (those accounting for less than 0.1% of the estimated emission reduction) from monitoring requirements

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Funding to the Worldbank Partnership for Market Readiness

Partnership for Market Readiness (PMR)

- The establishment of the PMR was announced by World Bank President Robert Zoellick at COP 16.
- It is the initiatives to support developing countries to prepare and implement market mechanisms for GHG reductions.
- It is expected to play important role for developing international rules for new market mechanisms.
- Japan has decided to contribute 600 million yen to the PMR.

- The organizational meeting was held in Bangkok, on April 2011.
- The first Partnership Assembly will be held in Barcelona, in the end of May 2011.
- Chile, Colombia, Costa Rica, Indonesia, Mexico, Thailand, Turkey and Ukraine have expressed their interests to participate and will submit a funding proposal for preparation phase.
- At this moment, Australia, European Commission, Germany, Japan, Netherland, Norway, Spain, Switzerland, United Kingdom, and United States pledged contribution to the PMR

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Plan for promoting New Mechanisms in FY2011

Institutional infrastructure and support for Japanese businesses

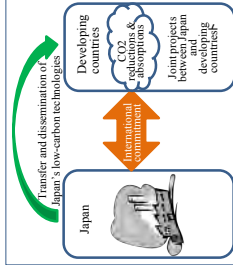
- [Study and feasibility demonstration]
 - Designing institutions for a new crediting mechanism and studying ways to reform the existing Kyoto Mechanisms
 - Model demonstration of specific reduction projects

- [Preparation for developing credit registry]
 - Seek to find appropriate registry format for credit management, etc.

- [Collection and dissemination of information; Consultation and support]
 - Collection of latest information, provision of a broad range of information to the general public, and the offering of consultation and support to domestic businesses

- [Feasibility study]
 - Feasibility study of specific emission mitigation projects in developing countries, etc.

New mechanism for emission reductions and carbon sinks



Enter into agreements with developing countries, properly value emission mitigation projects implemented in those countries utilizing Japan's low-carbon technologies, and count reductions attributable to Japan's efforts as credits to help achieve domestic target.

Support for developing country governments and businesses

- [Capacity Building support for project development]
 - Organizing workshops in host countries

- [Support the development of validation and MRV mechanisms]
 - Developing, in cooperation with developing countries, methodologies for valuing Japan's contributions to emission mitigation, for instance, through the provision of technologies
 - Dispatching experts to developing countries to help with the validation of specific projects and inviting personnel of developing countries to training programs in Japan

*MRV: Measuring, reporting and verification of GHG emission reductions and carbon sinks

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Japan's submission to the UNFCCC on new mechanisms

Requirements for new market-based mechanisms

- Need to be efficient and facilitative to facilitate GHG emission reduction activities by growing number of players and to scale up the market-based mechanisms as a whole.
- Essential to mobilize all available technologies.
- Should be built in a way that individual countries are also allowed to design, establish and implement their market mechanisms, reflecting their own national circumstances.
- Not only with centralized governance schemes similar to the Kyoto Mechanisms but also with decentralized governance schemes should be considered. Under such governance structure, respective countries are responsible for designing, implementing and securing transparency of the mechanisms, following basic principles directed by the COP.
- Respective countries regularly report to the UNFCCC secretariat such information as what market-based mechanisms the country has developed and how they are actually used.
- The COP directs basic principles on MRV as it is a key component in securing the credibility of new market-based mechanisms. The balance between efficiency and environmental integrity has to be adequately secured in developing the MRV for the new market-based mechanisms.
- Should be designed to co-exist with the existing market-based mechanisms, such as the CDM. Measures to avoid double counting between different mechanisms have to be installed.

Outcomes to be achieved in COP17

- Taking limited time available by COP17 into account, Parties should aim to adopting at the COP17 decisions which will provide directions on the new mechanisms, including basic principles and requirements that the new mechanisms are to meet, basic ideas for MRV and reporting methods which Parties need to follow in reporting their market related activities

