

# Climate Policy Project (CP)

## 1. Research Theme

*“Designing Rational Climate Policies for Sustainable Development in Asia”*

The mission of our Project is to evaluate and recommend pragmatic climate policies for sustainable development in Asia and the Pacific in an era of evolving global climate regime. Our research in Phase 3 will aim at policy measures both for strengthening the effectiveness of the Kyoto Protocol mechanisms and towards designing more effective post-Kyoto climate protection architecture. Such an effort will obviously entail continuation of some research in the earlier phases while simultaneously upgrading its focus and methodology. While international climate policies are largely determined through UNFCCC (United Nations Framework Convention on Climate Change) negotiations, regional and national policies are strongly influenced by changing geo-political climate, globalisation, etc. Research on how various Annex 1 countries such as Japan can meet their greenhouse gas (GHG) emission reduction targets during the first commitment period (2008-2012), and how such efforts lead to furthering cooperation with developing countries in Asia during and beyond the first commitment period will be the core activity in this phase. Studies on the role of non-participating Annex 1 countries (e.g., USA, Australia) in framing future global climate regime and ways to enhance their participation through contacts with non-governmental organisations (NGOs) will also be attempted. As Asian countries are already facing the adverse impacts of climate change, some effort will be directed to address policies for reducing vulnerability and facilitating adaptation.

## 2. Objectives

Our Phase 3 research has four main objectives:

- (a) To evaluate climate policies in Japan and their implications for Asian countries
- (b) To propose measures for effective implementation of Kyoto mechanisms in Asia
- (c) To identify ways to achieve global participation and strengthen future climate regime
- (d) To recommend policies for reducing vulnerability and enhancing adaptive capacity

To accomplish the above objectives, we shall conduct studies grouped under three components (Domestic policies and Kyoto mechanisms, Beyond Kyoto issues, and Vulnerability and adaptation issues), which are closely related with each other in a sense that research outputs of one component will have significant impacts on those of others (Fig. 1).

Insofar as domestic policies are concerned, we believe that Japan needs to set an example for other countries, especially in Asia. Our earlier efforts to design an effective policy mix in Japan were appreciated by several stakeholders. We consider that continuation of this work, including a comparative analysis of measures in other developed countries in Europe, is crucial both to maintain momentum in the Japanese domestic policy, and to provide a range of suitable policy options and measures for potential adoption and implementation by other countries in Asia. With growing expectations for entry of the Kyoto protocol into force in the near future, we shall proceed from our earlier work on methodological issues to implementation aspects of the Kyoto mechanisms such as Clean Development Mechanism (CDM) and Emissions Trading (ET). In partnership with selected institutions of developing countries in Asia, we plan to identify barriers and propose potential countermeasures for effective implementation of CDM as a tool

for sustainable development in developing countries. In addition, we shall conduct studies particularly with reference to implications of regional ET plans on the design and operation of domestic ET in Japan.

Designing effective mechanisms for global participation through enhancing cooperation between developed and developing countries is critical to the success of any future climate regime. Extending emission caps to developing countries is, however, a daunting challenge and needs a lot of groundwork in policy research including a shift in the opinion, especially among policy makers of the large developing countries. For this to be achieved, IGES should cooperate with researchers in developing countries to design new and more acceptable mechanisms that indirectly influence policy makers. The decision of some major countries not to participate in the Kyoto Protocol also raises a number of issues as far as understanding the regional and global costs of international climate policy. In cooperation with selected non-governmental research organisations in the US, we aim to achieve a better understanding of such costs and the interaction of their domestic global climate change policy with international policy.

On several occasions, we have been both formally and informally urged to work more on vulnerability and adaptation issues, as developing countries of Asia are already facing many threats from climate change. Using our past experience in leading Global Environmental Facility (GEF)-sponsored activities on adaptation, our group can begin to address selected issues more thoroughly.

Global negotiations on climate change will enter a critical stage in 2005 coinciding with the 2<sup>nd</sup> year of IGES Phase 3. We have, therefore, identified a few priority topics so as to contribute effectively to the negotiation process. Further prioritisation will be done, however, based on human and financial resources available in Phase 3.

## **2.1 Domestic Policies and Kyoto Mechanisms**

- Designing effective policy measures (including economic model-based evaluations and implications of long-term energy/emission scenarios) and identifying checks and balances necessary to monitor Japan's progress in implementing the Kyoto Protocol, including their implications for other countries in Asia and the Pacific
- Evaluating policy measures of other developed countries including state/local initiatives, and assessing the role of technology options in reduction of GHG emissions
- Examining ways for the effective design and implementation (e.g., capacity building) of CDM and ET for promotion in Japan (particularly in relation to ODA) and assess their potential benefits, especially in the Asia-Pacific region

## **2.2 Beyond Kyoto Issues**

### **2.2.1 Enhancing global participation and international cooperation in climate policy, especially with developing countries in the Asia-Pacific region**

- Identifying incentives (e.g., design of compensatory mechanisms for industries adversely affected by mitigation policies), assessing climate technology options, and evaluating the role of local initiatives with a view to induce participation of countries such as the US and Australia
- Analysing ways to promote a greater involvement of major developing countries in the climate regime (e.g., building trust through dialogues with stakeholders, harmonising energy and climate policies through focused studies on energy modelling, assessing costs and benefits of mitigation measures and identifying no-regrets options) within the framework of sustainable development

- Enhancing capacity building (e.g., for CDM implementation) and technology transfer, and studying mechanisms to utilise adaptation funds generated through CDM projects

### **2.2.2 Strengthening global framework on climate change**

- Developing policy frameworks applicable beyond the first commitment period (2008-2012) through designing and/or analysing win-win strategies and additional flexibility mechanisms
- Examining implications of future climate regime and its governance at local and national levels in the Asia-Pacific region

## **2.3 Vulnerability and adaptation Issues**

- Proposing policies to reduce vulnerability and enhance adaptive capacity through building on bottom-up approaches and integrating with other poverty-alleviation efforts in priority sectors of selected countries
- Identifying measures for mainstreaming adaptation in national plans of developing countries through addressing barriers in technology transfer and capacity building, and analysing cost-benefit relationships of various adaptation options

## **3. Expected Outcomes**

Expected outcomes from each research component are as follows.

