Development Needs-oriented Efforts to Address Climate Change and CDM

### **Co-benefits Approach**



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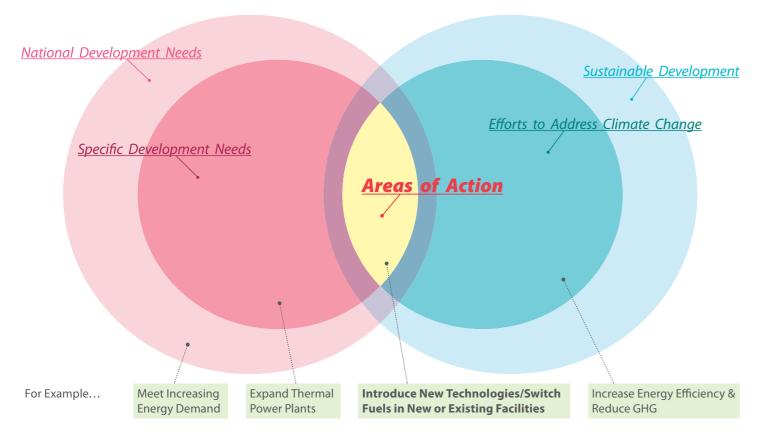
# 1 Co-benefits Approach to Climate Change and CDM

The co-benefits approach to climate change and CDM means integrated efforts to address climate change concerns, while meeting development needs in developing countries. The co-benefits approach helps developing countries increase their ownership while engaging in efforts to address climate change, by introducing measures to achieve tangible development benefits. It is also considered to be a practical approach for developed countries to cooperate with developing countries, where economic and social development is a priority at the national and local levels.

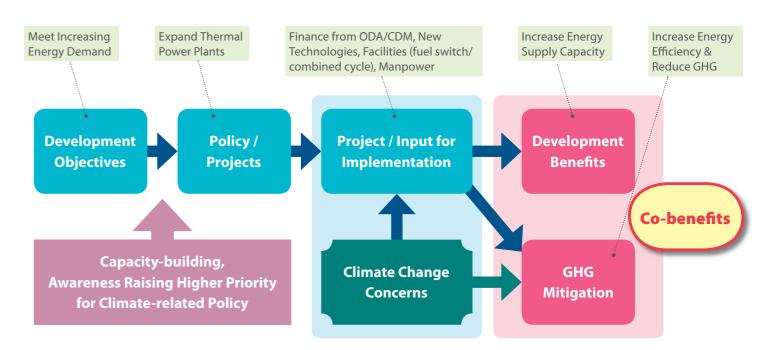
## 2 Co-benefits Areas of Action for Development and Climate Change

The co-benefits approach focuses on duplicating areas of action, through which development needs of society are met, and climate change concerns are addressed simultaneously.

### **International Concerns / Global Benefits**



### **Process of Co-benefits Approach to Climate Change**



In alignment with economic and social policies of developing countries, climate change concerns can be addressed by integrating relevant critical elements into their development activities, or development cooperation activities. Also climate change-related activities may cover development perspectives. In order to meet both needs (i.e. development and climate protection) in a sustainable manner, it is useful to seek tangible benefits from both areas (Co-benefits) in the process of respective activities, whereby further efforts by stakeholders are encouraged.

There are large potentials to introduce the Co-benefits Approach into conventional or ongoing development and climate change-related activities. A consideration for selecting inputs for such activities is a key (e.g. technologies, finance, etc). The Co-benefits approach provides opportunity to upgrade your activities to value-added efforts.

In addition, it is critical to improve policy makers' awareness and develop capacity. Increased awareness and developed capacity facilitates developing country stakeholder to make further integrated political decisions in favor of both development and climate protection.







### **Japan's Good Practices in Development Assistance**

### **Metro Manila Transport Project (Philippines)**



The Metro Manila Traffic Improvement Project by the Japan Bank for International Cooperation (JBIC) helped the Manila capital region increase the mobility of passengers and raise logistics efficiency, which are vital for economic development of the region. The project demonstrated a positive impact of mitigating traffic congestion, and reducing air pollution

substances such as SOx and NOx, as well as CO<sub>2</sub> which is a major contributors of climate change.

A series of yen loan projects consisted of 10 sub-projects including Metro Manila Traffic Control Projects and Road Construction Projects. JBIC's assistance for constructing roads, two-level crossing roads, and Light Rail Transit (LRT) upgraded region's economic infrastructure, and the same time, by introducing traffic and air quality monitoring system, it significantly strengthened capacity to protect environmental condition by the local authorities.

According to JBIC Impact Evaluation, by mitigating traffic congestion, air pollution substances were abated by 3% (SOx) and 0.6%(NOx) and CO<sub>2</sub> was reduced by 4.2%.

