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Long-term capacity development for local climate governance – what next after PDD development?

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Abstract

Developing countries which wish to be fully prepared for climate change need to increase their local awareness and knowledge about climate change. This is especially true if countries want to fully tap their potential to attract investments via the Clean Development Mechanism (CDM) of the Kyoto-Protocol. On the other hand, companies and governments of Annex I countries of the Kyoto-Protocol are in urgent need for CDM projects to fulfil their greenhouse gas reduction commitments. In order to increase the supply of high quality project development documents (PDDs) for CDM projects, many donor agencies have launched bilateral capacity development programmes for the establishment of functioning local CDM markets in developing countries. What are the interests and motives of donors to set up capacity development programmes for the CDM (CD4CDM) which differ in their objectives, locations and timings?

Drawing on CD4CDM experiences made in China, the paper analysis factors which have an influence on the choice of donors' for their CD4CDM projects. After a short introduction why capacity development for the CDM is necessary and a brief description about the CDM market in China and its bottlenecks, the paper gives an analysis of donors' interests behind their preferred types of CD4CDM projects. Being ambiguous in their role by being a rule-setter and a player in the Kyoto-game, governments from Annex I countries of the Kyoto Protocol strive for "Certified Emission Reductions" (CERs) for their domestic compliance. While the CER motive seems to be dominant when deciding on objective and timing of CD4CDM programmes, the location of projects can also be determined by historical linkages and prior commercial ties. While the cake of potential CDM projects in China is already nicely split up between donors, bilateral and multilateral capacity development projects focused on adaptation measures are still in an early stage.

Content

I. Introduction

The Kyoto Protocol can be a great opportunity to reach cost-effective greenhouse gas reductions and to promote sustainable development. In theory it is designed to be a "win-win" deal for both developed and developing countries. Ultimately, its implementation will tell how far this goal has been reached. Besides the political will of the involved governmental and business actors for implementation, much of the protocol's success depends on the abilities of the involved actors to implement it effectively. While we usually acknowledge a divide between developed and developing countries in their capacities to put international agreements into practice, it is even a greater challenge to put international agreements into action on the local level. This challenge becomes even greater for large countries which face regional differences in implementation capacity and which cannot just implement regulations by a central top-down approach but need to rely on local political will and capacities for policy implementation.

This article focuses on Sino-foreign projects to strengthen the CDM capacities in China in order to enable its full participation in the Kyoto Protocol, and to compete with other CDM host countries for carbon investments. Much of the provincial level capacity development for the CDM has initially been financed either bilaterally by foreign countries or multilaterally by international development organisations. While all capacity development projects are implemented via the central Chinese government, the projects differ in terms of focus, scope, target group, design and involvement of the donor entity. Some projects focus on PDD generation and Certified Emission Reductions (CER) purchase, others help to build CDM institutions, support CDM-related research or aim for increasing the sustainable development benefits of CDM projects.

This article uses an interest-based explanatory approach to analyse the variation in objective, timing and location of Sino-foreign capacity development projects for the CDM at the provincial level in China. The article starts by introducing the need for and previous experiences with capacity development for the Clean Development Mechanism (CD4CDM) (Chapter 2). The main part gives a brief description of the CDM situation in China and outlines its potential and its barriers at the national and the provincial level. The dependent variable "differences in CD4CDM projects by different donors in terms of objective, timing and location" is introduced and the intervening variable "interests of the Chinese government" is discussed. Finally, the interests and motives of the different donors are analysed for their impact on programme design (Chapter 3). The paper's conclusion summarises the results and draws attention to present shortcomings (Chapter 4).

II. Why capacity development for the Clean Development Mechanism

The Clean Development Mechanism is one of the three flexible mechanisms of the Kyoto Protocol which allows developed countries to comply with their emission reduction commitments by buying "Certified Emission Reductions" (CERs) from developing countries. The CDM is described as a "market mechanism" because it relies on a functioning market to deliver emission reductions cost-effectively. The binding emission reduction obligations of the Kyoto Protocol create a demand for emission reductions in Annex I countries of the Protocol. As most European

governments pass this demand partly to their energy-intensive utilities via the European Union Emission Trading System (EU ETS), demand is politically created for some European companies to either reduce emissions in own installations, trade European emission allowances or to buy CERs on the global carbon market.

Answering to this demand, national carbon markets are emerging in developing countries and supply what Annex I governments and their companies are paying for: CERs. However, these markets are not emerging out of the blue. Similar as the demand markets of the Annex I countries, CER supply markets in developing countries are political creations that need to be brought to life. For the CDM to function, a market is needed where buyers from developed countries can meet and trade CERs with sellers from developing countries. There is also the need for a secondary market for entities active in project development, CER validation and verification, CDM project financing and other kinds of financial and consulting services. Besides business actors, each country needs to set up a so-called "Designated National Authority" (DNA) at the national level for national CDM project approval and promotion. In addition, each country is asked to specify national regulations on CDM project design, e.g. whether criteria for sustainable development have to be met, and to outline the CDM project approval process. According to Michaelowa (2003), three years since the Marrakech Accords only a third of Non-Annex B countries have notified their DNA. While even realising the minimum requirements of the Kyoto Protocol takes much effort and time, facilitating an effective CDM market at the local level needs more.

