

CHAPTER 3: BENCHMARKING OF COMPETITOR NATIONS FOR CDM INVESTMENT, ANALYSIS OF TARGET COUNTRIES FOR CDM INVESTMENT ATTRACTION.

3.1 OVERVIEW

Developing countries are positioning themselves to act as a host for CDM projects in various sectors. Many of these projects emanate from Annex 1, developed countries and are designed to assist these countries in mitigating their GHG emission levels as mandated by the UNFCCC. The ability of developing countries to propose and implement CDM project activity – ie. unilateral projects – has been accepted in cases where PCF or private non Annex participants are involved. This is evidently stronger in Brazil, to a lesser extent in India and also in the case of the first South African landfill gas projects where PCF acts as a project financier. These projects have resulted in a flurry of activity by Annex 1²⁵ country development assistance agencies in developing countries, in an effort to position themselves to be first movers and participants when CDM projects are implemented. The assistance on offer from developed countries range from capacity building, institutional set-up and advice, research and project development efforts. Annex 1 developed countries use this influence to steer project development in areas that are beneficial to their companies and the competence they possess from a technological or operational perspective.

3.2 BENCHMARK OF COMPETITOR DEVELOPING COUNTRIES

An assessment of how other developing countries have reacted to the challenges posed by CDM will be instructive to the South African process. The extent to which these countries have created an efficient and simple institutional framework, procedures, and the support given to CDM projects will point to the benchmarks set by competitor nations vying for CDM investment. This aspect of the study analyses the efforts of Brazil, India, and China in this respect and seeks to draw out lessons for South Africa. These three countries are at various stages of implementing CDM institutions and policy formulation and are therefore able to offer a varied experience that South Africa can benefit from given in its early stage in setting institutions and promoting projects. The parameters considered for these three countries included:

²⁵ UNFCCC, Annex 1 lists countries as those developed or “economies in transition” that have GHG mitigation responsibilities.

- Institutions involved in managing CDM, the procedures to facilitate investments, the role of national and international bodies
- Mechanisms that offset transaction costs for CDM projects including supporting domestic Designated Operating Entities
- How CDM investment is promoted in these countries

3.2.1. Analysis of Brazil

3.2.1.1 Institutions, procedures, and the role of national or international agencies

Brazil was the first to propose the introduction of a Clean Development Fund in climate change negotiations that would fine polluters in developed countries and be utilized to transfer technology to developing countries to enable lower GHG emissions. This was accepted after negotiations as the CDM which is one of the three flexible mechanisms in the Kyoto Protocol for stabilizing GHG emissions globally. A Presidential decree in 1999 created the “Inter-ministerial Commission on Global Climate Change” (CIDES), with the purpose of articulating Brazil’s position relative to the UNFCCC and its subsidiary instruments to which Brazil is a party.²⁶ The decree www.mct.gov.br/clima/ingles/comunic/cimgc.htm provides the rationale for the composition and nature of the Commission from a Brazilian perspective.

The decree established that the Minister of Science and Technology would hold the Presidency or chair of the Commission while the Minister of Environment the vice-Presidency. The Ministry of Science and Technology (MST) would be responsible for the function of the Executive Secretariat. The MST was chosen to head the body since it has previously developed national activities that facilitated compliance of Brazilian commitments to the UNFCCC.

This Commission would be the de facto Designated National Authority (DNA) in Brazil. The decree recognizes the cross cutting horizontal nature of the work of the DNA and also includes other Ministries as members, these include the Ministries of Mines & Energy, Transport, Development Industry & Trade, Agriculture & Supply, and the Environment. Other Ministries involved in long term planning and macro-economic policy such as the Ministry of Budgeting & Management and the Ministry of Special Projects are also included.

²⁶ Presidential Decree of 7 July 1999, Creating the Interministerial Commission on Global Climate Change.

In Brazil, all international negotiations are undertaken by the Ministry of External Affairs, and this Ministry is included in the Commission in order that all climate change negotiations are centrally led.

A key area of work for the Commission includes analysing limitation or reduction of emissions in projects of different sectors. As such the MST which is regarded as having no specific sector responsibility was regarded as the best option to lead the Commission. The creation of the Commission was followed by the strengthening of the existing structures in the MST, so that activities around climate change could be implemented and executed appropriately. The structures in MST act as the secretariat to the Commission and this has been the rationale for the additional resources in personnel. This DNA/Commission would also consider the definition of additionality criteria beyond that advocated by the rules of the Kyoto Protocol.

The Executive Secretary of the Commission²⁷ has indicated that it is currently establishing the procedures for approval of projects and this is now being subject to public comment. There is the first resolution of the Commission posted on the internet and is only available only in Portuguese since it is meant for public consultation. This procedure for approval of projects, www.mct.gov.br/clima/comunic/resolu2.htm, will be finalized after public consultation and be published as an official document. The current text in Portuguese will be officially translated after the February 2004 deadline and gazette processes are undertaken.

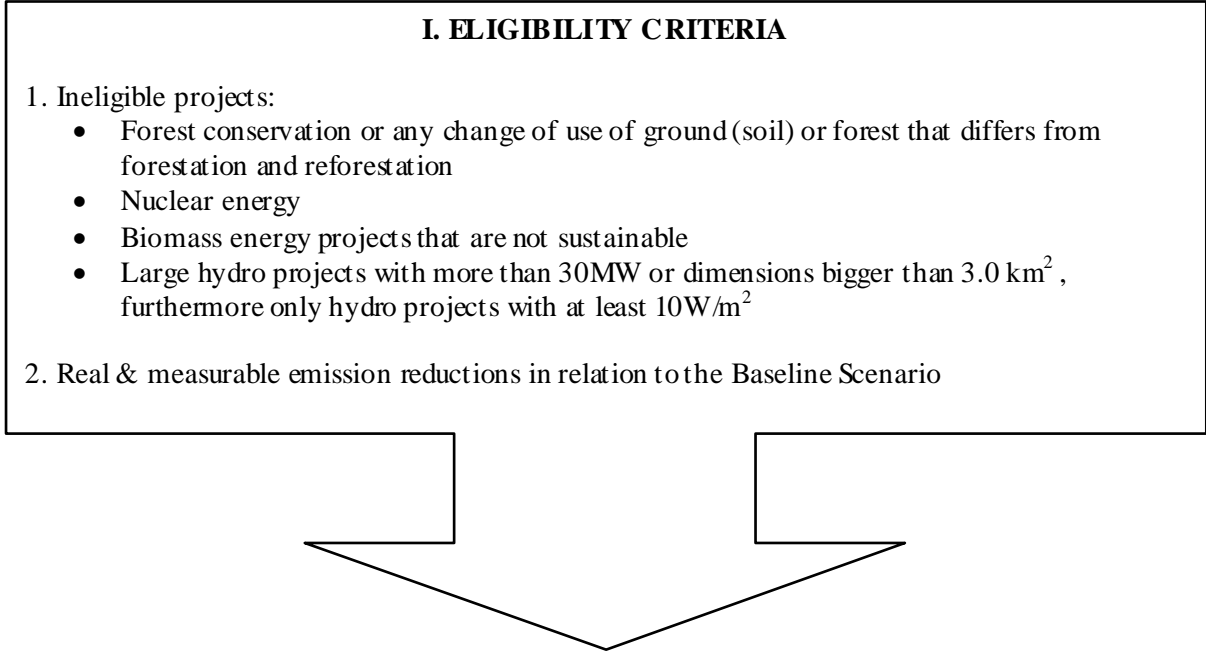
Brazil currently has the highest number of CDM projects (10) that have claimed CER's as of November 14, 2003.²⁸ These projects have been facilitated to a large extent by international funding mechanisms involving Annex 1 buyers. These include the CERUPT, IFC-Netherlands Carbon Facility, Netherlands Clean Development Facility managed by the World Bank. Other buyers have been direct government purchasers such as Sweden and Japan. Other technical cooperation agencies such as GTZ of Germany have been playing a role in preparing information platforms for CDM projects to take root in Brazil by jointly sponsoring websites that assist companies seeking basic information. This has been tied to German-Brazil joint ventures in consulting firms that offer CDM services, evidenced by offers of service by such firms to investors seeking CDM opportunities in Brazil. These firms offer an

²⁷ Interview via email, Jose Domingo Miguez, Executive Secretary, CIDES, 10 October 2003.