### **3.1 Domestic policies and Kyoto Mechanisms**

- A package of policy recommendations to meet the Kyoto targets in Japan
- Econometric analysis of policy options for Japan
- Policy recommendations based on analysis of European climate policies
- Reports on successful case studies on domestic policies across Asia
- Recommendations on domestic and regional emissions trading in the Asia-Pacific region
- Policy recommendations to improve CDM implementation through analysis of barriers and opportunities in selected Asian countries
- Reports on capacity building needs for CDM and guidelines for effective CDM cooperation between Japan and the rest of Asia

### **3.2 Beyond Kyoto Issues**

- Policy briefs for improving the climate regime from an Asian perspective
- Recommendations for enhancing global participation in post-Kyoto regime through identification of critical incentives, assessment of technology options and local initiatives, and their linkages with sustainable development
- IGES climate policy fact sheet series for Asia and the Pacific
- Policy briefs on climate regime beyond 2012
- Recommendations for enhancing synergies among climate change and other conventions such as biodiversity, desertification, etc.
- Creation of new research networks and forums (e.g., Asia Energy and Environment Modelling Forum [AEEMF])

### **3.3 Vulnerability and adaptation issues**

- Recommendations for integrating local knowledge in adaptation plans
- Policy briefs for mainstreaming adaptation in national development plans in critical sectors
- Creation of new research networks (e.g., Adaptation Research Network for Asia and Pacific)

## 4. Project Design

### *Rationale and Context:*

Tackling climate change is an overriding challenge of the 21<sup>st</sup> century. According to the latest assessment of the Intergovernmental Panel on Climate Change (IPCC), global temperatures are expected to rise between 1.4 and 5.8°C by 2100. It is estimated that the impacts would be drastic if strenuous efforts are not taken to limit GHG emissions. While policy makers worldwide recognize the importance of stabilising global climate, international negotiations to implement various policies and measures have stalemated over issues such as potential negative implications for the economies, limited progress by developed countries, reluctance of developing countries to accept binding commitments, etc.

In designing effective domestic policies to address global warming, Japan lags behind some countries in Europe for different reasons. It is therefore critical to compare and evaluate various European policies and identify measures suitable for Japan. Looking at current trends in GHG emissions in Japan, we believe that further tightening of policies seems inevitable from 2005. Although marked progress has been achieved in setting up milestones for measuring the progress, the development of coordinated policy framework across various agencies will be critical in the near future. Our staff made proposals during the 2<sup>nd</sup> Phase but these need to be updated in future to meet expectations of policy makers in Japan.

With regard to the Kyoto mechanisms such as CDM, considerable progress was made during the past two years in terms of formulating operational guidelines. However, policy research on barriers and countermeasures for effective implementation of such mechanisms has not been thoroughly looked into, especially in the Asian context. Based on our past accomplishments on methodological issues, we are in a good position to undertake new research in this area.

Policy makers worldwide are anxiously waiting to see how the global framework on climate change would evolve especially beyond the first commitment period of the Kyoto protocol. The protocol requires that discussions must start in 2005 at the latest. Further research on strengthening the climate protection architecture is, therefore, essential. The importance of participation of all countries (global participation) in the climate regime has been emphasised, and it is well known that the emissions from developing Asia are expected to increase considerably in future. For developing countries in Asia, however, addressing climate change is an issue of basic economic development more than environmental protection, as they face more urgent priorities (such as poverty alleviation) than climate change. It is important that IGES build on its previous efforts such as climate policy dialogues and develop new initiatives to encourage countries in the region participate in climate change negotiations more effectively by integrating climate policy concerns within the framework of sustainable development.

The decision of nation states such as USA and Australia not to ratify the Kyoto Protocol, and the recent outcomes of the Marrakech and Delhi Conferences of the Parties have important implications for both the effectiveness and the efficiency of future climate policies. As strategies to enhance global participation in climate protection regime are vital, we will conduct research, in partnership with the US-based think tanks, to highlight potential economic losses by not participating in the existing agreements. We also aim to highlight the voluntary efforts of developing countries in Asia to limit GHG emissions, and our initiatives to develop mechanisms to enable meaningful participation by all countries.

The Third Assessment Report of the IPCC in 2001 places emphasis on sensitivity, adaptive capacity and vulnerability of natural and human systems to climate change, and the potential impacts of climate change. Even with various mitigation measures in progress, countries in the region are already facing several extreme climate events. Research on policies to decrease vulnerability and enhance adaptive capacity (e.g., designing effective mechanisms for utilisation of adaptation funds) within the framework of sustainable development is, therefore, critical. IGES, with its solid human and research networks built over the past 5 years in Asia, is in an advantageous position to conduct strategic policy research in this area.