It is not only in the interest of the host country government to establish a functioning CDM market. Buyers – whether governments from Annex I countries, private companies or traders with an interest in purchasing CERs – also have an interest in tapping into the market potential. In addition, multilateral organisations with a mandate to contribute e.g. to the achievement of the Millennium Development Goals (MDG) have an interest in ensuring that the dual goal of the CDM – cost-effective mitigation and a contribution to sustainable development – actually materialises. These different types of donors are getting active in supporting the establishment of local CER markets, but they use different approaches according to their motives.

Most interesting is the ambiguous position of governments of Annex I countries of the Kyoto Protocol: On the one hand, national governments are the parties to the Kyoto Protocol with their right to participate and vote in negotiations and to set and modify the rules of the Protocol. On the other hand, the governments of the Annex I to the Kyoto Protocol have agreed on binding greenhouse gas emission targets and thus have a strong interest to acquire CERs from CDM-projects as one means to fulfil their commitment. Being a rule-setter and a player in the Kyoto-game, many governments have a variety of interests when deciding about CDM capacity development programmes in CDM host countries.

III. Capacity development for the CDM (CD4CDM) in China's provinces: How to divide the cake?

This chapter first introduces the potential and framework conditions for the CDM in China, and provides an overview of the existing Sino-foreign CD4CDM programmes at the provincial level. After a briefing on the intervening interests of the Chinese government, the chapter closes with the analysis of the donors' interests as an explanation for their choice of CD4CDM programme type.

1. Potential for CDM projects

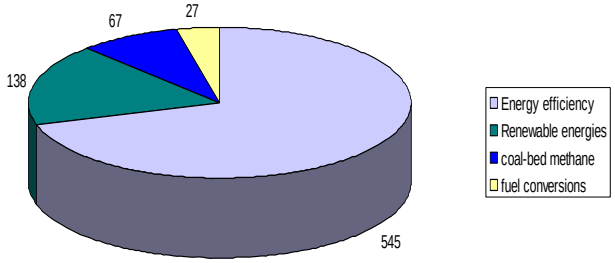
China's overall potential for greenhouse gas (GHG) reductions is large (see table 1) and projected to grow with increasing energy consumption. Analysed for CDM project types, China's largest potential for GHG reductions is by increasing its energy efficiency, its use of renewable energies, and the utilisation of coal-bed methane (compare graph 1).

Table 1: China Greenhouse Gas Emissions in 2000

Gas	Million metric tones of carbon	Percentage of World Total
CO2	948.0	14.54
CH4	212.4	13.2
N2O	176.0	19.12
PFC	1.4	5.4
HFC	10.1	16.19
SF6	0.9	7.8
Total	1348.8	14.74

Source: World Resources Institute's Climate Analysis Indicators Tool (CAIT), 2005

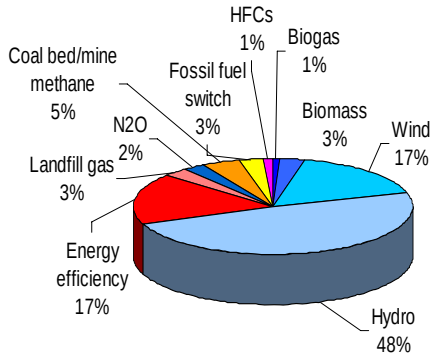
Graph 1: GHG reduction potential per sector in million tonnes of CO2 equivalent



Source: Adaptation from IGEC 2005:75

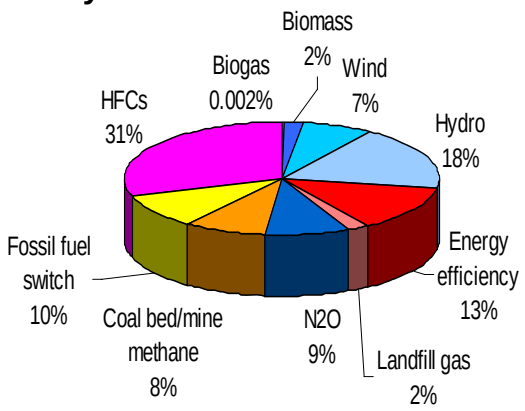
A comparison between the potential for GHG reduction per sector and the actually realised no. of CDM projects per project type reveals that the renewable energy projects are about ¾ of the overall no. of projects, while energy efficiency projects so far make up only roughly 1/6, despite their large overall potential. This mismatch of projects' potential and projects' realisation can be explained by the relative complicated nature of energy efficiency projects and their rather low CER output. In line with the motto of "picking the low-hanging fruits first", project developers and buyers tend to go for the easy project with high CER outputs, which are projects that flare HFC gases: there are only 11 HFC projects out of 961 CDM projects in China, but they make up 31% of China's CERs (graphs 2 and 3).

