

Climate Policy and Development

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Preface

The role of developing countries in international climate policy is discussed intensely in the international climate negotiations. A focus of the international debate is whether or not industrialized countries should be allowed to fulfil at least a part of their domestic obligation to reduce greenhouse gas (GHG) emissions by taking corresponding measures in developing countries. At one extreme, this type of cooperation which has been labelled in many different guises is seen as a least-cost option to mitigate global climate change. At the same time it is expected to initiate important transfers of technology and capital to the developing world. Its opponents fear a new colonialist intrusion into the environmental space of the developing nations and a repetition of failures witnessed in development cooperation. Moreover, many decision makers and the public remain confused concerning the role of such cooperation in meeting the targets of the UN climate convention and the Kyoto Protocol.

This book features contributions from renowned specialists as well as from young German researchers that have not yet been available to an English-speaking audience. Chapter 1 outlines the evolution of the concept of flexible instruments - emissions trading and joint implementation as well as the clean development mechanism (CDM) specially geared towards the developing countries - since they were first proposed. It discusses their theoretical properties and the arguments of their proponents, as well as opponents. It summarizes the state of the activities implemented jointly (AIJ) pilot phase. Moreover; it outlines possible project categories and discusses who might be interested in using these mechanisms.

Chapter 2 analyses the decision on four different mechanisms laid down by the Kyoto Protocol as the result of diverging interests. The advantage of four over only one such mechanism lies in the fact that more interests could be considered. Where interests are strictly opposed and hard to reconcile, the creation of different systems seems the only way out. While the CDM as the relevant mechanism for the developing countries is very close to what politicians of host countries would consider optimal, placing emphasis on the developmental rather than on the environmental issue, the provisions about joint implementation between Annex I countries (industrialized countries with emission targets) seem to be more in line with investors' interests. Since

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the latter will favour the more liberal conditions of joint implementation with countries in transition, they might shy away from the CDM as long as marginal costs of abatement measures are not considerably lower in the developing countries and as long as there is no shortage of project opportunities in the former countries. As some developing countries might fear being cut off from the benefits of additional transfers, they might change sides and adopt national targets.

Chapter 3 addresses questions related to the CDM:

1. How to determine the GHG emission reductions achieved through a CDM project? Not only should the emissions of the new plant under the project be measured, but also a reference scenario ('baseline') needs to be determined showing what the emissions would have amounted to in the absence of the project.
2. Are forestry projects allowed under the CDM? In its current form, Article 12 of the Kyoto Protocol only refers to projects that result in emission reductions, but some observers have argued that this does not necessarily exclude 'sinks' projects.
3. What will the governance structure of the CDM look like? The Executive Board for the CDM could be assisted by so-called 'operational entities', but it is not yet clear which institute will do what and who will be responsible for certification procedures.
4. What exactly will be the amount that parties involved in CDM projects have to pay to cover administrative expenses and adaptation investments in the developing countries most vulnerable to climate change?

Chapter 4 discusses ways and means for a country to elicit CDM funding. Transparency in the project selection and approval process is of utmost importance. The foremost criterion for the host country is to undertake a national exercise involving the private sector in prioritizing the sectors where such funding and projects should be undertaken, which should obviously be in line with the development objectives of the country. To alleviate distrust of developing countries an experimental phase should be set up.

Chapter 5 is the first of two case studies, which evaluates a German/Japanese AIJ project to disseminate solar home systems and small-scale renewable energy supply systems in Indonesia. It discusses the large number of objectives that should be achieved within a CDM project to ensure that it fulfils both the climate change (CDM, primary objectives) and development related criteria. The analysis reveals a number of problems such as life-cycle emissions, leakage effects, transaction costs, delays in the time schedule, double counting and the importance of proper reporting.

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The second case study (Chapter 6) discusses Costa Rican AIJ policy, one of the rare instances where the process is host country-driven. From the very beginning, Costa Rica has understood climate cooperation as one way of financing its development goals. It has been active in the AIJ process and in the UN Framework Convention on Climate Change (UNFCCC) climate negotiations. The chapter undertakes an evaluation of the way project cooperation developed within the period 1994-1997 and gives a complete overview of all projects actually approved in the small central American country, including the calculation of climate benefits and externalities, and how the programme was developed by the hosts later on.