In conducting the above research, attention would be devoted to (a) making policy-related analysis of climate change issues including mechanisms and feedbacks related to technological innovation in the Asia-Pacific region accessible to a wide range of stakeholders, and (b) facilitating debate among the diverse constituencies involved in the development of climate policy both in Japan and other Asian countries. As a wide range of stakeholders from the general public to governments will be involved in various outreach and capacity building initiatives, we hope such efforts will have a positive impact on the overall policy making process at various levels both in Japan and other Asian countries.

Our work in Phase 3 will be guided by four key principles. First, we shall foresee and guide domestic and international climate policies through recommending timely and appropriate actions by closely following the progress in UNFCCC negotiations. Secondly, we believe that climate policy research cannot be conducted solely within the context of climate, but from a larger perspective of sustainable development. Thirdly, we will ensure high quality in our research to make it internationally competitive both in academic and policy circles. Last, but not the least, our research will be action-oriented in that it will be coupled with outreach activities such as publications in academic journals and popular magazines, organization of open forums, international workshops and training activities for various stakeholders.

### ***Methodologies, Implementation arrangements and Target Stakeholders:***

The methodologies to be employed, implementation arrangements and stakeholders for each research component are given below:

## **4.1 Domestic Policies and Kyoto Mechanisms**

### ***a. Methodologies***

- Literature review and bibliographic studies on domestic policies of Japan and other developed countries to meet targets of the Kyoto protocol
- Econometric modelling to provide greater insights into responses and adjustments of energy sectors (e.g., industry, household, transportation) to selected climate policies and measures
- Long-term GHG emissions scenario analysis to project the emission trends and identify effective mitigation policies to be introduced over time
- Cost-benefit analysis of domestic policies (e.g., with and without CDM)
- Interviews/surveys with diverse stakeholders (policy makers, private sector, academia and NGOs) on barriers and countermeasures for effective CDM implementation in Asia
- Workshops and open forums to facilitate a vital exchange of ideas between researchers and policy makers and to stimulate additional research to provide a sound basis for future policy interventions
- Collaborative policy research with national (e.g., National Institute for Environmental Studies [NIES], Global Industrial and Social Progress Research Institute [GISPRI]) and international (e.g., Wuppertal Institute (WI), Energy Research Institute (ERI) of China, among others) organisations

### *b. Implementation arrangements*

Two full-time researchers and one part-time researcher will analyse domestic measures to make appropriate policy recommendations. We plan to collaborate with Business for the Sustainable Society (BSS) Project at Kansai Research Centre, especially in analysis of measures by the Japanese corporate sector to tackle global warming. A few visiting researchers from developing countries of Asia will be invited to examine domestic policy initiatives in respective countries. One full-time researcher will conduct comparative evaluation of policies in Japan and Europe in collaboration with researchers in European institutions such as the Wuppertal Institute (WI). Insofar as Kyoto mechanisms are concerned, one full time and two part time researchers will analyse barriers and recommend countermeasures for effective implementation of CDM in collaboration with researchers from ERI (China), Korea Environment Institute [KEI], Korea Energy Economics Institute [KEEI] and The Energy and Resources Institute [TERI] (India), among others. Another full-time researcher will examine prospects for domestic emissions trading in Japan and its implications for other Asian countries.

To implement capacity building activities for CDM in selected Asian countries, a task force comprising two or three full time staff members will be constituted. The task force will not conduct research per se but fosters effective linkages with all IGES projects to involve them in various capacity building tasks and help establish/expand research networks with various institutions in the region.

### *c. Target Groups*

- Policy makers and businesses in Japan and other Asian countries (primary)
- Researchers, Media and NGOs (secondary)

## **4.2. Beyond Kyoto Issues**

### *a. Methodologies*

- Literature reviews to identify strengths and weaknesses of various proposals on future global climate regime (both within the framework of the Kyoto Protocol and alternatives outside) and to classify them using various techniques (e.g., cluster analysis)
- Expert consultations to enhance the understanding of various determinants of cooperation and broad participation in international climate regime, and to stimulate discussion on new policy initiatives
- Interviews/surveys with diverse stakeholders (policy makers, business representatives, and civil society) in Japan and abroad to assess their views and expectations on future regime
- Workshops and dialogues at regular intervals followed by publication of policy briefings to the general public
- Collaborative research with national (e.g., NIES) and international (e.g., Resources for the Future (RFF), KEI, TERI) organisations

### *b. Implementation arrangements*

Research on beyond Kyoto issues will be the core part of our Phase 3 research because of two reasons. First, various stakeholders both in Japan and other Asian countries strongly urged us to conduct research on these issues. Secondly, our researchers have a keen interest in furthering their expertise in this field by identifying specific niche. However, given the fact that this research had already attracted considerable attention in various countries, we will target our research with a focus on issues relevant to Asia through expanding research collaborations with institutions such as RFF, Center for Clean Air Policy [CCAP], Joint Global Change Research Institute [JGCRI] (USA), Stockholm Environment Institute [SEI] (Sweden),

TERI (India), ERI (China) and KEI (Korea). In Japan, we will continue our joint work on incentives for global participation with NIES researchers [with support from Ministry of the Environment (MOE)]. In addition, we plan to host several visiting researchers and interns. Two visiting researchers from Japan, for example, will examine governance and regional cooperation issues and ways to strengthen global framework from an Asian perspective. Two full time researchers and three part-time researchers will study measures to promote global participation in a future climate regime. A few researchers, on a part-time basis, will look into aspects such as technology options and energy modelling, local initiatives, synergies among international conventions, compliance in the post-Kyoto regime, etc.