Graph 2: No. of CDM project types in January 2008



Source: Based on UNEP Risoe CDM/JI Pipeline Analysis and Database, January 2008

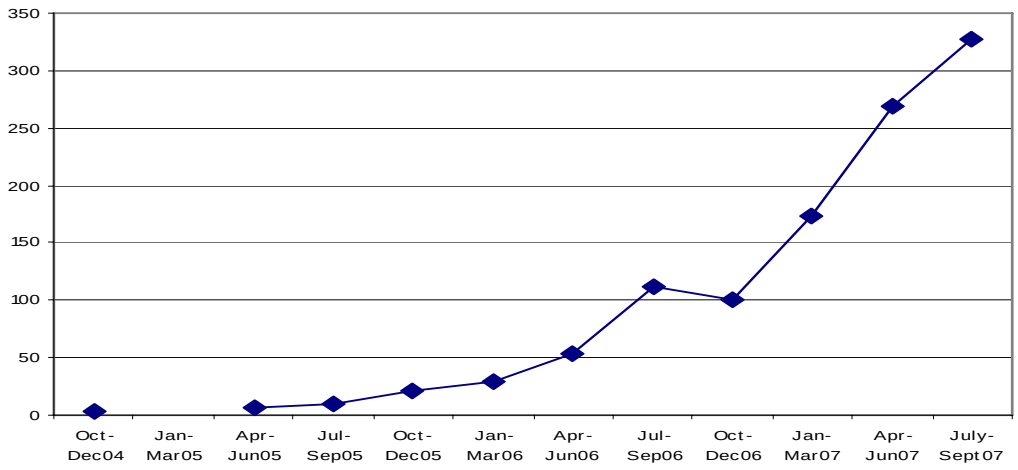
Graph 3: CERs per CDM project type in January 2008



Source: Based on UNEP Risoe CDM/JI Pipeline Analysis and Database, January 2008

Despite its large potential, China had taken a slow start in the global CDM market when the Kyoto Protocol came into force in February 2005 (Zhang 2006:6). After several CDM capacity development programmes had assisted China to set up its institutional CDM structure and after positive CDM project examples from other countries had raised China's awareness of its own CDM potential, the country quickly caught up (compare graph 4) and soon became one of the top CDM host countries. China remains top in PointCarbon's CDM Host Country Rating, which ranks how attractive countries are for CDM projects. This rank is based on an assessment of the country's CDM-related organisations and institutions, its investment climate and its CDM project status. China and India are the top countries in January 2008, both with an "A-" rating (PointCarbon 2008). In the beginning of 2008, China shared 53% of the world's CERs and 33% of the total no. of CDM projects (UNEP Risoe CDM/JI Pipeline January 2008).

Graph 4: New CDM projects developed per quarter 2004-2007



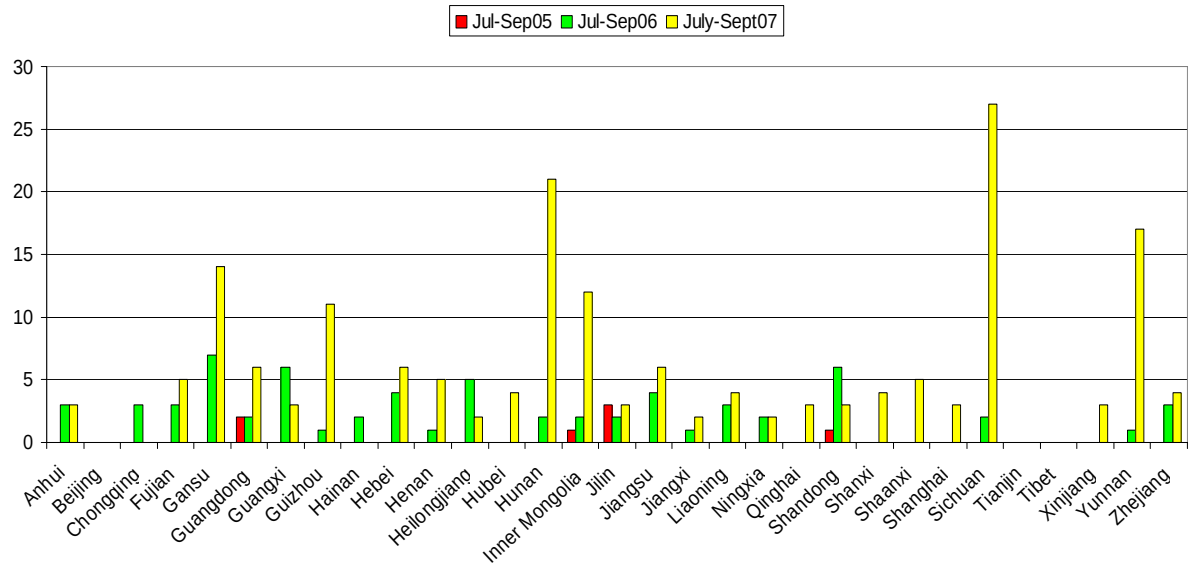
Source: Based on UNEP Risoe CDM/JI Pipeline Analysis and Database, September 2007

2. Barriers for CDM projects

There are still barriers at the national level for CDM project development that relate to general investment barriers in China like the strong governmental intervention in the economy, inflated bureaucracy, and an insufficient protection of intellectual property (Bfai 2007); and CDM-specific barriers like the 51% ownership rule which requires Chinese companies to hold a 51% control on CDM projects, thus limiting foreign companies' influence, and the set floor prices by the Chinese government (Gao/Li 2007).