²⁸ CDM Watch, website at www.cdmwatch.org listing all CDM projects having a PDD and baseline

interpretation of how the CIDES/DNA will judge CDM projects to be implemented in Brazil. An example of this is detailed below in the diagram showing what the CIDES/DNA regards as eligibility criteria, priority indicators, and criteria with multiplier effects.

Figure 5: CDM PROJECTS ASSESSMENT*



II. PRIORITY INDICATORS

Indicator score	-2	-1	0	1	2
3. Contribution to the mitigation of global cc					
4. Contribution to Net Environmental sustainability					
5. Contribution to Net Employment Generation					
6. Impacts on Rent distribution					
7. Cont. to sustainability of BoP					
8. Contribution to Macro-economic sustainability					
9. Cost Effectiveness					
10. Contribution to Technological Self Reliance					

III. CRITERIA WITH MULTIPLYING POTENTIAL

- 11. Internalization of the possible CER benefits in the national economy
- 12. Possibility of regional integrity and interaction with other planned activities
- 13. Potential of technological Innovation

*Source: AHK Brazil, available on website, www.ahkbrasil.com.br/cdmbrasil/imagens/overview_1pdf

3.2.1.2. Specific mechanisms that offset transaction costs for CDM projects including supporting domestic Designated Operating Entities

The main effort from the Brazilian Federal Government is directed at providing a clear set of procedures that will enable project promoters to easily formulate PDD, Baselines, and procedures for getting CDM projects approved by the DNA. This process was alluded to earlier in this chapter and the public consultation process suggests that the CIDES/DNA will take into account the suggestions of other stakeholders in setting rules and procedures for the DNA. It is not clear what the existing general incentives are for investment and technology projects in Brazil and the assumption is made that these are not excluded for CDM projects and would thus be available. The executive secretary of the CIDES has indicated that the process of incorporating general incentives into CDM has not been a factor of policy making but it is not precluded in any manner.

No specific mention of financial incentives conceived solely for offsetting transaction costs associated with CDM projects are mentioned. The value created by CER's at the lowest possible cost are the only incentives mentioned as an offset against high project development cost for CDM projects. The Decree establishing the CIDES/DNA does indicate that the functions of the institution will be to make recommendations on sectorial policy and legal instruments, which could be used to mitigate climate change and allow Brazil to adapt to its impact. This gives the DNA an option of implementing for policy instruments that could ease the efforts to mitigate climate change.

It was indicated in chapter 2, that the Executive Board (EB) received 17 applications for the registration of DOE's, none of these 17 have yet been approved by the EB. Further, none of the applications have emanated from Latin America or Africa. While the effort evidenced thus far as concentrated on project facilitation services from joint ventures with Brazilian and foreign firms (mainly German), none of these efforts are directed at setting up local DOE's.

3.2.1.3 How CDM investment is promoted in Brazil

Brazil was one of the first developing countries to set up a DNA in 1999, and the Government predicted that due to its unique economic and environmental conditions, Brazil could be a large recipient of technology and investment due to CDM. As such the effort on the part of Government involved creating the relevant institutions such as CIDE/DNA to evaluate

projects. Brazil also benefits from being a large economy with a huge domestic and export sectors, which investors would see as advantages in Latin America.

The net result of this has been that foreign organizations active in CER trading such as PCF, CERUPT, IFC-Netherlands Carbon Facility, Netherlands Clean Development Facility, and Swedish, Canadian & Japanese Government agencies have viewed Brazil as a low cost source of CER's with an institution to approve projects (CIDES/DNA) and thus are active in initiating projects. The Executive Manager of the CIDES has indicated²⁹ that Brazil has not made an overt attempt as yet to source CDM projects and many of the active project participants were attracted on the basis that the DNA was in place and that they saw potential low cost CER's being generated in Brazil. Brazil has a similar network of foreign trade offices as South Africa, and it could be used in as a promotion instrument for FDI relating to CDM projects. Brazilian foreign offices, run by the Department of External Relations, provide similar services to their export and investor sector such as basic export market research, intensive role in trade relations or market access issues, and investment promotion.

The current projects with PDD and Baselines in place that the international institutions have been involved in as project participants or buyers of CER's have included projects involving:

- mono-culture plantation sinks
- fuel switching (unknown PP or buyer)
- gas capture or removal (PCF/CERUPT/IFC-NCF/Canada/Japan)
- renewable energy (CERUPT/Japan/Sweden)

²⁹Interview via email, Jose Domingo Miguez, Executive Secretary, CIDES, 10 October 2003.

Table 1: Summary of Brazil analysis

Brazil	
<p>Institutions, procedures, stakeholders</p> <ul style="list-style-type: none"> -Early establishment of DNA, broad govt. representation, elevation of Pres. Decree -Resources for DNA added to in MST -Procedures for public comment -Eligibility criteria clearly defined -International interest on cooperation is high -German/Brazil technical capacity building cooperation 	<p>Facilitating mechanisms in place</p> <ul style="list-style-type: none"> -Sector policies and legal instruments being conceived -Current incentive schemes could be utilized -DNA could motivate for policy instruments that ease climate change mitigation in Brazil -Regarding DOE's, no applications apparent from Brazil, project facilitation encouraged via German effort
<p>Promotion efforts</p> <ul style="list-style-type: none"> -Reliance on capacity to offer low cost carbon sinks as USP, huge domestic market, efficient institutions -No overt attempts yet to promote CDM -Could utilize foreign office network -Foreign assistance for PDD, baseline for various projects acquired. 	<p>General lessons</p> <ul style="list-style-type: none"> -Established institutions, procedures early in process secured highest number of project -Committed to adequate resources and cooperative governance for DNA -Utilize foreign assistance early & effectively -Exploit sector competitive costs to attract projects -Mobilize resources already in place to support CDM promotion

3.2.2. Analysis of India

3.2.2.1 Institutions, procedures, and the role of national or international agencies

India is currently embarking upon a National Strategy Study (NSS) for the CDM and hopes that this study will lead to an Action Plan which will operationalize CDM in the country. The Ministry of Environment and Forests has overall responsibility for the World Bank Funded NSS. The NSS being conducted by India via the Tata Energy Research Institute (TERI) has a broader set of objectives³⁰ than the NSS recently carried out by South Africa. These include:

- evaluating processes and institutional arrangements in India for CDM
- assess opportunities presented by the international demand for CER's
- assess CDM potential in different sectors in India
- recommend a framework for capacity building in CDM implementation
- develop a pipeline of CDM projects

³⁰ TERI, NSS – Implementation of CDM in India, www.teri.res.in, 2003.