### *c. Target Groups*

- UNFCCC and Policy makers (primary)
- Researchers, Media and NGOs (secondary)

Our research on “Beyond Kyoto Issues” is likely to have a major impact in the UNFCCC negotiation process at international level. Likewise, our joint initiatives with non-governmental research organisations hope to generate positive influence on local policy makers in the US. Our analysis of funding mechanisms including Overseas Development Assistance (ODA) in shaping climate change policies of recipient governments is expected to have a significant impact on policies of various donor governments and international organisations.

## **4.3. Vulnerability and adaptation Issues**

### *a. Methodologies*

- Literature reviews on various approaches for vulnerability assessment and their utility in the Asian context
- Electronic conferences on mainstreaming adaptation in national development plans
- Expert consultations on vulnerability assessment and cost-benefit analysis of adaptation policies
- Field surveys and participatory rural appraisals to solicit information and views on local adaptation strategies from relevant stakeholders
- Workshops involving researchers, policy makers, resource managers, and other stakeholders to share expertise and solutions to common problems in facilitating adaptation to climate change, and to establish links between research and policy communities in the region
- Collaborative research with other IGES projects (e.g., Long-Term Perspective and Policy Integration Project [LTP] in identification of good indigenous practices and strategic policy options for facilitating adaptation to climate change) and external organisations (e.g., Bangladesh Resource Centre for Indigenous Knowledge [BARCIK])

### *b. Implementation arrangements*

One full-time and one part-time researcher will examine the relevance of bottom-up approaches in vulnerability assessment and in designing suitable adaptation policies in selected climate-sensitive sectors such as agriculture and water resources. On a part-time basis, one or two researchers will examine ways to mainstream adaptation in national development plans of critical sectors (e.g., agriculture, water resources), while a few visiting researchers will look into cost-benefit analysis of adaptation policies. In this work, we plan to collaborate with other IGES projects such as LTP (through their RISPO [Research on Innovative and Strategic Policy Options] initiative) and with other national (NIES) and international organisations including United Nations Development Programme (UNDP), Potsdam Institute for Climate Impacts and Research (PIK), and several organisations in developing countries of the region (TERI, BARCIK, etc.).

### *c. Target Groups*

- UNFCCC and Policy makers in Asian countries (primary)
- Researchers, Local governments, Media and NGOs (secondary)

## **5. Activities under each component**

Activities in each component of the project will be scheduled in such a way to have maximum possible impact on policy and academic circles both in Japan and abroad. For example, through collaborations with academia and publications in academic journals, we hope to contribute directly or indirectly to the Fourth Assessment Report of IPCC. To achieve this, we hope to strengthen our links with global institutions and bodies and their initiatives and policy development processes. Further, our research results are expected to directly feed into Japan's Climate Policy Second Phase (2005-2007) and the UNFCCC negotiations. The Kyoto Protocol requires that discussions on the second commitment period must start by 2005, and progress on policy implementation must be reported by the start of 2008, the first year of the first commitment period. Our work on post-Kyoto issues with several international partners during this phase will be especially relevant in this connection.

In addition, we hope to attend and organise several conferences, and plan to deliver climate policy digests relevant to the Asia-Pacific region based on these discussions. A capacity building programme with appropriate training courses and workshops will be developed for CDM in partnership with other projects in IGES and other related institutions in the region. A coherent information management plan will also be developed for the project through posting regularly updated information on climate change issues, policies, events, institutions and results of research and other information on the IGES web site.

The main activities across various project components include the following:

- (a) Involvement with, and support to IGES Secretariat in awareness raising, policy influencing and capacity building on issues related to climate change.
- (b) Participation in global events such as those of UNFCCC [Conference of Parties (COPs), and Subsidiary Body for Scientific and Technological Advice (SBSTA)], and regional meetings such as Asia-Pacific Seminar on Climate Change
- (c) Preparation of climate policy information packages and tool kits (in the form of CD-ROMs), training and awareness-raising materials for use by policy makers in the region
- (d) Publication of regular information bulletins on climate policies, and provision of information relevant for inclusion in the Fourth Assessment Report of IPCC
- (e) Organisation of national and regional meetings on climate policy
- (f) Liaison and development of (i) collaborative initiatives with other IGES projects (Fig. 2) and (ii) partnerships with regional and national institutions (Fig. 3) to carry out activities such as information exchanges, training programmes, case studies and field assessments.

Our project already maintains significant linkages with several international programmes through active participation in meetings such as those of IPCC, COPs and SBSTAs of UNFCCC. Our cooperation with international organisations is also strong. For example, our active collaboration with staff at United Nations Environment Programme (UNEP) Centre for Energy and Environment enabled us to conduct joint workshops in several Asian countries in the second phase and we hope to enhance such relationships in the 3<sup>rd</sup> phase. We hope to enhance our partnerships with GEF, UNEP, UNDP (United Nations Development Programme), AIACC (Assessment of Impacts and Adaptation to Climate Change), IHDP (International Human Dimensions Programme), and plan to conduct joint workshops with organisations such as IUCN

(International Union for Conservation of Nature and Natural Resources), ESCAP (United Nations Economic and Social Commission for Asia and the Pacific) and others. Recently established RINGO (Research and Independent Non-Governmental Organisations), of which IGES is a member, is another forum through which we shall maintain international linkages.