Concerning the particularities of the provincial CDM markets, one relation which can be observed especially in the early phase of the Chinese CDM market is the correlation between provinces with early CDM projects and provinces with a high FDI rate, e.g. in Guangdong and Shandong. From this correlation one can assume that places with a high FDI rate, thus with good general investment conditions and established contacts to foreign investors, have an easer access also to foreign carbon finance than other provinces.

Graph 5: Changes in CDM project development per Chinese province (2005-2007)

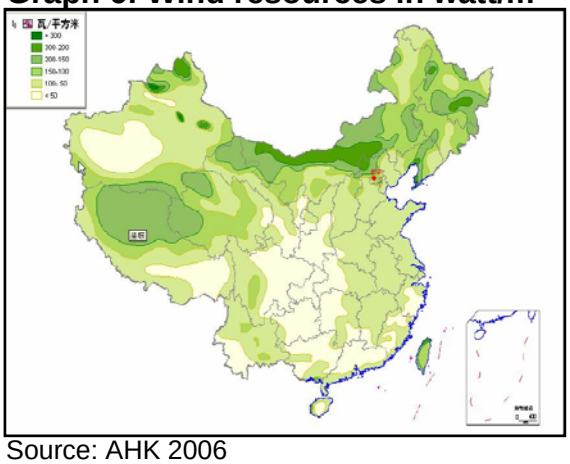


Source: Adapted from UNEP Risoe CDM/JI Pipeline Analysis and Database, 3rd October 2007

China faces a West-East divide in many terms: the coastal Eastern region tends to have a higher GDP and productivity, receives about 80% of the country's FDI (OECD 2003:46), and has a prospering secondary and tertiary sector, while the mountainous Western part is rich in energy, mineral and other natural resources, but has to cope with harsh climatic conditions, underdeveloped transport systems and a lack of well-qualified people. However, due to their good renewable energy resources, Western provinces are predestined for CDM renewable energy projects (see graphs 6 and 7 for wind and solar resources).

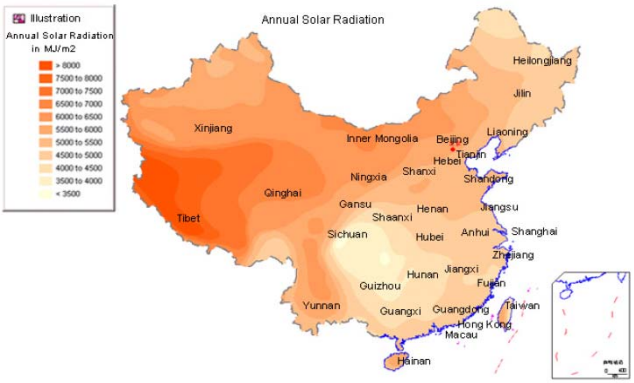
Renewable energy potential of Western provinces

Graph 6: Wind resources in watt/m²



Source: AHK 2006

Graph 7: Solar radiation in MJ/m²



Source: AHK 2006

Vulnerability to climate change is especially severe in China's Western provinces because they already have to cope with harsh climatic conditions and sensitive ecosystems. According to China's National Communication on Climate Change (2004), major impacts of climate change are expected on agriculture, water resources, terrestrial ecosystems, and the coastal areas. Already today, China is experiencing droughts and decrease in runoff of major rivers in Northern and North-western China, glacial shrinkage in the Himalaya, and sea-level rise along its Eastern coast. In figures, natural disasters cause economic losses of approx. 200 billion CNY per year and reduce the incomes of already poor migrants and farmers (Heggelund 2007:166).

3. Dependent variable: Division of provinces by foreign donors

Foreign countries and multilateral organisations have been early involved in capacity development measures for the CDM in China. Before the coming into force of the Kyoto Protocol in 2005, these projects naturally focused on the assessment of the Chinese potential for the CDM (e.g. the German-Swiss-World Bank China CDM Study 2003) by analysing most promising sectors for early and easy-to-do CDM projects, and by drawing policy recommendations for the Chinese government of how to set up an effective institutional framework. In a second phase (phases tend to overlap in practice), capacity development projects focused on developing demonstration projects for the CDM in order to involve Chinese researchers in the project development procedures and in order to establish successful learning cases for potential Chinese project owners and government officials, who were still in doubt about the feasibility and trustworthiness of the CDM. In the third phase of engagement, CD4CDM projects focused on supporting the Chinese government to set up national level institutions for the CDM, e.g. the ADB's and the World Bank's assistance for the set up of the China CDM Fund. In these first three phases of capacity development for the CDM in China, multilateral organisations such as the World Bank and the Asian Development Bank took the lead, although some countries such as Canada had CD4CDM programmes starting as early as 2003.

Once the CDM market came to life with the coming into force of the Kyoto Protocol in 2005, governments of Annex I-countries started to get involved into CD4CDM

projects in China. The foci of their programmes vary broadly. One category are research projects at the national level, e.g. Denmark is supporting a research study on the so-called "Programmatic CDM" with the Chinese Academy for Social Science, and the UK is promoting a project testing out the feasibility of using a emission trading system modelled after the European one in China. Another category of projects is the attempt to enforce the sustainable development contribution of CDM projects, e.g. UNDP has just launched the programme "Carbon Finance for Achieving Millennium Development Goals (MDGs) in China", in which CDM projects are supported which have an explicit contribution to sustainable development. These projects are partly sourced from Western provinces which have a comparatively greater need for sustainable development than Eastern provinces.