India does not have a DNA set up as yet and it was revealed in discussion with the Head of CDM-India³¹ that the DNA would most probably be set up and operational before the end of 2003, since the NSS would take a longer period to complete. It is expected that the DNA will frame its own business plan with rules & procedures ahead of the completion of the NSS. Currently a Cabinet draft is being contemplated that spells out the duties and responsibilities of the DNA but this is not publicly available to assess the manner in which the DNA will look and operate. It is expected that the DNA will be refined once the recommendations from the NSS regarding institutional arrangements are available. TERI has called for Project Information Notes (PIN) as part of the NSS to establish a pipeline of CDM projects in India. The template for the PIN is available at the TERI website www.teri.res.in.

GTZ, the German technical assistance aid agency is an active player in the CDM environment in India and supports the Indo-German Energy Programme and an MoU is currently being envisaged to formalize the rules for trading and transacting and equity participation in CDM projects. Other players active in the Indian environment are CERUPT, PCF and the Governments of Sweden & Denmark. There are currently 8 CDM projects in India which have PDD, and baseline studies that are able to claim CER's³². These are being implemented in conjunction with these international agencies.

3.2.2.2. Specific mechanisms that offset transaction costs for CDM projects including supporting domestic Designated Operating Entities

CDM-India indicates that there are currently no incentives to lower transactions costs³³ and even point to trends that suggest that India may have an overly burdensome layer of procedures outside of CDM that could even aggravate these costs. An example cited is that PDD costs are estimated for India at between €8000-20 000, and that at prices of CER \$3 there are actually no additional income streams if all costs are factored into CDM projects. The Senior Energy & Technology Advisor to the Confederation of Indian Industry also indicates in the UK's Carbon Limited's online publication that the costs involved do not warrant CDM investment at these prices. TERI has indicated that CER's add 1-3% to the internal rate of return to CDM renewable energy projects, and in many instances this may provide the financial additionality needed for such projects to occur.

³¹ CDM-India, Email interview with Pamposh Bhat, Head of CDM India, Indo-German Energy Programme.

³² CDM Watch, website at www.cdmwatch.org listing all CDM projects having a PDD and baseline

³³ CDM-India, Email interview with Pamposh Bhat, Head of CDM India, Indo-German Energy Programme

CDM-India reports that in many instances, renewable energy projects by state power utilities are signing energy off-take contracts at rates which will discount CER within the tariff should CER's be sold. This indicates a further reduction in rates investors in CDM projects will realize, since CER benefits are already discounted in off-take prices with customers.

The recent call by TERI for PIN's has resulted in some offset of costs involved in the preparation of PIN's. The following specific costs are handled in the following manner by NSS-TERI:

- analysing PIN's
- expenses of developing PDD for short-listed PIN's
- no registration costs for PDD will be covered.
- Facilitation of reviews of select PDD's to buyers including the PCF and others

CDM-India indicates that India initially had a major interest in cultivating local DOE's and a major effort by many Indian companies to seek registration. The current perception of the commercial risk involved for many local entities as caused many to reconsider this option. In fact all Indian candidates withdrew from this process, and at present no Indian firms are among the 17 who have applied for registration. Even international firms who are keen on being DOE's have not opened branches in India due to the operational risk of assessments being compromised and exposure to heavy fines by the EB at a later stage. Currently the CDM-India project does have a mechanism to support local firms with training and technical capacity if an application is made for registration as a DOE. The CDM-India programme will also support development of a PDD for the amounts given above.

3.2.2.3 How CDM investment is promoted in India

India is one of the fastest growing and most energy-intensive economies and it has a clear advantage over other developing countries in its record of usage of renewable and clean energy.³⁴ As a result India has benefited from the second highest number of CDM investments after Brazil. The 8 projects are implemented with the assistance of a variety of

³⁴ Carbon Limited, Online report, 2003

international role-players in the CDM field.³⁵ These include CERUPT, PCF, USAID and the Governments of Sweden & Denmark. The projects include:

- Renewable energy - wind (CERUPT buyer/Denmark & Sweden technology partner)
- Energy efficiency (PCF buyer)
- Clean coal for integrated gasification combined cycle power plants (USAID)
- Fuel switching (PCF buyer)

In the Indian context renewable energy dominates the projects undertaken and wind farms are particularly advanced with the assistance of Danish and Swedish technology transfer. CDM-India categorises the situation in India as one where there are numerous purchasers of CER's but a lack of ability to deliver good projects. This differs markedly with the SA approach which has been to align itself with a select foreign assistance programme with only certain foreign governments/agencies.

The current draft before the Indian Cabinet plans to split the DNA into a regulatory/approval division and a promotion division. This is speculative at this stage and the final decision from Cabinet is still awaited. The NSS is also expected to make recommendations in this regard and this will probably fine tuned into the final outlook for the DNA in India. The expected decision for clarity from Cabinet on the DNA is expected before the end of 2003.

³⁵ CDM Watch, website at www.cdmwatch.org listing all CDM projects having a PDD and baseline

Table 2: Summary of India Analysis

India	
<p>Institutions, procedures, stakeholders</p> <ul style="list-style-type: none"> -Still setting up DNA via Cabinet Resolution by end 2003, rules, procedures and business plan to follow -NSS to fine tune character of DNA at later stage with broad mandate of DNA, opportunity assessment, potential, capacity building, pipeline of projects, PINs -Use of GTZ, UK, Swedish, & Danish assistance to build capacity & project assistance 	<p>Facilitating mechanisms in place</p> <ul style="list-style-type: none"> -No Govt. schemes in place presently, acceptance of high bureaucratic costs. -PDD costs offset by foreign agencies -NSS support for PIN costs and PDD's -Support for DOE training possible via int. agencies
<p>Promotion efforts</p> <ul style="list-style-type: none"> -India has high CER costs, huge domestic market, to attract CDM -No overt attempts yet to promote CDM -Could utilize foreign office network -Has 2nd highest CDM # of projects despite no DNA -Fields of projects renewables, energy efficiency, clean coal technology, fuel switching 	<p>General lessons</p> <ul style="list-style-type: none"> -Use areas of weakness – low energy efficiency, commit to renewable targets etc -Use of PM to elevate projects, Cabinet resolution on DNA set up -Mobilize resources already in place to support CDM promotion, foreign office network -Utilize all avenues of foreign assistance

3.2.3 Analysis of China

3.2.3.1 Institutions, procedures, and the role of national or international agencies

China announced ratification of the Kyoto Protocol at the Johannesburg World Summit for Sustainable Development in August 2002. Although China accepted no mandatory greenhouse gas (GHG) emissions target under the Protocol, Chinese agencies have been working to define and develop programs to reduce carbon emissions in cooperation with international partners under the Clean Development Mechanism (CDM) emissions reductions trading program. China's State Development and Planning Commission (SDPC), Ministry of Science and Technology (MOST), State Economic and Trade Commission (SETC) and Ministry of Foreign Affairs (MFA) have spelled out draft guidelines for a National CDM Management Office. The State Council is considering these guidelines and it is envisaged to have a National CDM office functional in the near future. China has also sought funding from numerous multilateral and international donors for capacity building and technical programs related to the CDM program.