## 5.1 Domestic policies and Kyoto Mechanisms

The main activities in this component include revision of policy package for Japan, organisation of open forums and post-COP seminars in Japan, policy dialogues and capacity building workshops in developing countries, etc. A rough schedule of various activities is given below:

	2004	2005	2006
Policy package revision ----->			
Public Forums in Japan	XXX	XXX	XXX
Post-COP Seminars	Post-COP10	Post-COP11	Post-COP12
Policy dialogues with key stakeholders	Thailand/ Indonesia	LDC (Bangladesh/ South Pacific)	China/ India
Capacity building workshops	XXX	XXX	XXX
Hosting Eco-Frontier Fellows----->			
Workshop on ODA and CDM issues		XXX	

## 5.2. Beyond Kyoto Issues

The key activities under this component comprise the design of a draft package of global framework, organisation of side events on beyond Kyoto issues at international conferences such as COPs, and facilitation of workshops in collaboration with institutions such as TERI, SEI, RFF, CCAP, JGCRI, VTT, RIVM, among others. A new series of climate policy fact sheets for selected countries in the region and a series of policy briefs on global participation including climate technology options and energy modelling will be published at suitable intervals. A rough schedule of activities is given below:

	2004	2005	2006
Global Framework (Draft package) ----->			
Side events at COPs	XXX	XXX	XXX
Climate Policy Fact Sheets (2-3/year)	XXX	XXX	XXX
Workshops in/with organisations of developed countries	USA (RFF, CCAP)	Europe (SEI, IIED, RIVM)	Russia
Publication of Policy briefs	XXX	XXX	XXX

## 5.3 Vulnerability and Adaptation Issues

The main activities under this component will be: creation of a research network on adaptation issues in Asia and the Pacific; organisation of electronic conferences on mainstreaming adaptation in national

development plans; publication of policy briefs on adaptation issues, and field studies on efforts to integrate local knowledge in adaptation policies. An analysis of opportunities and gaps in current climate agreements with regard to adaptation strategies will also be completed by the end of 2005. A rough schedule of main activities planned is given below:

	2004	2005	2006
Creation of adaptation research network----->			
Electronic conferences	XXX		XXX
Workshop on ODA and adaptation		XXX	
Workshops on adaptation policies	XXX		XXX
Adaptation Policy Briefs	XXX	XXX	XXX

## 6. Monitoring Plans

Both internal and external monitoring approaches will be adopted with the goal of attaining the highest standards of credibility, transparency and responsiveness to the scientific and policy circles. Internally, project staff will meet at least once every three months to determine success in meeting the various objectives against a list of baseline indicators (e.g., feedback from stakeholders; performance in research grants; awards and international recognition received by staff members; etc.) and milestones under each objective. Adjustments in terms of reorientation of the research plan and recruitment of additional staff members will be made, if necessary. For instance, wherever in-house staff members are unlikely to achieve targets in certain areas because of other competing priorities, a few visiting researchers and interns will be invited to complement such research. Externally, we will report verifiable progress to the Board of Directors and Trustees at biennial meetings every year. We plan to invite a panel of peer review members to assess progress after 18 months of the start of Phase 3.

In order to facilitate thorough monitoring of research progress, key milestones and/or expected outcomes for each year under each objective are listed below:

### **Objective 1: To evaluate climate policies in Japan and assess their implications for Asia**

#### **Year 1 (April 2004 – March 2005):**

- Quantitative analysis and incorporation of ideas on energy taxation and other aspects leading to the publication of first revised draft of domestic policy package
- Working paper on European policies relevant for application in Japan
- Development of the first draft of the design of Japanese Emissions Trading System

#### **Year 2 (April 2005 – March 2006):**

- Comparative analysis of specific climate policies among developed countries and of state/local initiatives resulting in publication of a series of working papers.
- Analysis of domestic policies of selected developing countries in Asia (through hosting visiting researchers from selected countries)
- Publication of the second draft of domestic policy package for Japan

#### **Year 3 (April 2006 – March 2007):**

- Working paper on relevant Japanese policies for possible adoption in other developed countries
- Identification of relevant Japanese policies for transfer to selected developing countries in Asia
- Reports on potential impacts of such policies in reducing GHG emissions in Asia

**Objective 2 : To propose measures for effective implementation of Kyoto mechanisms in Asia**

**Year 1:**

- Working papers on the design of regional ET markets in Asia-Pacific and assessment of the EU ET scheme leading to identification of rational policy options for Japan
- Publication of two discussion papers on the interactions between the EU and Germany with respect to ET policy and CDM capacity building needs in Asia

**Year 2:**

- Discussion papers on the effective design and implementation of CDM in specific sectors (e.g., waste management) through analysis of barriers and opportunities in selected countries
- Reports on regional emissions trading to identify ways in which Japan might effectively collaborate with other countries

**Year 3:**

- Publication of policy recommendations and guidelines to improve CDM cooperation between Japan and major Asian countries at regular intervals.

**Objective 3: To identify ways to achieve global participation and strengthen future climate regime**

**Year 1:**

- Analysis of comparative strengths and weaknesses of various proposals on post-2012 climate regime using cluster analysis as a tool
- Recommendations for Japanese negotiators on Japan's stance in future climate regime
- Identification of options to design future climate regime from a legal perspective
- A working paper on technology options for climate policy from an Asian perspective

**Year 2:**

- Identification of options for re-engagement of the USA through cooperative research with CCAP, RFF and others
- Assessment of implications of the future climate regime and its governance at local and national levels in one or two major Asian developing countries.