A third category of Sino-Foreign CD4CDM projects are projects which focus on PDD development at the provincial level. In accordance with the research question of this article "How to explain the variation in objective, activities, location and timing of Sino-foreign capacity development programmes for the CDM (CD4CDM) at the provincial level in China", this project category will be discussed in length in the following paragraphs. The first foreign donor project which focused on capacity development at the provincial level was the Canadian programme (CIDA was the responsible Canadian agency), which supported the set up of China's first provincial-level CDM Centre in the Ningxia Autonomous Region. Due to the success of the project, Canada expanded its project to four other provinces, and other Annex I countries followed swiftly in picking up provincial level CD4CDM projects in China (see table 2 and map 1 for an overview).

Table 2: Overview of selected donor projects for CD4CDM at the provincial level in China

Donor	Location	Time	Objective	Activities
Sino-Canada Cooperation Pilot Project Local CDM Capacity Building	Ningxia	2003-2005	Exploration of twelve potential CDM projects and development of 3 PDDs	Financial support for Ningxia CDM Centre, trainings for local project owners and experts
ADB: Opportunities for the CDM in the Energy Sector	Gansu, Guangxi	2004-2005	Small-scale CDM project development	Assessment of potential for small-scale CDM projects + trainings
WB-China's Provincial Climate Change Programme	Hubei, Jilin, Shaanxi, and Yunnan	09.05 – 10.07	Development of provincial-level Climate Change Programmes	Trainings and workshops supporting provincial government in planning process
China-France CDM Capacity Building Cooperation Programme	Guangxi, Sichuan, Guizhou and Yunnan	2006-2008	Promote bilateral cooperation in clean technology, development of CDM projects	Financial support for 4 CDM Centres, trainings
Development of Sino-Italian CDM Projects	Ningxia	2006	Development of 3 CDM projects	PDD development
China-Canada CDM Capacity Building	Hebei, Shanxi, Zhejiang, Shandong and Hunan	Five months in 2007	Exploration of potential CDM projects and development of PDDs	Financial support for CDM Centres, trainings for local project owners and experts
China-Japan Shandong	Shandong	2007	Development of	Financial support for

CDM Capacity Building Programme		– 2008	CDM projects	Shandong CDM Centre, trainings for local project owners and experts
Sino-Danish Cooperation Project on CDM Capacity Building	Hunan, Guizhou and Xinjiang (in cooperation with France)	2007-2008	Testing of the programmatic CDM approach	Pilot biomass projects
China-UNDP "Millennium Development Goals (MDGs) "	Liaoning, Jilin, Inner Mongolia, Xinjiang, Hubei, Henan, Anhui, Jiangsu, Shannxi, Qinghai, Shanxi and Xinjiang	Launch at end of 2007	Development of CDM projects in Western provinces which have a measurable contribution to the MDGs	Trainings for 12 provincial CDM Centres, maybe set up of carbon exchange platform between sellers and buyers

Map 1: Selection of Sino-foreign CD4CDM projects at the provincial level

4. Intervening variable: Interests of the Chinese government

While China had initially taken a sceptical attitude towards the CDM as it feared official development assistance (ODA) would be diverted to the CDM, the Chinese government is now supporting the CDM. Climate change has been recognised as a cross-cutting issue between energy, economic and environmental politics. Although climate politics in China seem to be a sub-topic of the energy security discussion, the CDM is regarded as one of several measures how China can reach its targets for improved energy efficiency, energy saving and curbing of greenhouse gases (Heggelund 2007:186). The change in institutional responsibility also mirrors a shift of the Chinese government in assessing the importance and context of the climate

change issue: initially the responsibility for climate change policies had been with the State Meteorological Agency, but shifted in 2004 to the ministerial-level and high-influential National Development and Reform Commission (NDRC).

Although the CDM approval process stays exclusively with NDRC, the central government is encouraging provincial level authorities to consider the CDM as a means to reach local targets for energy efficiency, energy savings and emission reductions. The 11th Five-Year-Guideline (2006-2010) foresees to increase the energy efficiency of production by 20% in the next five years; and to increase the share of renewable energies in China's electricity generation from 8% in 2005 to 10% in 2010 and 16% in 2020. These targets have been allocated by the NDRC among provinces and industrial sectors, annual figures for the energy consumption per unit of output have to be made public for all regions and major industries, and energy efficiency improvement is now among the criteria used to evaluate the job performance of local officials. Among other measures such as the closure of small coal-fired power plants and inefficient industries, the CDM is regarded as one instrument to draw investments in clean energy infrastructure.

Although China has not established particular criteria for sustainable development for CDM projects, sustainable development benefits are expected out of projects that fall into the following three priority areas defined by the Chinese government its Measures for Operation and Management of Clean Development Mechanism Projects, Article 4:

1. Energy efficiency improvement,
2. development and utilization of renewable energies, and
3. methane recovery and utilization.

These priorities are reflected in the differentiated levies on the CERs sales form CDM projects: a 65% levy is charged on HFC and PFC projects, N20 projects have a 30% duty, while all other project types face only a 2% duty.