In October 2002, MOST, SDPC, SETC and the MFA submitted a joint recommendation³⁶ to the State Council calling for the establishment of a National CDM Management Office along the following lines:

- MOST, SDPC, SETC and MFA should be the key governmental actors in all CDM projects;
- The four agencies would form an inter-ministry CDM Project Review Board, that would be the decision-making body for CDM projects and policy;
- The CDM Board must approve all projects;
- A CDM Secretariat/Administrative Center will serve the Board and carry out daily administrative work;
- The "implementing agency" should be a Chinese entity that partners with a foreign entity to carry out a CDM project; it is not clear if this precludes unilateral projects.
- After passing through the CDM Board, projects should be verified/certified by an independent auditor. After this certification, the CDM Board would send Certified Emissions Reductions (CER's) to the relevant country or company account;
- A "Cost Recovery Approach," using a flat commission rate, should be considered in order to enable the government to recover its expenses used for monitoring and evaluating CDM projects. This rate would be set somewhere between 1% and 5%, but most likely at 2%.

According to officials, China will have a "one-stop" CDM project approval process. Chinese provincial or local government bodies will not be allowed to clear or approve CDM projects independently. The national CDM Board will be composed of working-level (Office Director or Bureau Director General level) officials. The Board will ideally review each proposal within a week to ten days, before forwarding each project to a Minister or Vice Minister for final approval. The senior official approving each project will be responsible for issuing approval letters to project participants.

China has also sought funding from international donors in order to build capacity and set institutions for CDM purposes. Canada has probably been the most active international partner. Canada's International Development Agency (CIDA) has already used \$11.5 million

³⁶ US Embassy Beijing Report, 2003, "China Pursues Kyoto Protocol's CDM". www.usembassy-china.cn

to fund six projects related to capacity building and technology transfer, in order to help China kick-start its CDM process. (Canada's Climate Change Development Fund has \$76 million to be allocated worldwide.) The six Canadian projects focus on:

- Capacity building on "awareness and outreach," "national communications," and "impact and adaptation";
- Enhancing China's capacity for carbon sequestration (capacity building in terrestrial carbon cycle monitoring and modeling);
- Coal bed methane technology (CO₂ sequestration at point of mining);
- Reduction of CO₂ emissions from coal-fired utility boilers;
- Solar energy for rural electrification in Western China; and
- Renewable energy diversification (primarily promotion of small hydropower facilities).

Canada has made an additional \$3.2 million available for China projects, to be implemented through the Canada Trust Fund on Climate Change managed by the Asian Development Bank (ADB). Other international organizations active in the CDM field are ADB on small scale projects, Japan on energy efficiency, and Australia on statistics collection. The US has also a working group with the Chinese on Climate change that focuses on climate related research. The Netherlands has also financed a feasibility study for the iron steel, and chemical sectors and will act as a buyer of CER's from any resulting project at between \$5-10/ton of CO₂. The World Bank is financing a feasibility study in the power sector which ends at the end of 2004.

It is of note that China only has 2 projects that currently have a PDD and Baseline Study for 1.4m CER's and this compares to South Africa's two projects with 9.4m CER's³⁷. This alludes to the difficult investment environment in China and a lack of clear policy indication until recently on its view to CDM. The Chinese economy and the domestic market make China an attractive destination for FDI and also CDM projects, but this is offset by the bureaucracy levels and unclear policy positions.

³⁷ CDM Watch, website at www.cdmwatch.org listing all CDM projects having a PDD and baseline

3.2.3.2. Specific mechanisms that offset transaction costs for CDM projects including supporting domestic Designated Operating Entities

The major rationale for CDM projects in China are the high energy demand, heavy reliance on dirty coal, and low baselines of energy efficiency.³⁸ Studies conducted indicate that reductions of GHG emissions could cost as much as \$10/ton of carbon. The donor assistance provided by Canada is at the forefront in implementing small scale projects with the ADB, and it remains to be tested if these projects will be able to claim CER's.

There is no policy position that the Chinese Government would seek to attract CDM projects by offering cost mitigating incentives. Instead the reliance of the market power of China which is the largest recipient of FDI, the establishment of a National CDM Management Office, and the setting of clear procedures is regarded as sufficient to attract CDM projects to China. Thus far a reliance on foreign aid funding is apparent with no real costs being offset by the Government. China also proposes a "Cost Recovery Approach," using a flat commission rate of 1-5%, in order to enable the government to recover its expenses used for monitoring and evaluating CDM projects. Current incentives generally available from Cities, States and the National Government relate to industrial infrastructure set out in industrial estates where low cost establishment costs are the norm.

The US embassy report also indicates that the Chinese authorities involved in the institutional development for CDM are also keen to ensure that local DOE's are encouraged in order to ensure that costs are kept to a minimum. It is unclear from the information available from the EB if any Chinese DOE's have applied for registration, since the applicants are listed according to region rather than country. None of the donor activity reported on is listed as in support of creating local DOE's in China.

3.2.3.3. How CDM investment is promoted in China

China's two CDM projects currently with PDD and baseline studies³⁹ are supported by CERUPT in the renewable energy sector and has no listed Annex I buyer for a project in energy efficiency. Other projects in the pipeline are beneficiaries from the Canadian CIDA

³⁸ US Embassy Beijing Report, 2003, "China Pursues Kyoto Protocol's CDM". www.usembassy-china.cn

³⁹ CDM Watch, website at www.cdmwatch.org listing all CDM projects having a PDD and baseline

programme or the Canadian sponsored ADB small scale programme.⁴⁰ The German Government has three-year financing support mechanism for proposal to develop a 20MW wind power project that is expected to be finalized this April for Chinese government approvals. The feasibility study findings, as well as the potential of selling the emission reductions generated from the project to other developed countries are being contemplated. Procedures contemplated for the National CDM Management Office do not indicate any overt use of Chinese Ministry of Foreign Trade and Economic Cooperation (MOFTEC) which has a network of foreign offices that promotes exports and investment in major economies globally. Indications from interviews carried out with senior officials⁴¹ are that the Government is indicating that it is eager to clear administrative barriers for CDM business in China and that wind power projects will be a priority.

Table 3: Summary of China

China	
<p>Institutions, procedures, stakeholders</p> <ul style="list-style-type: none"> -Currently setting National CDM Mngt. Office -Multi agency/Ministry guidance for Office and guidelines -Effort to streamline processes, timelines -Foreign funding actively sought for capacity building, project set up, technology transfer -Canadian effort most substantial with ADB -US research collaboration, World Bank support 	<p>Facilitating mechanisms in place</p> <ul style="list-style-type: none"> -Low # of projects with PDD/Baseline -Reliance of huge domestic market -Negatives include difficult invest. environment lack of clear policy -Use only of foreign aid to offset costs -Current local, province level incentives could be available -Indication DOE's will be promoted
<p>Promotion efforts</p> <ul style="list-style-type: none"> -Currently two projects in renewable energy -No effort to use MOFTEC offices yet -Admin barriers will be reduced -Fields of projects include renewables, energy efficiency, clean coal technology, fuel switching 	<p>General lessons</p> <ul style="list-style-type: none"> -Late entry, using market dominance -Inclusive use of all major state organs for DNA -Active foreign donor assistance program as policy path -May be over-reliant on market power as in the case of other FDI -Low project up take could be due to slow starter status, may change with efforts in place.