**Year 3:**

- Cost-benefit analysis of mitigation strategies to identify potential win-win strategies.
- Policy recommendations to incorporate such strategies in national development plans.

**Objective 4: To recommend policies for reducing vulnerability and facilitating adaptation**

**Year 1:**

- Studies on Good Practice Guidance for improving adaptation based on local knowledge using Bangladesh as a case study
- Options to integrate local knowledge in site-specific adaptation plans
- Holding an expert consultation on enhancing adaptive capacity in Asia

### Year 2:

- Reports based on analysis of systemic and perceptual barriers for facilitating adaptation in one or two sectors (e.g., agriculture, water resources) using Bangladesh as a case study
- Formulation of policy guidelines to overcome such barriers

### Year 3:

- Working papers on cost-benefit analysis of selected adaptation policies
- Identification of opportunities and trade-offs for integrating mitigation and adaptation concerns in one or two vulnerable sectors
- Policy recommendations to incorporate such policies in national development plans.

The management of the CP project will follow the general principle of a bottom-up approach, wherein individual researchers will be responsible for progress in conducting both strategic research and managing various information dissemination activities, under the overall guidance of the Project Leader and the Chair of the Board of Directors. Efforts to formalise the process of accepting visiting researchers from Japan and abroad on a continuing basis will be intensified. In addition, we plan to accept several interns and trainees supported by external funds so as to enhance human and institutional capacity building in climate policy issues in the region. Dynamism and flexibility will be key components of our project management reflecting the evolving nature of international climate negotiations.

## **7. Financial aspects**

The budget currently allocated for the project (about US\$ 1 million per year) and limited human resources are inadequate to conduct quality research in all topics discussed above. Therefore, additional efforts will be devoted to attract external funds both within Japan and abroad. Since the establishment of this project in 1998, we have been successful in procuring up to 25-30% of the yearly budget, on an average, by securing competitive funds from MOE, Asia-Pacific Network on Global Change Research (APN), and the Ministry of Education, Science and Technology (MEXT). In Phase 3, besides procuring competitive funds from the above sources, we plan to apply for funds from private foundations in Japan and abroad to maintain, and if possible exceed, the procuring rates of 25-30%. They include AEON Foundation, Toyota Foundation, MISTRA (Swedish Foundation for Strategic Environmental Research), Wallace Global Fund, MacArthur Foundation, etc. Efforts will also be devoted to encourage in-kind contributions from institutes in various Asian countries. In addition, joint proposals with researchers in developing countries will be prepared and proposed for external funding. We also plan to utilize programmes such as the Eco-Frontier Fellowship Programme to partially meet staff requirements while simultaneously contributing to the training of young researchers in the region. Research progress and budget utilisation will be monitored and reported to the Board members at regular intervals.

As personnel costs constitute the major part of our expenses, allocation of a budget for each component in each year would largely reflect personnel allocation. Therefore, on average, research on beyond Kyoto issues will be allocated about 45% of the yearly budget while research on domestic policies and Kyoto mechanisms will be allotted about 35%. The rest will be utilised for work on adaptation issues.

Figure 1: Climate Policy Research Themes in the Third phase (2004-2007)