Because of its promise to contribute to sustainable development and because of its ability to draw foreign investment into energy infrastructure, the CDM is also hoped for to contribute to the government's Western Development Strategy. This strategy was launched in 2000 in order to speed up the development of the Western region by increasing inter-China technology transfer and financial investment from the East to the West. The CDM is thus an additional channel for transferring technology and investment from foreign countries.

In its National Climate Change Programme (2007:56), the Chinese government plans to enable the local capacities to encounter climate change and to contribute to mitigation efforts, and proposes the establishment of a regional administration system for coordinating the work in response to climate change, and of local expert groups on climate change, and a strengthened coordination between national and local governments for climate change policies and measures. So far, the government has mainly realised two approaches for a strengthening of the local capacities to deal with climate change:

1. *Provincial Climate Change Pilot Programmes.* Under the supervision of the NDRC and with financial support from the Italian government and technical support from the

World Bank China Office, the Energy Research Institute has supported five Chinese provinces in the development of their "Provincial Climate Change Pilot Programmes".

2. *Set up of Provincial CDM Centres.* Under the supervision of the Ministry for Science & Technology (MOST), and with financial support from various foreign donors and organisations, the Office for China's Agenda 21 (ACCA) has supported 27 provincial governments to set up "Provincial CDM Centres". The mandate of these centres is to facilitate the local CDM market development by disseminating information to local stakeholders and to give CDM trainings to local government officials and potential project owners. These centres also engage in the development of project planning documents (PDDs) for CDM projects, and are focal points for Beijing-based and international project developers sourcing CDM projects at the provincial level.

5. Independent variable: Interests of foreign donors

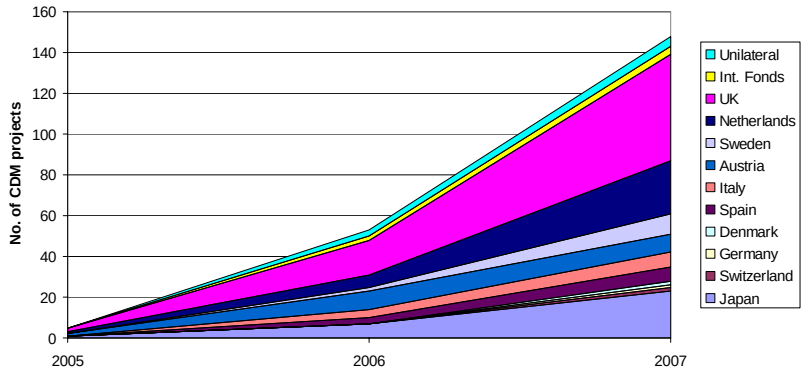
In the following paragraph the interests of major donors active in supporting CD4CDM programmes at the local level in China will be analysed for their impact on the projects' objective, timing and location.

Choice of objective

Concerning the objective and activities of CD4CDM projects, one major factor determining a donor's interest is their domestic demand for CERs. China is an attractive CDM host country as CER prices tend to be low[1] and general investment conditions are comparatively good. Countries of the EU ETS make up 89% of the buyers in China if compared by no. of CDM projects, but they make up 46% of the buyers if compared by calculated emission reductions up to 2012. This is explicable by the high CER yielding N_20 projects of Canada and the HFC projects of the international funds. When assessing the demand side for CERs, one has to distinguish between companies and governments from Annex I countries (e.g. Canada, Japan, European countries), and international funds and CER traders, who might have their CER registry established in one country (e.g. most traders are registered in the UK, some in the Netherlands), but do not necessarily only sell to their home country's companies. Thus the high demand of CERs from China by UK entities is not necessarily a sign that UK companies or the UK government are in high demand for CERs and thus eager to create CER supply by supporting CD4CDM projects, but just reveals that London has become the financial hub of the global carbon market.

[1] The Chinese government intervenes in the CER price negotiations and has set a current floor price of 8 USD/10 Euros in order to avoid dumping prices on the Chinese CER market.

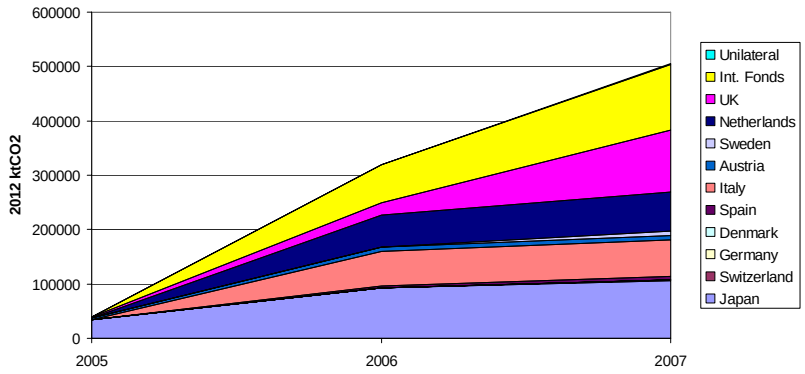
Graph 8: Buyers in China compared by no. of CDM projects



	2005	2006	2007
Canada	0	0	0
Japan	1	6	16
Switzerland	0	0	2
Germany	0	0	1
Denmark	0	0	2
Spain	0	3	4
Italy	0	4	3
Austria	1	8	0
Sweden	0	2	8
Netherlands	1	5	20
UK	2	15	35
Int. Fonds	0	2	2
Unilateral	0	3	2