⁴⁰ US Embassy Beijing Report, 2003, "China Pursues Kyoto Protocol's CDM". www.usembassy-china.cn

⁴¹ Green Capital Staff Reporter, 2003, China and Germany work together to promote a wind-farm in PRC, www.greencapital.cimc.com/co2/chinafocus/1/php

3.3 ANALYSIS OF TARGETED DEVELOPED COUNTRY INVESTORS

3.3.1 The Netherlands

3.3.1.1 Policy framework, institutions & structures that facilitate outward CDM investment

According to the agreements reached in Kyoto and subsequently in the European Union, the Netherlands has a 6% emission reduction target for GHG emissions (carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and the fluorinated gases: HFCs, PFCs and SF₆). The Dutch government has agreed that a substantial part of this reduction should be achieved within the Netherlands itself and the remaining part should be achieved in other countries through the three Kyoto mechanisms.⁴² The Netherlands is one of the first countries, which have earmarked public funding for buying CO₂-reductions by CDM. The Ministry of VROM (Housing, Spatial Planning, and Environment) is responsible for the implementation of CDM. VROM has also been assigned as Designated National Authority (DNA) for CDM in the Netherlands.

The Dutch government has a substantial budget available for the implementation of CDM. In April 2001, the Ministry of VROM set up a CDM Division as part of the International Environmental Affairs Directorate of the Ministry. The responsibility of the division is to use the funds allocated by the Dutch government to purchase Certified Emission Reductions (CERs) from sustainable projects in developing countries in a cost-effective manner. The purchase of CERs should create an additional return on project investments. As a result, sustainable projects can be realized, which would not have been feasible without the possibility of selling CERs. The Ministry of VROM intends to purchase CERs through the following four tracks:

- Multilateral international financial institutions;
- SENTER International, a Dutch agency acting on behalf of several Dutch Ministries;
- Private financial institutions;
- Bilateral purchase-agreements with Host Countries.

⁴² Third National Communication on Climate Change, 2003, Submitted to UNFCCC, www2.minvrom.nl/pagina.html2

Via the above ways VROM is contracting various organizations to act as intermediaries for the purchase of CERs. Under the guidance of VROM, these intermediaries select sustainable projects in developing countries and purchase the resulting CERs for the benefit of the Ministry. Investors from all countries may submit CDM-project proposals to these intermediaries that will judge these projects, including the compliance with the requirements.

Currently the Ministry of VROM has contracted the following organizations which are relevant for South African CDM proponents.

Rabobank

Rabobank is an internationally operating private bank focusing on the food and the agribusiness. South African CDM project proposals may be submitted to the Rabobank and more information about the CDM funds can be received by contacting Engel Koolhaas at Engel.ejr.Koolhaas@utc.rabobank.com.

International Finance Corporation (IFC)

IFC is also known as the IFC-Netherlands Carbon Facility (INCaF). South African CDM project proposals may be submitted to the IFC and more information about the CDM funds can be received by contacting Vikram Widge at ywidge@ifc.org

International Bank for Reconstruction and Development (IBRD)

CDM project proposals may be submitted to the IBRD and more information can be received by contacting Chandra Shekhar Sinha at csinha@worldbank.org.

SENER International

SENER International has organized a CDM tender called CERUPT in late 2001 for investment projects in developing countries. CERUPT acts as mechanism where the Dutch Government acts as a purchaser of CERs subject to criteria set out late in this chapter. There are currently 18 projects in 9 countries and more than 75% of the projects are in renewable energy, This tender closed on 31 January 2002; for the time being no new projects will be considered. For more information on CERUPT, contact Mr. Adriaan Korthuis at a.korthuis@sener.nl.

The various procedures with these various institutions are listed as [Annex 1](#) in the report for interested SA companies to access.

A prerequisite for South African project proponents to note is that the host country must approve of projects prior to any transfer of CERs. In order to facilitate the process of Endorsement and Approval of CDM projects by host countries, and thus assisting project participants, the Netherlands signs Memoranda of Understanding (MoUs) with those countries. The MoUs focus on a long-standing CDM co-operation with host countries with a high potential CDM projects. However, the conclusion of an MoU is no prerequisite for CDM co-operation with the Netherlands. The host country will still have to approve of each individual CDM project by issuing the formal Letter of Approval, whether an MoU has been signed or not. Memoranda of Understanding have been signed with Colombia, Costa Rica, El Salvador, Guatemala, Nicaragua, Panama, and Uruguay.⁴³ The Netherlands has also used bilateral contracts with governments of potential host countries for CDM-projects.

3.3.1.2 Support mechanisms and sector focus for outward investment to be targeted

Under the Dutch CDM programme, projects eligible for CDM include renewable energy, such as wind, solar, geothermal, hydro and biomass (clean) energy; energy improvement; transportation improvement; recovery and utilization of methane from waste landfills and coal mines and/or fossil fuels-switching to less carbon-intensive sources (example: from coal to natural gas).⁴⁴ Projects not eligible for financial support from the Dutch CDM programme include:

- Aforestation and reforestation projects (pending decisions of COP 9 in 2003)
- Projects related to nuclear energy;
- Projects that are not cost-effective for the Netherlands (this can be verified by contacting the intermediary organization for project requirements);
- Projects which may result in severe damage on biodiversity or on social livelihood.

3.3.1.3 How the Dutch can Assist South African projects with Baselines

In all cases, greenhouse gas reductions are expressed as the difference between the actual emissions of a project and the emissions that would have occurred in the absence of this project; the latter is also referred to as 'the baseline'. This baseline is the reference for

⁴³ Ministry of VROM, 2003, Memoranda of Understanding, <http://www2.minvrom.nl/docs/internationaal/MOU>

⁴⁴ Op cit.

calculating the amount of GHG reduced and has to be defined for each separate project. The international community has not yet agreed upon a sophisticated set of baseline methodologies. In order to facilitate a prompt start of the Dutch CDM programme, the Ministry of VROM has developed its own set of guidelines for baselines, which can be used by project developers. In addition, VROM has developed standardized baselines for small-scale projects. In January 2003 the executive board of COM launched a package of simplified modalities for small-scale CDM projects, including a “simplified CDM project design document” for registering such projects, and an “indicative list of simplified baseline and monitoring methodologies”, helping project proponents to lower costs for complying with CDM rules. Those standards may be downloaded from the [UNFCCC](#).

The procedure adopted by the Dutch Government for CDM projects can be downloaded at <http://www.ecn.nl/docs/library/report/2000/c00026.pdf>. The Dutch CERUPT programme includes the following individual implementation steps:

1. The investor plans a project, whose feasibility has been adequately reviewed.
2. The draft project is submitted to the host country's government and assessed to see whether it can be approved.
3. During the CERUPT submission period -- which depends on the host country involved -- the investment project is submitted to Senter.
4. Senter assesses the project for funding and feasibility.
5. Once this assessment has been completed, Senter invites a number of companies to submit a detailed proposal for the project. The proposal must define the baseline scenario and include the Letter of Approval by the host country. Additionally, the [baseline](#) scenario must have been validated by an impartial third party.
6. Senter assesses the detailed proposal on the basis of the price at which carbon credits are offered, the feasibility of the project and its sustainability. In this context, Senter also checks the [validation](#) and Letter of Approval and concludes corresponding contracts.
7. In cases involving [JI projects](#), Senter may, depending on project progress, provide advances of up to 50% of the total amount of carbon credits during the term of the contract. The remaining payments follow annually on delivery. In cases involving [CDM projects](#), payments are only made on delivery. Projects need only reduce emissions by 100 000 tCO₂e to be considered for the CERUPT programme.