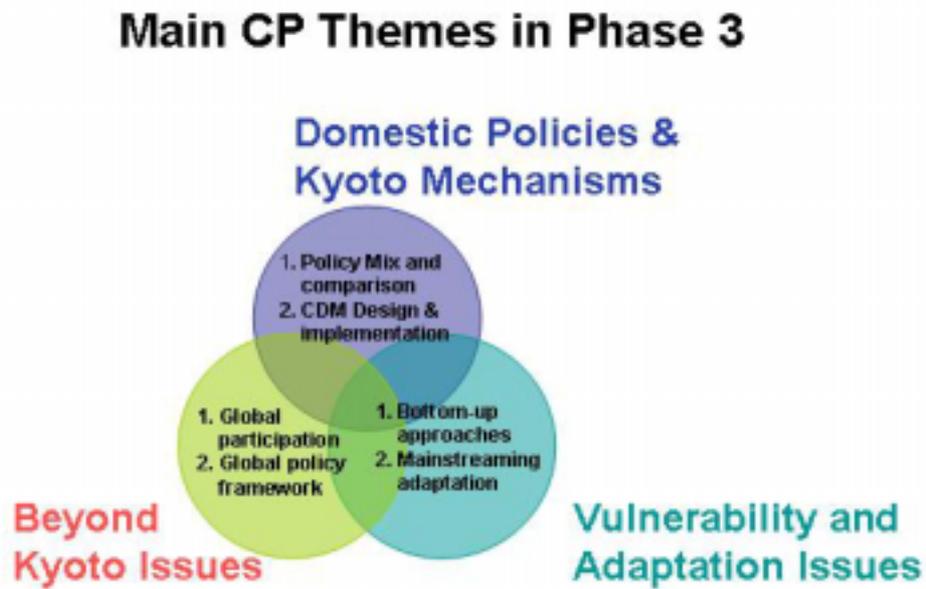
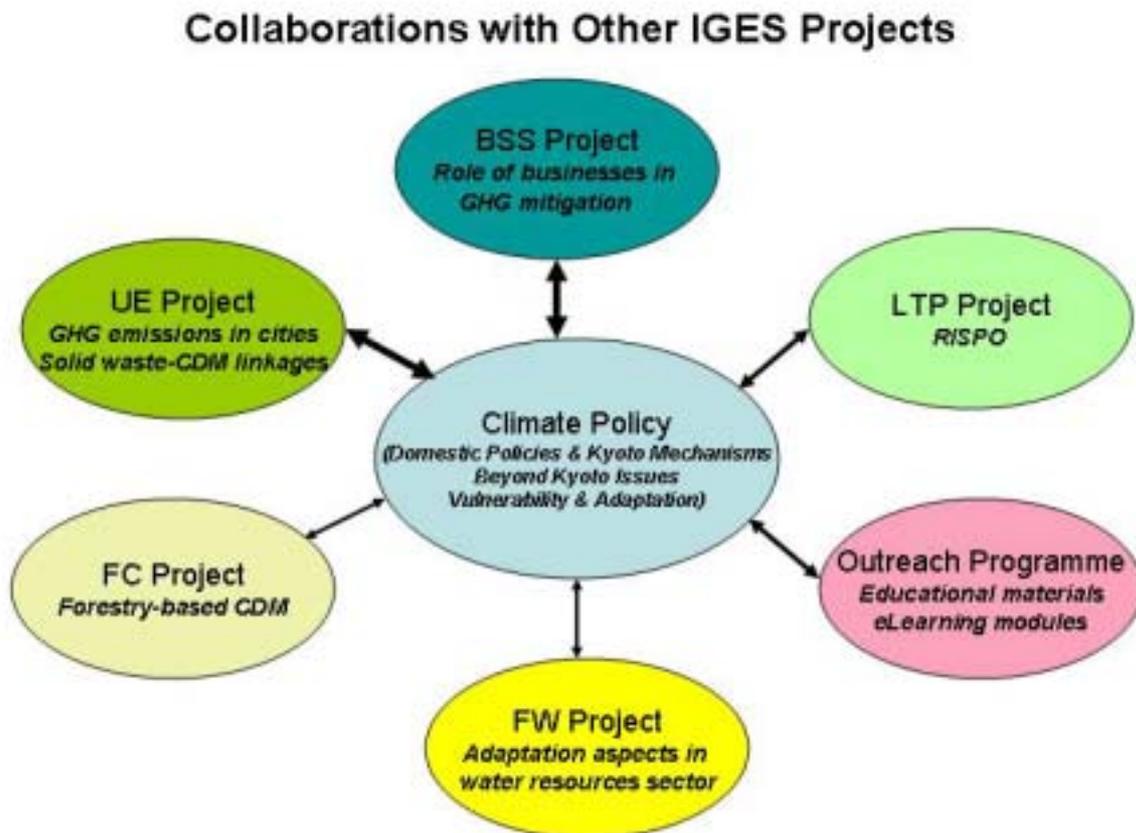
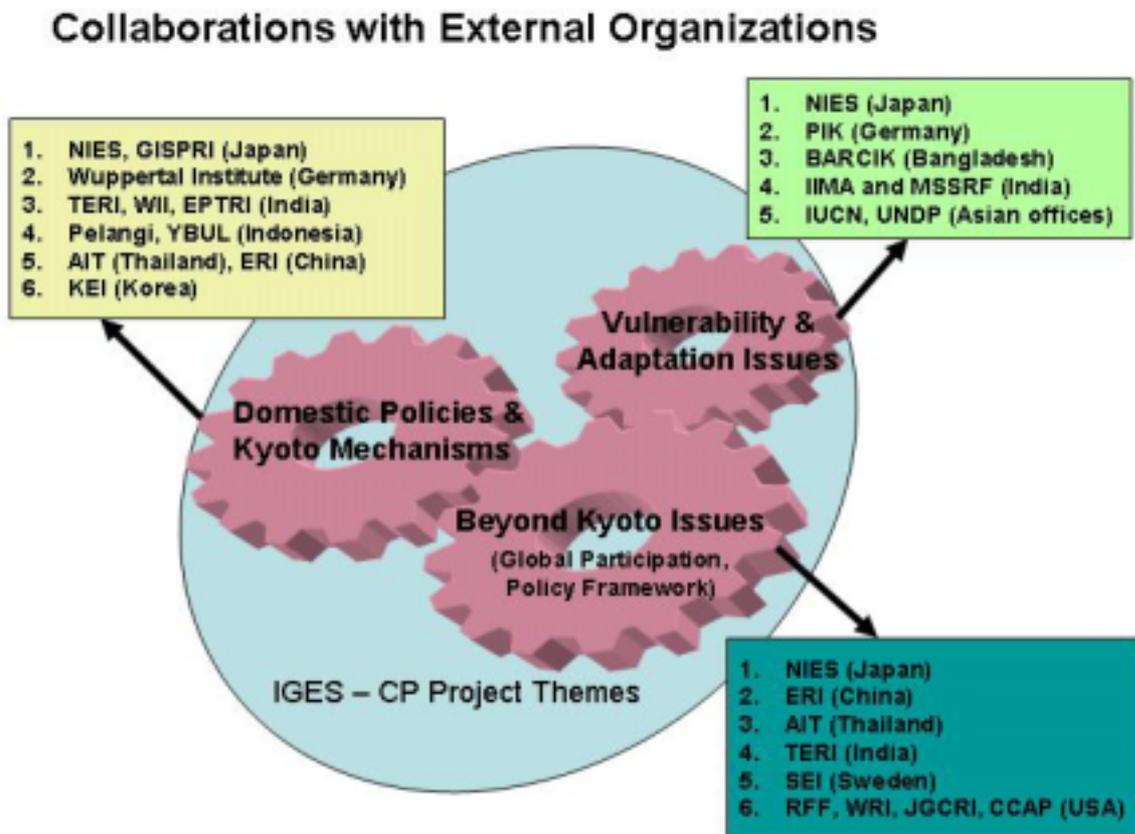