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Near-Term Approach

- Japan will take the following steps for the Bilateral Offset Credit Mechanism:
 - ◆ **Facilitate mutual understanding with developing countries on the Bilateral Offset Credit Mechanism** through periodic dialogue, exploration of potential projects and utilization of the existing channels such as capacity building.
 - ◆ **Seek to enter into agreements** with developing countries after having sufficient understanding on the mechanism so as to ensure credibility of the mechanisms.
- In parallel with the above steps, and drawing on the outcome of such steps, institutional designs for the Bilateral Offset Credit Mechanism will be reviewed for improvements.
 - ◆ **Mechanisms that can address issues of the existing CDM, bring benefits to many developing countries, and promote further emission reductions.**
- Japan will communicate and address its position in international negotiations so as to ensure that **improvements will be made to the existing mechanisms** under the new framework applicable from 2013 onward, and that **the Bilateral Offset Credit Mechanism will be consistent with this new framework.**



2011 国際森林年

Recent movements surrounding REDD+ REDD+を巡る最近の動き



Forestry Agency/林野庁

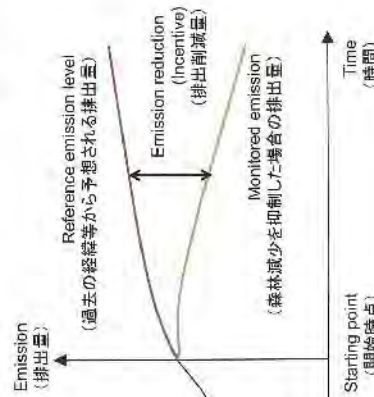
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2011 国際森林年

General concept on REDD+ (REDD+の考え方)

- Proposed by PNG and Costa Rica at the COP11 of the UNFCCC(2005)
 - Establishing reference emission level
 - Implementing activities for avoiding deforestation
 - Monitoring emission
 - Providing positive incentive
- 気候変動枠組条約第11回締約国会議(2005年)にてPNGとコスタリカが共同提案
 - これまでの森林減少による排出量等により参照排出レベル(ベースライン)を設定
 - 森林減少対策を実施
 - 排出量をモニタリング
 - 排出削減量に応じ資金等のインセンティブ措置



20 May, 2011



2011 国際森林年

Deforestation in developing countries (途上国における森林減少等の進行)

- World forest area: 4 bil. ha (or 30% of land area)
 - 世界の森林面積は40億ha(陸地の3割)
- Net global change in forest area in the period 2000-2010 is estimated at -5.2 million hectares per year.
 - 毎年520万ha/年が純減(2000~2010年)

Net change in forest area by country, 2000-2010 (ha/year)



(source: FAO, FRA 2010)

20 May, 2011



2011 国際森林年

Key movement to promote REDD+ (REDD+推進のための主要な動き)

- The UNFCCC's COP decision "outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the Convention" includes REDD+.
 - The decision provides basic framework of REDD+ activities.
 - The decision consists of text and annexes.
 - REDD+ activities, works by developing countries, developed countries, SBSTA, AWG-LCA, relevant organizations etc.
 - Guidance and safeguards for REDD+ and SBSTA work programme are attached as annexes.
- COP決定「条約の下での長期的協力の行動のための特別作業部会の作業結果」に、REDD+が盛り込まれ、その基本事項について決定
 - 当該決定は本文と附属書により構成
 - REDD+の活動、全締約国・途上国・先進国・SBSTA・AWG-LCA・関係機関等の取組を記載
 - 本文に加えて、附属書として、REDD+の取組みのガイダンスとセーフガード、補助機関(SBSTA)の作業計画が添付

20 May, 2011

The support project for preventing deforestation measures in developing countries

(森林減少防止のための途上国取組支援事業)

To support developing countries to promote preparedness for REDD-plus activities in technical aspects, which includes development of forest monitoring technology using satellite images, support of ground level activities and capacity development etc. (REDDへの取組体制が十分整備されていない開発途上国において、REDDの取組体制整備を促進するため、現場レベルでの活動支援、衛星画像解析技術等の開発、人材育成等を支援)

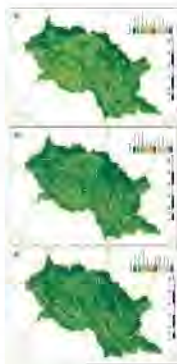
- Activity in FY 2010 (H22年度の取組概要)
- Implemented in Lao Rep. by Japanese private firm (民間事業者によるラオスでの取組みを支援)

Develop technology to:

- Monitor forest resources using satellite images at subnational level (combination of images provided by different satellites) (衛星画像による森林資源状況の把握(異なる衛星画像の組み合わせ))
- Estimate forest carbon stocks (do forest survey) (森林炭素量把握技術の開発(森林(現地)調査を実施))
- Simulate future deforestation due to historical trends in forest cover (socio-economic survey at community level) (歴史的な森林変化のトレンドから、森林減少の将来予測シミュレーション解析手法の開発(村落調査等))