Yen Loan Post Evaluation Report 2001



### **Environmental Model City Project in Guiyang (China)**



Guiyang Environmental Model City Project is conducted as a part of the Japan-China Environmental Model City Initiative, which aims to implment intensive environmental improvement measures in model cities (Guiyang, Chongging and Dalian). Utilizing several cooperation schemes of the Japan International Cooperation Agency (JICA) and the Japan Bank for International Cooperation

(JBIC), the assistance included loan for establishing measures to control and monitor major pollution sources, and human and institutional capacity building of Chinese authorities and private sector stakeholders.

Cooperation project by loan assistance consisted of 7 sub-projects. As follows; (1) measures for Sulphur Dioxide and Dust from Guiyang Steel Plant, (2) Measures for Sulphur Dioxide and Dust from Guiyang Cement Plant, (3) Measures for Sulphur Dioxide and Dust from Guiyang Power Plant, (4) Supply Desulphfurized Clean Coal, (5) Supply Coal Gas, (6) Establishment of Automatic Air Monitoring Stations and On-line Monitoring System for Emission Sources and (7) Abolishment of Acetic Production Facility Using Mercury Catalyst in Organic Chemistry Plants. Some of these environmental project activities provided an opporunity to contribute greenhouse gas reduction, in addition to air and water pollution abatement.



As a result of the project, SO<sub>2</sub> (80.54% / 163,500 t), PM (66.37% / 57,080t), as well as CO<sub>2</sub> emissions (1,067,400 t) were reduced.

Report by Guizhou (Guiyang) Project Secretariat (July, 2004)

#### photo by Mr. Hideaki Koyanagi

### **Development Needs-oriented Efforts to Address Climate Change and CDM**

Following are potential areas of action for development needs-oriented efforts to address climate change and CDM.

Development Objectives/Needs		Examples of Assistance Project		Concrete Developmental Benefits		Key Actions in Achieving Co-benefits		Climate Change- related Benefits
For example								
Energy Demand	••)	Construction of Power Plants	• • • •	Increased Energy Supply	••	EE, RE, and Turbine with Higher Capacity	•••	
Economic Infrastructure (Energy Source, Transport)		Mass Transit Development		Increased Mobility of Passengers and Products & Economic Competitiveness of Economic Zones		Modal Shift (Transport Mode Change)		Greenhouse Gas Reduction
Environmental Protection	••)	Upgrading Waste Process & Production Facilities	• • • •	Increased Waste Processing Capacity Reduction of Air & Water Pollution Substances (e.g. SO <sub>2</sub> )	f	Avoiding LFG, Cleaner Production	•••	
Advanced Industrial Production		Upgrading Production Facilities		Higher Productivity & Economic Competitiveness		Demand-side EE		
Agriculture & Rural Development	••)	Introducing Farm Machinery	• • • •	Higher Production Capacity and Income	••	Utilizing Biomass Residue	••	
Poverty Eradication		Rural Electrification		Higher Living Standards, Enhanced Economic Activities		RE, and Fuel Switch from Non-renewable Biomass		

# **3** Concrete Actions for Development Needs-Address Climate Change and CDM

In order to promote cooperation with developing countries by the cobenefits approach to climate change and CDM, the following actions are suggested.



oriented Efforts to







### dentifying Development Needs related to Climate Change

To identify areas of action for the co-benefits approach, countries' development goals and policies are vital reference materials. Policy documents prepared by donors (e.g. Japan's ODA Charter and Mid-term Policy) may also provide useful information.

### trengthening Cooperation Schemes on Climate Change

Cooperation schemes on climate change and CDM including capacity-building should be strengthened in order to promote the co-benefits of development and climate change.

### trengthening Cooperation Schemes on Development **Assistance, and Policy Tools for Climate Change**

ODA's policy and financial schemes or guidelines for environmental and social considerations are also expected to be strengthened in order to promote the cobenefits of addressing climate change and development needs.

### artnership between Development Assistance and **Cooperation in Climate Change**

In conducting development assistance, targeted activities should also take into account climate change aspects. Capacity-building to create an enabling environment and hybrid use of ODA and CDM for development assistance may be developed.

## ood Practice Guidelines for the Co-benefits Approach

Good practice guidelines will be developed to make it easier to take action for cobenefits. Also, to help private-sector organizations participate in such activities, standards or frameworks for co-benefits may be developed. In case of CDM, ways of using existing baseline and monitoring methodologies should be explored.

### eveloping Quantitative and/or Qualitative Evaluation Methods

It is recommended to develop quantitative and/or qualitative methods to evaluate cobenefits achieved through efforts on climate change and CDM activities.







The leaflet was published to introduce a result of policy survey on "Develoment Needs-oriented Co-benefits Approach to Climate Change", conducted by the Overseas Environmental Cooperation Center, Japan (OECC). The policy survey is a part of programmes of the Ministry of the Environment, Japan, to cooperate with partners in developing countries for jointly addressing climate change.

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