Source: Based on UNEP Risoe CDM/JI Pipeline Analysis and Database, January 2008

Graph 9: Buyers in China compared by reduction of $ktCO_2$ until 2012



	2005	2006	2007
Canada	0	0	0
Japan	34738	58200	23462
Switzerland	0	0	1271
Germany	0	0	156
Denmark	0	0	1378
Spain	0	2541	3614
Italy	0	64538	2045
Austria	2234	5244	0
Sweden	0	757	7484
Netherlands	411	57408	14487
UK	2108	20895	91270
Int. Fonds	0	69759	50696
Unilateral	0	1067	767

Source: Based on UNEP Risoe CDM/JI Pipeline Analysis and Database, January 2008

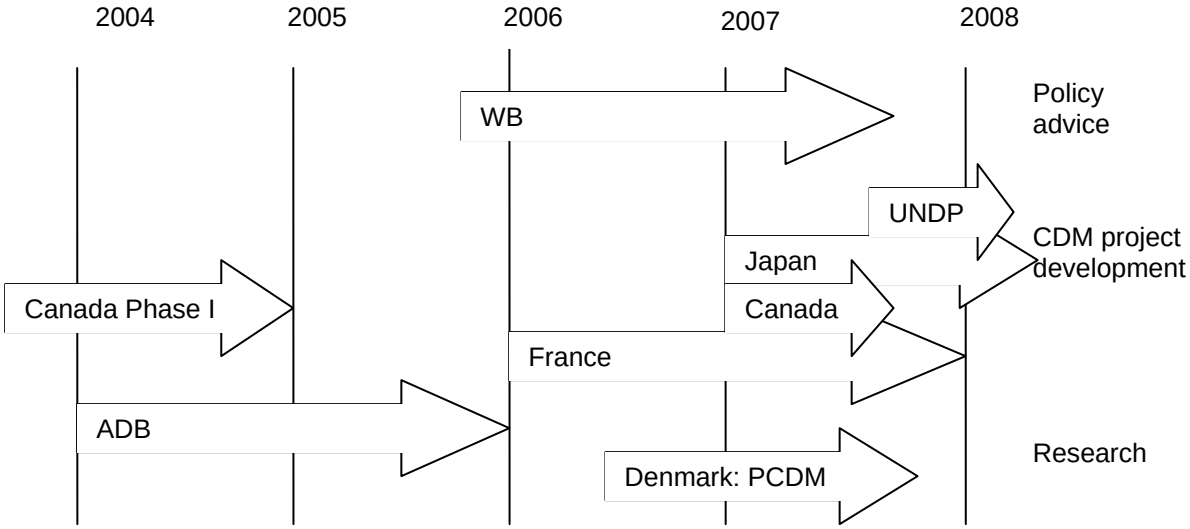
Keeping this possible distortion in mind, the two graphs 8 and 9 above tell us about the main buyers on the Chinese market: Japan is clearly among the largest and earliest buyers, probably due to the proximity and the familiarity of the Chinese market, thus one can assume that Japan also has a high interest in accessing the Chinese CDM market by supporting CD4CDM projects. European countries such as Italy (main buyer is ENEL, Italy's largest power provider), Spain (main buyer is Endesa, Spain's largest power provider) and Sweden (main buyer is Tricorona, a carbon trader) are buyers which take up a middle-sized share and started operations late in 2006 – they should also have in interest in CD4CDM with the objective of CER generation. If comparing no. of CDM projects with no. of CERs generated it becomes obvious that some buyers tend to go for few, but very lucrative projects: e.g. the international funds, which have in total only 4 projects, but are able to buy 25% of CERs. Canada seems to be thus an awkward case: it was one of the first countries to support CD4CDM projects at the provincial level and even expanded its initial project to four other provinces. Nevertheless, Canada has been well-exposed in terms of capacity development for the CDM at the provincial level, but it has not yet bought any CERs directly from a CDM project, not even from its "own" provinces, but has so far only bought CERs via international funds. Canadian internal political changes (from Kyoto supporter to Kyoto "laissez-faire" after change of the Canadian government in 2006) can explain this situation. The UK and France have sent trade delegations to the provinces of their CD4CDM projects: the UK Emission Trade Team visited Guizhou and a delegation of 10 French enterprises, CER buyers,

financiers and companies selling equipment for CDM projects have visited the South-western provinces, where ADF has a CD4CDM project. Although UK companies have a 38% share of CERs sold from Guizhou province this may but must not be induced by the CD4CDM project's activities as it merely mirrors the percentage of UK's CER purchase from the Chinese total (UNEP Risoe CDM/JI Pipeline Analysis and Database, October 2007).

Choice of timing

The timing of a CD4CDM project is probably hardest to explain as many internal factors within a donor agency and within the bilateral negotiation process are influential. However, the shift in time in the demand for CERs by a donor country is one factor which can explain the timing of a CD4CDM project aimed at CER generation. Some European countries that had not had a very large CER demand in the beginning like Germany or France have so far been absent as CER buyers, have taken a low profile in supporting CD4CDM project in China and are just starting to get engaged. While Germany has so far organised several match-making events linking already existing buyers and sellers, France has launched its own local CD4CDM in four provinces already in 2006, supporting potential project owners by trainings and CDM publications.