- Workshops and training in Japan (ワークショップ、本邦研修等を実施)

(30 May, 2011)



Land-use/forest cover map in Louangphabhang province in Lao (in 1983, 2000 and 2007).
ラオス ルアンパブーン県の土地利用被覆図(1983年、2000年、2007年)

(Provider: Asia Air Survey Co Ltd./株式会社アジア航測株式会社)



国研 国産林研

REDD Research and Development Center

- In collaboration with FA, the Forest and Forest Products Research Institute of Japan launched the "REDD Research and Development Center" in July 2010 to promote REDD-plus activities.
 - which will provide a technical hub for REDD-plus activities in Japan, through international and domestic cooperation, including technical development and giving support to private sector activities;
 - train specialists; and
 - support relevant projects in the private sector

http://www.fpri.affrc.go.jp/redd-dc/en/index.html

On July 15, 2011, "REDD Research and Development Center (REDD R&D Center)" was launched within the Forest and Forest Products Research Institute (FFPRI) as a comprehensive transnational research base on REDD-plus.



Promotion of Legality/Sustainability Verified (=Goho) Wood

Wood Products Trade Office
 Forestry Agency, Japan
Forestry Agency
 Ministry of Agriculture, Forestry and Fisheries
 The Government of Japan
 1-2-1, Konanigasaki, Chiyoda-ku, Tokyo 100-8957 JAPAN

Verified Legality/Sustainability Wood

II

Goho Wood

- In 2006, the Government of Japan has put "Goho Wood" in the environmentally friendly goods list which are subject to "Green Purchasing Law".
- Forestry Agency has established the guideline for Verification on Legality/Sustainability of Wood and Wood Products
- The guideline shows 3 ways of verification as examples



Progress of Japanese Suppliers' Actions

- Utilizing SFM Certification and CoC
 - **FSC**: 1,114 CoC Certification (as of November 2010)
 - **SGEC(Japanese original)**: 404 CoC Certification (as of December 2010)
 - **PEFC**: 186 CoC Certification (as of January 2011)
- Voluntary Verification by Association-authorized companies
 108 Associations authorized 4,906 Companies (as of March 2007)
- **140 Associations authorized 7,610 Companies** (as of March 2010)
- Verification by Individual Companies' Own Systems
Paper Mill and Others



Supply of legality/sustainability verified wood (comparisons of 2006 and 2009 JFY)

	Total supply (1000m ³)	Verified legality wood (1000m ³)	(%)
Log products (domestic)	2,278	906	40
Log distributed (dn.)	5,777	951	16
Wood processing (dn.)	8,180	1,630	20
Wood products distributed (dn.)	2,308	167	7
Log distributables (import)	6,479	578	9
Wood products distributables (dn.)	8,023	200	2

※Based upon the reply from total 2,267 association-authorized companies

※Based upon the reply from total 5,436 association-authorized companies

Recent topics

- "Act for Promotion of Use of Wood in Public Buildings" came into force on Oct.1st, 2010
- National basic policies under the Act stipulates utilization of Goho wood to public buildings and promotion of supply.



BOOST in Goho wood demand expected



Next Step

- **Promotion to general consumers**
 - ✓ Advance differentiation of Goho wood by labeling
- **Improvement on credibility of legality/sustainability verification**
 - ✓ Conduct monitoring for verification
 - ✓ Establish database of suppliers



Technical development of log traceability system in Indonesia

Wood Products Trade Office
Forestry Agency, Japan

Japan's technical development for tackling illegal logging

- Japanese government commits to cooperate with Indonesia for tackling illegal logging in June 6, 2003 on "Joint Statement" and "action plan".
- Based on the "Joint Statement", Japan has developed "log tracking system"