Figure 2: Internal Collaborations with Other IGES Projects



**Figure 3: Collaborations with Domestic and International Organizations**



## 8. Executive Summary

The Climate Policy Project made considerable progress in the 1<sup>st</sup> and 2<sup>nd</sup> phases in areas such as analysis of the Kyoto mechanisms (e.g., emissions trading, clean development mechanism [CDM]), domestic policies, and measures to promote international collaboration in climate change issues. Our achievements were well recognised internationally as evidenced by keen interest shown by several organisations to collaborate with us in various research and information outreach activities. By reflecting on our past work against the backdrop of recent developments such as the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) in 2001, the World Summit on Sustainable Development (WSSD) in 2002, and negotiations under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC), we plan to reorganise our Phase 3 activities into three closely inter-related components viz., Domestic Policy Issues, Beyond Kyoto Issues, and Vulnerability and Adaptation Issues.

Attaining the emission reduction targets by developed countries during the first commitment period of the Kyoto Protocol (2008-2012) is the basis towards the goal of global participation in the second commitment period and beyond. Since Japan is a key player in the Kyoto Protocol and a large Annex 1 country, its success in meeting the Kyoto targets will have great influence on the global regime. Designing effective and relevant policies for implementation by Japan as well as EU countries is, therefore, critical. We will focus on evaluating relative success of mitigation measures adopted so far and the likely impacts of such policies in selected countries. Despite ratification of the Kyoto Protocol by many states, progress towards the goal of climate stabilization worldwide is far from satisfactory. Our project will endeavour, therefore, to set forth a blueprint for post-Kyoto climate policy regime through identification of measures to promote participation of the developing countries and other non-participating Annex 1 countries and development of policy frameworks appropriate for the second period of commitment and beyond. In this context, we shall conduct studies on governance of the future climate regime and its implications for countries in the Asia-Pacific region. Since mitigation alone will not solve the problem of climate change, the project will examine policies necessary for reducing vulnerability and enhancing adaptive capacity (in terms of social, economic and technical resilience) in priority sectors of the region (e.g., agriculture, water resources, biodiversity) and identify “win-win” strategies developed through a bottom-up participatory approach. Besides conducting strategic research, we will contribute to information outreach, multi-stakeholder dialogues, capacity building and technology transfer through development of joint research projects, exchange of researchers, and dissemination of information via publications, training workshops and conferences.

Our efforts in Phase 3 will be guided by four key principles. First, we shall foresee and guide domestic and international climate policies through recommending timely and appropriate actions by closely following the progress in UNFCCC negotiations. Secondly, we believe that climate policy research cannot be conducted solely within the context of climate, but from a larger perspective of sustainable development. Thirdly, we will ensure high quality in our research to make it internationally competitive both in academic and policy circles. Last, but not the least, our research will be action-oriented in that it will be coupled with outreach activities such as publications in academic journals and popular magazines, organization of open forums, international workshops and training activities for various stakeholders.

## Abbreviations

AEEMF	Asia Energy and Environment Modelling Forum
AIACC	Assessment of Impacts and Adaptation to Climate Change
AIT	Asian Institute of Technology, Thailand
APN	Asia-Pacific Network for Global Change Research
BARCIK	Bangladesh Resource Centre for Indigenous Knowledge
BSS	Business for Sustainable Society
CCAP	Center for Clean Air Policy, USA
CDM	Clean Development Mechanism
COP	Conference of Parties to the United Nations Framework Convention on Climate Change
EPTRI	Environmental Protection and Training Research Institute (India)
ERI	Energy Research Institute (China)
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
ET	Emissions Trading
EU	European Union
GEF	Global Environmental Facility
GHG	Greenhouse Gases
GISPRI	Global Industrial and Social Progress Research Institute (Japan)
IGES	Institute for Global Environmental Strategies
IHDP	International Human Dimensions Programme
IIED	International Institute for Environment and Development
IIMA	Indian Institute of Management, Ahmedabad (India)
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature and Natural Resources
JGCRI	Joint Global Change Research Institute (USA)
KEEI	Korea Energy Economics Institute
KEI	Korea Environment Institute
LDC	Least Developed Countries
LTP	Long term Perspective and Policy Integration project
MEXT	Ministry of Education, Science and Technology (Japan)
MISTRA	Foundation for Strategic Environmental Research (Sweden)
MOE	Ministry of the Environment (Japan)
MSSRF	M.S. Swaminathan Research Foundation (India)
NGO	Non-Governmental Organization
NIES	National Institute for Environmental Studies (Japan)
ODA	Overseas Development Assistance
PIK	Potsdam Institute of Climate Impacts and Research (Germany)
RINGO	Research and Independent Non-Governmental Organizations
RISPO	Research on Strategic and Innovative Policy Options
RIVM	National Institute for Public Health and the Environment (The Netherlands)
SBSTA	Subsidiary Body for Scientific and Technological Advice
SEI	Stockholm Research Institute (Sweden)
TERI	The Energy and Resources Institute (India)
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
VTT	Technical Research Centre of Finland
WI	Wuppertal Institute (Germany)
WII	Winrock International India
WRI	World Resources Institute (USA)
WSSD	World Summit on Sustainable Development