Timeline 1: Selection of CD4CDM programmes by different donors



Choice of location

The choice of a Chinese province by a donor is done in close cooperation with the Chinese government entity responsible for project implementation. This is in most cases either the National Development and Reform Commission (NDRC) or the Ministry of Science and Technology (MOST). As outlined before, one can assume a priority for CD4CDM projects in the Western provinces and for CDM projects in the three priority areas by the Chinese Government. Concerning the interests of foreign donors for a special Chinese province, two main factors seem to be relevant: Historical linkages and an interest of domestic companies to enter or extent their market presence in a Chinese province.

Historical linkages of foreign donors can be tracked back for Japan and European countries. Due to its geographical proximity, Japan has traditionally close ties with the Eastern province of Shandong. Japan is – after South Korea and Hong Kong -

the third largest investor in Shandong (Shandong Province Centre 2008). Thus one assumes that Japanese companies are also eager to become partners of CDM projects in Shandong. It was quite natural for Japan to choose Shandong as a province to get involved with a capacity development project supporting the set up of a provincial CDM Centre and having the "first right of purchase" for CERs generated by this Sino-Japanese CD4CDM programme.

Another case where historical linkages have been influential on the choice of provinces is the Sino-French CD4CDM programme. The French Development Agency (ADF) supports the Chinese Ministry of Science and Technology for the set up of four provincial CDM Centres in the South-western provinces of Yunnan, Sichuan, Guizhou and Guangxi. This choice of provinces reflects the previous historical presence of France, having been active in trade with the South-western provinces bordering Vietnam since the 19th century. This historical connection continues today by a relatively large presence of French companies in the region (Interview with a representative from ADF, Beijing, 23 October 2007).

Alternative explanations

Other motives than a country's CER demand can be considered to play a role in the choice of CD4CDM programmes for donors who have no or only a low need for CERs:

1. *Organisation's mandate*. Most multilateral organisations active in China such as the World Bank, the ADB and UNDP are all taking up CD4CDM projects which focus not on CER generation but on either policy advice or on attempts to steer the carbon finance into CDM projects which have explicit sustainable development benefits, e.g. because they are small-scale projects (ADB's programme promoting small-scale CDM projects in Gansu and Guangxi), or because they take place in the underdeveloped regions and are chosen for their contribution to sustainable development (UNDP's MDG Carbon Facility), or because they can provide policy advisory as a catalyst for the Chinese government for innovative methodologies, technologies and project types (e.g. Italy's/WB's Provincial Climate Change Programme, which – through the National Development and Reform Commission – assists provincial governments to develop local level plans for mitigation and adaptation).
2. *Diplomatic considerations.* CD4CDM projects can also serve the purpose of establishing good diplomatic relations with the host country, and especially with the relevant governmental bodies working e.g. on the issue of climate change. The Danish research project on the Programmatic CDM in collaboration with leading Chinese research institutions could thus serve the dual purpose of a) initiating Chinese research towards new CDM options for the post-2012 period, and b) establishing good working relations with the cooperating NDRC with the hope of positive contributions of the Chinese delegation at the COP/MOP 15 scheduled for Copenhagen (Remark by a researcher participating in the Danish PCDM programme, Beijing, January 2008).

Depending on the motivational background of donors is also the credibility of their policy recommendations to the Chinese government. While countries with a high demand for CER which focus mainly on CER-generating CD4CDM programmes like Japan and Italy do not seem to have much influence on the political agenda, multilateral organisations with CD4CDM programmes clearly intended to contribute to

China's sustainable development, can be expected to be more neutral in their advice. Also countries with low CER-demands could have a high credibility (Michaelowa 2005:11), but these countries often do not show a high profile on CD4CDM projects in China.

IV. Conclusion

This article has given a preliminary analysis of the current situation of Sino-foreign Capacity development projects for the Clean Development Mechanism (CD4CDM). China has experienced a growing interest of foreign donors' in supporting CD4CDM projects at the provincial level. Consequently, the Chinese CER market has been sliced up like a cake among different donors for their different CD4CDM projects. Questioning the reasons behind donors' boosting support, this article examined the question which interests donors have when deciding on objective, location and timing of their CD4CDM programmes. Findings show that multilateral organisations are only involved in programmes which are in line with their mandate to e.g. promote sustainable development, while governments of Annex I countries of the Kyoto Protocol seem to be at least partly motivated to support provincial CD4CDM programmes in order to develop CDM projects and buy CERs for their Kyoto compliance.

Securing an access to the local CDM market is fine as an objective in itself as it is in line with the Chinese government (which sometimes even grants "first right of purchase" to donors for CERs generated by their CD4CDM programmes) and with the DAC decision (OECD 2004) that allows for ODA to be used in CDM projects as long as the value of any CERs received in connection with an ODA financed CDM project leads to a deduction of the equivalent value from ODA. Capacity development programmes with the explicit aim to have PDDs ready for own governmental or private CER purchases, however stay in the "grey zone" (Dutschke/Michaelowa 2003) of the ODA – CDM nexus. They should be welcomed if they contribute to launching CDM projects or help to develop new methodologies that are not (yet) attractive for private investors, but should be seen critical if they merely initiate business-as-usual CDM projects.

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