It is quite clear that South African project proponents will therefore not be able to use CERUPT as a means of pre-financing project capital costs of preparation costs. CERUPT has also been purchaser in 18 projects in 9 developing countries world-wide and a total of 17 million tCO₂e have been purchased.⁴⁵ These projects have ranged from renewable energy, gas capture and removal, hydro-electric schemes, & energy efficiency. A detailed report on these projects can be viewed at www.carboncredits.nl.

3.3.1.3 Factors considered in evaluating attractiveness of CDM destinations

The Dutch programme is geared to the purchase of CERs rather than in actual project implementation. As such it holds certain disadvantages for South African project participants who may be looking for assistance in the financing of CDM projects. Since the Dutch scheme does not provide any pre-financing for CDM as it does for Joint Implementation projects, other sources of finance need to be tapped for costs related to PIN, PDD costs, new methodology development etc. While VROM has developed standardized baselines for small scale projects and can fund baseline study costs, other funding would need to be sourced from incentive schemes covered in Chapter 2 of this report.

The factors that the Dutch programme use to evaluate the attractiveness of a destination that is relevant for South Africa include the following⁴⁶:

- Has the host country ratified or explicitly stated its willingness to ratify the Kyoto Protocol
- Does the host country approve of the project via formal letter of approval and does it have a CDM focal point (or a formal DNA). This needs to be done for every project individually.
- Does the host country have a formal Memorandum of Understanding with the Netherlands? A bilateral contract to buy credits for a CDM project with the South African Government would be an alternative. This still needs to be addressed at the level of the government –to government agreement by the SA Government.
- Do the projects conform to the areas that the Dutch consider for CDM ie. renewable energy, such as wind, solar, geothermal, hydro and biomass (clean) energy; energy

⁴⁵ CDM Watch, website at www.cdmwatch.org listing all CDM projects having a PDD and baseline

⁴⁶ SENTER, 2003, Eligibility Criteria, www.senter.nl

improvement; transportation improvement; recovery and utilization of methane from waste landfills and coal mines and/or fossil fuels-switching to less carbon-intensive sources (example: from coal to natural gas)

- The cost at which credits are generated forms the basis of the assessment if companies are then asked to submit proposals for taking the project forward.
- A clear regulatory and legal environment for the project area is also helpful for reducing this risk to the project.

Table 4: Summary of the Netherlands

The Netherlands	
<p>Policy, Institutions, structures</p> <ul style="list-style-type: none"> -EU/Dutch targets set scene for CDM/JI project activity, under Min VROM as DNA -Substantial budget made available -Using intermediaries to buy CERs -MoU's with host countries prerequisite -CERUPT tender for CER projects -Endorsement and Approval required for CERUPT involvement by host institutions 	<p>Support provided and sector focus</p> <ul style="list-style-type: none"> -Eligible projects include RE – wind, solar, geothermal, hydro, & biomass – energy improvement, transportation, recovery of landfill methane, fuel switching. - Negative list – LULAC/COP9 – go ahead, nuclear, high cost CERs, biodiversity or social damage causing projects -Standard baseline small scale assistance
<p>Factors driving investment decisions</p> <ul style="list-style-type: none"> -Geared to low cost CER purchasing rather than project implementation -Host ratification of KP, intention to ratify, MoU or bilateral contract -Host county approval mechanism for projects -Projects possible in areas of Dutch interest -Clear regulatory and legal environment to reduce risk to project 	<p>General lessons</p> <ul style="list-style-type: none"> -Provide low cost CERs -MoU prerequisite for host country -Use intermediaries to access CERUPT -Dutch sector focus needs to be addressed -Use facilities CERUPT offers to offset costs and achieve CER realistic prices

3.3.2 Denmark

3.3.2.1 Policy framework, institutions & structures that facilitate outward CDM investment

Denmark's Third National Communication on Climate Change⁴⁷ acknowledges that the EU has committed via the Kyoto Protocol, to reducing GHG emissions by 8% in the periods 2008-2012 against the base 1990 levels. This implies that Denmark will have to cut its emissions by 21% against its 1990 levels and is acknowledged as one of the toughest

⁴⁷ Denmark's Third National Communication on Climate Change, February 2003, www.mst.dk

reduction targets in the world. The communications explicitly states that it will use the CDM flexible mechanism in order to meet some of its GHG emission targets. The Danish Government has also introduced a CO₂ emission cap for electricity production with a DKK40/ton for those exceeding the cap, while these producers may use tradable emission allowances. This induces further demand by Danish private sector firms and will have an implication for South African firms seeking to trade with Danish CER purchasers and the details of this legislation can be found at [Legislation](#).

According to the “Final Mission Report on the CDM in South Africa”⁴⁸ the Danish Government released its strategy in March 2003 to ensure that Denmark meets its commitments of the Kyoto Protocol (*National Strategy for the Realisation of Reduction Commitments of Denmark*). According to the strategy, recent projections indicate that Denmark will be lacking GHG emissions reductions corresponding to 20 MtCO₂e/year⁴⁹ during the commitment period of 2008-12 unless additional measures are taken.

The Danish government expects the major part of the compliance gap (up to 15-20 MtCO₂e) to be fulfilled through the use of the flexible mechanisms of the KP and that the Danish private sector companies will have to bear the major part of the financial burden and accordingly be a potential buyers of CER's.

Currently the Danish Government has Memoranda of Understanding with Thailand and Malaysia and intends including South Africa as a third signatory. At this stage signature of the agreement is still to be finalized. This will enable the Danish Ministry of Foreign Affairs to allocate funding for various elements of CDM project implementation in South Africa. While the Danish Environmental Agency has responsibility for coordinating the country's position on climate change, the Ministry of Foreign Affairs and Danida (it's international aid organization) will be the relevant institution for CDM capacity building, institutional capacity building, project development funding in South Africa.⁵⁰ This is proposed to occur via the Royal Danish Embassy in Pretoria. The Consultants to the Ministry of Foreign Affairs/Danida have been instructed to prepare a Memorandum of Understanding to be signed by the two

⁴⁸ ECON ANALYSIS, 2003, Final Mission Report: CDM in South Africa.

⁵⁰ ECON ANALYSIS, 2003, Final Mission Report: CDM in South Africa.

Governments as an initial step to formalize the funding mechanism and transfer of CER's. Danida's current work South Africa on Renewable Energy and Energy Efficiency will be the main basis for future capacity building. Consequently, the mission should propose a strategy for Danish support to CDM projects in South Africa, which is closely linked to ongoing work in the energy sector and supported by Danida.