Development Log Traceability System

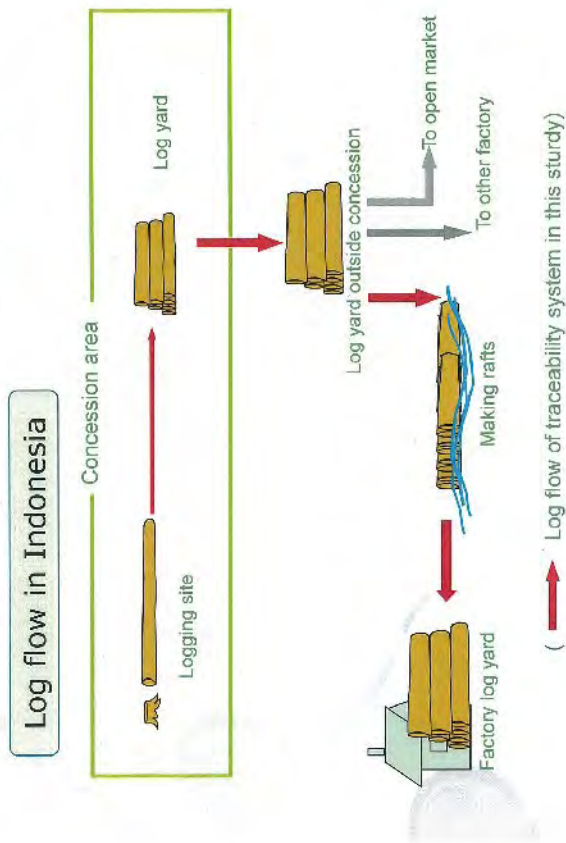
<Purpose>

To develop Log Traceability System on distribution and processing stage to identify legality of wood and wood products in producing countries.

<On-going project>

The Field test of 2D barcode log traceability system from logging site to primary processing factories in Indonesia

Development Log Traceability System



Development Log Traceability System

<On-going project>

- In 2008 to 2010-
- Field test for 2-D barcode system in the actual logging operation site
- Training workshop for related stakeholders



2D barcode label

- Data in 2D barcode
- Logging company name
 - Cutting site No.
 - Name of species
 - Tree number
 - Length, diameter, volume of log
 - Others

Development Log Traceability System

<On-going project>



Entering log information



Printing labels in the field



Affixing labels to a cut tree and its stump



Printing the same code

Label on a log brought into a timber storage yard (the label is clean and can be scanned)



Obtaining and registering log information by scanning



Printing a list of logs based on scanned data

Development Log Traceability System

<On-going project>

- From April 2010 to March 2011-
- System integration with Indonesian existent forestry database and TLAS
- Dissemination and publication to related stakeholders of the log traceability system

International Symposium on Legality Verified Wood 2010, in Tokyo

- Introduced the output of project activities by Indonesian officer.
- Exchanged information with other participants.



Current situation in Indonesia

- Indonesian government approved the system as one of the TLAS

Next Step

- To apply log traceability system to other forest type in Indonesia, such as private forest, community forest.
- To disseminate the system to other wood producing countries

Thank You Very Much

Yamato Spirit

Environmental strategy

Let's Go Greening

TA-Q-BIN™ Home Delivery



May 23th 2011

Profits derived from Service

“First comes Service, profit later.”

1. Starts here !
High Quality of Service
2. Increase in Volume
3. High Density of Operation
4. Profitability
5. Investment

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Yamato Transport Co., Ltd.

Volume Leads High Density

Delivered 3.8 million packages per day
100% covered by our Own Network!

4 min. to Customer

13 min. Delivery Centers

Facility	Count
Delivery Volume	1.3 billion parcels
Hub Terminals	71
Delivery Centers	6,266
Collection Agents	260,622
Delivery Trucks	37,718
Employees	140,345
Sales Drivers	54,632

Delivered 3.8 million packages per day
100% covered by our Own Network!

4 min. to Customer

13 min. Delivery Centers

Facility	Count
Airport	89
JR Stations	6,290
Post Boxes	160,399
Convenience Stores	11,947
Post Offices	1,147
Public Telephone	266,320
Public Telephone	91,610
Fire Stations	1,615
Police Stations	16,237
Elementary School	24,535
Gas Station	56,859
Bus Stop	217,000
Vending Machines	455,000

Yamato covers all over Japan like capillary vessels.

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Yamato Transport Co., Ltd.

Environment

Strategy 1
Not Always Vehicles

Strategy 2
Usage of Eco-friendly Vehicles

Strategy 3
Eco-friendly Driving

“By 2012”
“Yamato aims to reduce its overall CO2 emission volume to 99% of the levels in 2002, regardless of the delivery volume increases.
To achieve the goal, Yamato reduces CO2 emission per unit to 70% of the levels in 2002.”

Plan Firstly Settled on in Sep. 2003. Revised in Apr. 2008

FTSE4Good
Yamato has met stringent social and environmental criteria

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