Chapter 6 stresses the role of renewable energy technologies in the CDM. It becomes clear that two factors are crucial for the implementation of a sustainable energy system. First is the balancing of the commercial incentives of private sector actors with the CDM requirement of additional projects that would have happened anyway; second is the political recognition of energy as a basic need, including the individual right to energy access that is required for clean water and food. This right includes the physical and economic access to energy.

Chapter 8 sums up the problems the forthcoming negotiation rounds will have to solve and proposes practical solutions for the design of the CDM, taking into account the results of the 5th conference of the parties at Buenos Aires in 1998. It discusses the process of setting baselines, the institutional structure and credit sharing. Moreover, a more long-term view of the interaction of climate and development policy is taken, aiming at an equitable allocation of emission rights.

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Abbreviations / Accronyms

AE	Aeroenergia
AIJ	activities implemented jointly
BOT	Build, operate, transfer
BPPT	Agency for the Assessment and Application of Technology
C	Carbon
CACTU	Central Agricultural Center of Turrialba
CAF	Certificados de Abonos Forestales
CCB	Certificado de Conservación de Bosque
CATIE	Centro Agrenómico Tropical de Investigación y Ensenza
CNFL	Compania Nacional de Fuerza y Luz
CDM	clean development mechanism
CER	Certified Emission Reduction
CO ₂	Carbon dioxide
COP	Conference of the Parties
CTO	Certified tradable offset
DGEED	Directorate General of Electricity and Energy Development
ECOLAND	Esquinas Carbon Offset Land Conservation Initiative
EDF	Electricité de France
EI	Edison International
EPA	Environment Protection
ERU	Emission Reduction Unit
EU	European Union Agency
FCCC	Framework Convention on Climate Change
FESP	Forestry Environmental Services Payment Programme
FOF	Fondo de Desarrollo Forestal
FONAFIO	Fondo nacional de Financiamiento Forestal
FSA	Financial Sustainability Analysis
GCA	Guanacaste Conservation Area
GHG	greenhouse gas
G77	Group of 77
HQ	Hydro Quebec
HS	hybrid system
IADB	Inter – American Development Bank
ICE	Instituto Costaricense de Electricidad

Abbreviations/Acronyms

ICLEI	International Council on Local Environmental Initiatives
IEA	International Energy Agency
IET	International Emissions Trading
INC	Intergovernmental Negotiating Committee
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
JI	Joint Implementation
KANSAI	Kansai Electric Power
KUD	Koperasi Unit Desa (village union)
LAPAN	National Institute of Aeronautics and Space
LOI	letter of intent
MHP	micro hydro power
MINAE	Ministerio de Ambiente y Energia
MME	Ministry of Mines and Energy
MOU	memorandum of understanding
MW	Megawatt
NGO	Non – governmental organisation
NO _x	Nitrogen
NTT	Nusa Tenggara Timur
O&M	Operation and Maintenance
OCIC	Oficina Costaricense de Implementation Conjunta
ODA	Official Development Assistance
OECD	Organization of Economic Cooperation and Development
OH	Ontario Hydro
PAP	Protected Areas project
PFP	Private Forestry Project
PE	Plantas Eolicas
PLD	Perusahaan Listrik Desa (village utility)
PLN	Perusahaan Listrik Negara (governmental electricity company), Indonesia
PPA	power purchase agreement
PV	Photovoltaic
QELRC	Qualified Emission Limitation and Reduction Commitment
R&D	Research and Development
RESS	Renewable Energy Supply Systems
RET	Renewable Energy Technologies
SAR	Second Assessment Report
SBI	Subsidiary Body of Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SEI	socio economic integration
SELCO	Solar Electric Light Company
SGS	Société Générale de Surveillance

Abbreviations/Acronyms

SHIS	Statistical Household Income Survey
SHS	Solar Home System
SINAC	Sistema Nacional de Áreas de Conservación
SO ₂	Sulphur dioxide
TEPCO	Tokyo's Electric Power Company
TM	Tierras Morenas
UNCTAP	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USIJI	United States Initiative on Joint Implementation
V	volt
W	watt
WBCSD	World Business Council for sustainable Development
WWF	Worldwide Fund for Nature

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