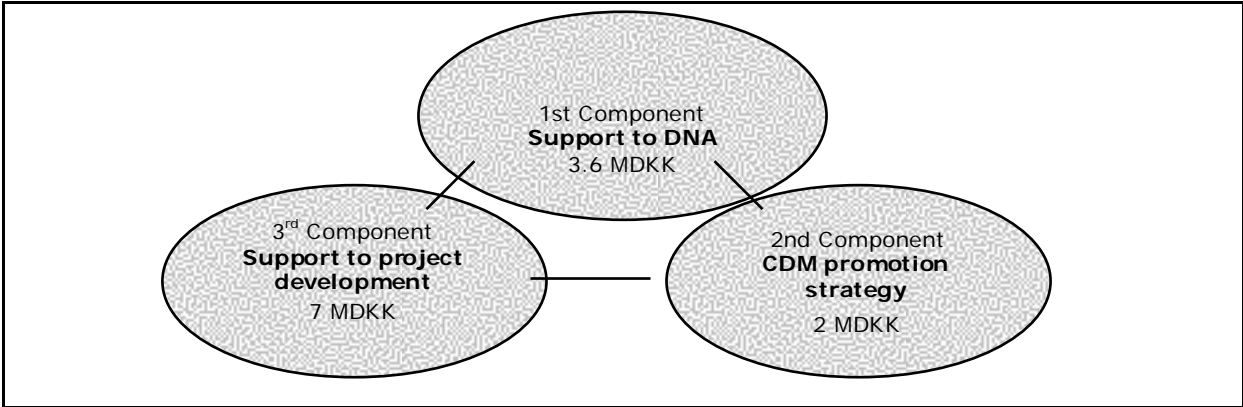
3.3.2.2 Support mechanisms and sector focus for outward investment to be targeted

The focus of Danish financial support via the Ministry of Foreign Affairs/Danida in South Africa will be given to capacity building in the institutions to screen, approve, monitor, certify and validate future CDM projects. The allocated funding which is available via the 2003 Budget allocation for South Africa for CDM project development is estimated at R3.5m for the DNA development and staffing, R2m for promoting CDM in South Africa, and R7m project development (which consists of R5m for a pilot project development facility and R2m for a fast tracking of high potential projects)

The sector focus will be on renewable energy and energy efficiency the project list prepared includes those in land fill gas, carbon sequestration, and fuel switching in different sectors as is indicated at <http://www.ens.dk/sw1039.asp> as the preferred areas.

The Danida South African proposal is represented conceptually as having three legs:

Figure 6: Danida CDM programme

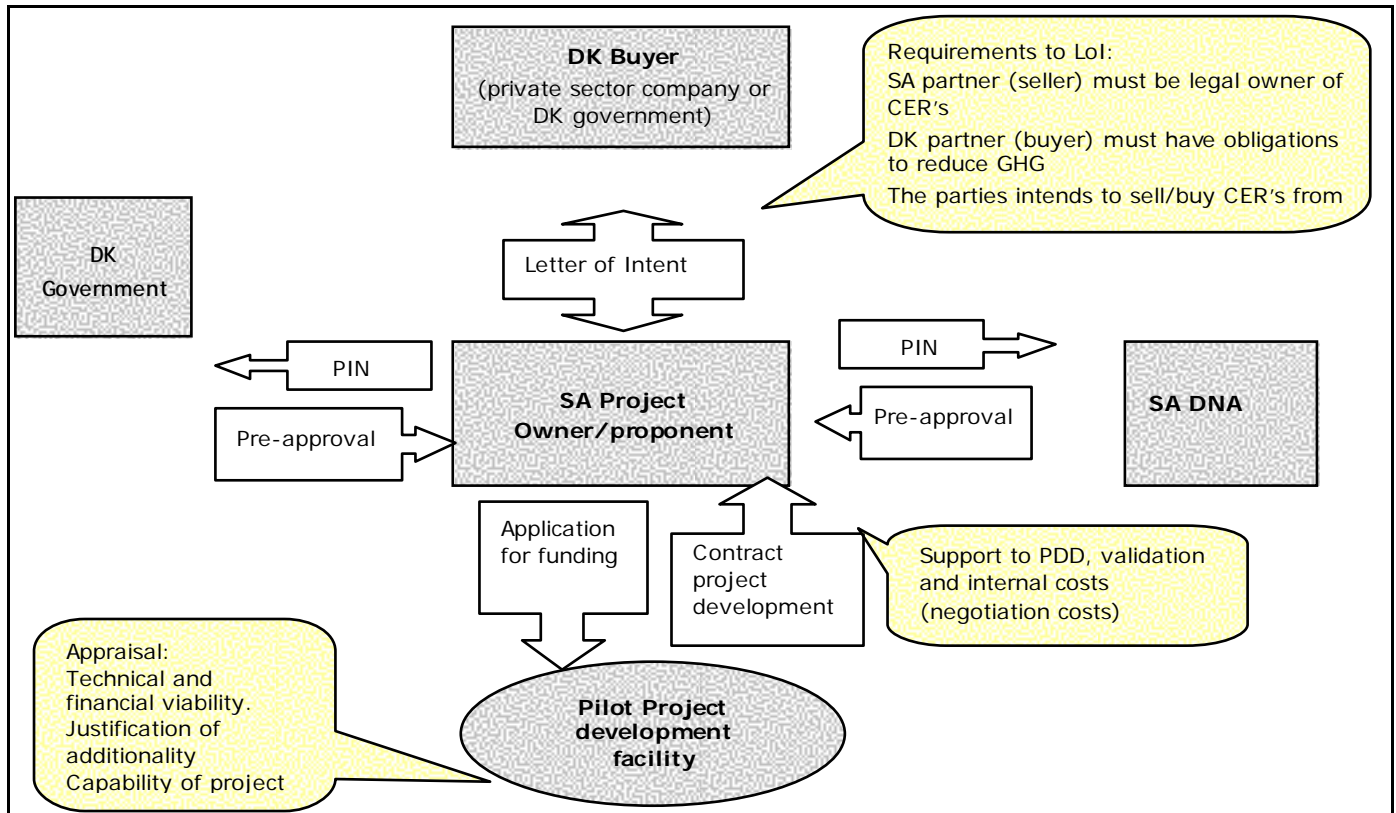


Source: ECON ANALYSIS, 2003, Final Mission Report: CDM in South Africa.

Econ Analysis have also designed a conceptual flow for the pilot Project Design Facility which will cover various costs for but have responsibilities defined between project

participants and Danish Government/Danish private companies interested in buying CER's. This is depicted below:

Figure 7: Conceptual design of Pilot PDF



Source: ECON ANALYSIS, 2003, Final Mission Report: CDM in South Africa.

3.3.2.3 Factors considered in evaluating attractiveness of CDM destinations

The Danish experience suggests that its evaluation of specific developing country markets is very different from the Dutch experience which is mainly carbon credit trade based. The main factors that drive the selection of the three selected countries benefiting from its capacity building programme include:

- Ongoing environmental cooperation between the Danish Government and the host country in sectors that allow for CDM type climate change projects.
- An agreement or a process to conclude a Memorandum of Understanding with the developing country, such as that signed with Malaysia and Thailand, and the current effort to have this signed with South Africa.

- The Danish Government being able use bilateral assistance to build capacity in the targeted developing country fro CDM which will reduce the risk for Danish private sector buyers of credits.
- A level of capacity in the selected countries to allow for absorption of the training provided and one that has potential for what is termed gold standard or high profile projects that have low risk CER potential. The Danish assessment thus of selecting the three countries indicates that South Africa is viewed as a gold standard country, and moreover the fact that Danida has already implemented renewable energy and energy efficient projects in the country are a positive factor.
- The South African legal and regulatory environment is a predictable one that assists in projects that require legal ownership of CERs being sold and Letters of Intent are legally binding.

The ECON ANALYSIS report also favours CDM projects in South Africa due to its advanced policy environment and that fact that many of these policy objectives would be assisted by the CDM sector areas that Denmark has earmarked, namely renewable energy, energy efficiency, land fill gas, carbon sequestration, and fuel switching in different sectors. The basis that Danish CDM projects promote sustainable development in host countries is an important political imperative for the Danish Government.⁵¹

⁵¹ Denmark's Third National Communciation on Climate Change, February 2003, www.mst.dk

Table 5: Summary of Denmark

Denmark	
<p>Policy, Institutions, structures</p> <ul style="list-style-type: none"> -Toughest EU reduction targets via KP at 21% below 1990 levels – 3NC to UNFCCC -Tax on electricity cap, makes CDM necessary -Focus on MoU – 3 countries Malaysia, Thailand, & possibly SA -DEPA set as DNA & coordinates climate change program -In SA use of RDE & Danida for 3 pronged capacity building program 	<p>Support provided and sector focus</p> <ul style="list-style-type: none"> -Eligible projects include Renewable Energy & Energy efficiency. Other areas include land fill gas, carbon sequestration, & fuel switching -SA support available for DNA, project development & promotion strategy, with DKK12m budget committed. - Project implementation and pre project assistance is possible PDF – active mechanism
<p>Factors driving investment decisions</p> <ul style="list-style-type: none"> -Gold standard CDM possibilities as with SA status -MoU signature and LOI process in place -History of environmental cooperation and projects possible in sector of focus eg wind farms -Use of bilateral assistance to build confidence in host country prospects 	<p>General lessons</p> <ul style="list-style-type: none"> -Direct sector focus in interest areas -MoU and capacity building prerequisite for host country -Utilize gold standard status -Set DNA to utilize Danish budget assistance -PDF offers window – offset by tied sale of CERs -Legal and environmental stability

3.3.3 The United Kingdom

3.3.3.1 Policy framework, institutions & structures that facilitate CDM investment

The Third National Communication on Climate Change⁵² by the UK acknowledges that the UK’s obligations under the Kyoto Protocol will be at a rate that is equivalent of 12.5% of its 1990 levels for the period 2008-2012. The UK is ahead of this target and currently is reduced GHG emissions at around 14.5% of 1990 levels in 1999. The UK has imposed a domestic target of 20% below 1990 levels by 2010. While this suggests that the UK will be within its limits, the use of the three flexible mechanism of the Kyoto Protocol are still acknowledged as important parts of emission reduction in the UK, although no specific figures are attributed to how much of GHG reduction are expected to be realized by the CDM.

⁵² Third National Communication on Climate Change, 2003, Submitted to the UNFCCC/IPCC www.defra.gov.uk/environment/climatechange/3nc/pdf/climate_3nc.pdf

The UK policy designed to impact on climate change is a programme that includes measures that will impact on various sectors of the economy. The introduction of a climate change levy is designed to impact on both the business and public sectors. The amendment of Building Regulations is expected to cut emissions from business, households, and public sectors. Market transformation measures are expected to cut emissions in business, households, and transport sectors. The Energy Policy has its main objectives to be security, diversity, and sustainable supply at competitive prices while constantly challenging for energy efficiency measures.

The institutional actors in the UK context include the Department of Environment, Food, & Rural Affairs (DEFRA www.defra.gov.uk/environment and the newly established Climate Change Projects Office (CCPO) as well as the Technology Partnership Initiative. This technology transfer is facilitated through its multilateral activities such as the UK's substantial contribution to Global Environment Facility (GEF), which received £200m between 1997-2000 for climate change activities. Other institutions would be academic research centres on climate change in the UK

The CCPO is thus the agency regarded as the driver of UK projects under the CDM umbrella. It will assist UK firms to take advantage of new opportunities and markets in low carbon technology. The CCPO was created as response from British Business for an office with staffed personnel to assist firms take advantage of CDM/JI projects and will be a useful contact point for South African firms seeking UK technology or finance partners for CDM projects. The UK Government has also introduced a UK wide Emissions Trading Scheme⁵³ in April 2002 and supports this with a grant of £215m over 5 years. This facilitates project participants sale of CER's to UK partners who may then trade these CERs or use it to offset their own reduction commitment and can be accessed at www.defra.gov.uk/environment/climatechange/trading/index.htm

The UK has also jointly funded the SUSAC CDM with the European Commission which is detailed at www.susac.energyprojects.net effort which assists African and Caribbean and Pacific (ACP) countries to put in place national clearing houses to identify, verify, certify and monitor investments and emissions in order that they capture a greater share of CDM investment opportunities. The mechanism to access the support given by the EU partner

⁵³ Framework Document on the UK Emissions Trading Scheme, August 2001, DEFRA.

institutions or the consortium as they are called and the service they can provide to ACP countries varies from securing investor interest to building DNA capacity. This presents an opportunity for the SA DNA to build links to access this support if required.

3.3.3.2 Support mechanisms and sector focus for outward investment to be targeted

The current support mechanisms provided by the UK Government are efforts to build capacity in the CDM decision making institutions in developed countries. To this effect a substantial amount of funding exists and this is being applied in various countries to this effect. The funding exists in the form of both bilateral assistance or via multilateral efforts with implementing agencies such as SUSAC, GEF etc. A part of the funding was applied during the 1998-2000 period, and this was in specific areas of climate change relating to projects in various developing and JI countries of Central and Eastern Europe.

The most tangible support for CDM projects will emanate from the CCPO which will allow for project identification, development and support through the processes of the Executive Board. The CCPO will in the main be available to UK businesses that want CDM projects assessed and then given assistance.

South African involvement with UK driven efforts have been in the main directed at project specific activity since 1998. The reason for this is that the CDM capacity building effort has been reliant mainly on NORAD (Norwegian aid assistance) and more recently by the Danish driven capacity building initiative. The project areas that the UK has been involved in South Africa since 1997 via mitigation projects are:

- Forestry and Agriculture (£1.4m in 1997-1998)
- Forestry and Agriculture (£2m in 1998-1999)
- Forestry and Agriculture (£7.6m in 1999-2000)

The main areas of focus for the UK bilateral initiative on mitigation globally included, energy, forestry, and agriculture. UK private sector involvement in CDM projects has been even wider and includes projects in:

- Methane gas capture or removal (Malaysia, Costa Rica, Vietnam)

- Renewable Energy (Brazil, Thailand, Jamaica)
- Energy efficiency (Bolivia)

3.3.3.3 Factors considered in evaluating attractiveness of CDM destinations

UK business advisory bodies, particularly the ACBE, have been instrumental in driving key policy direction of the UK through the COP meetings. Detailed positions on various issues are canvassed by the DEFRA and incorporated into the UK position. This occurred for the COP 6 on issues around JI/CDM and detailed positions were formulated and these are distilled as being the factors which UK Business sees as being desirable in developing countries.⁵⁴ These included factors such as:

- Achieving real GHG reduction via CDM projects
- Low transaction costs, minimum bureaucracy, and few restrictions as a prerequisite for CDM investment
- Assist host country in achieving sustainable development objectives via CDM while at the same time recognizing that countries with less stringent benchmarks of what will be allowed as CDM will encourage more projects.
- Levies and adaptation levies should not be excessive to deter investors

The UK has used the South African Shell/Eskom solar heating units project to illustrate how it intends deriving credits from a project with a residential application. This is one of 4 case studies used by the CCPO to assist UK firms with CDM/JI issues. This project bases its methodology on CER's reducing the final technology cost to consumers via CER's utilized the supplier of such technology. Various mechanisms for calculating baselines are debated and will be put forward in trying to establish the GHG abatement attributed to this project.

An added advantage that South Africa would possess for UK CDM projects would involve the current high levels of trade and investment that exist and the fact that there are common languages. The UK has also focused a significant effort on directing assistance programmes to South Africa since democratisation and the conclusion of the FTA with the European Union.

⁵⁴ Advisory Committee on Business and the Environment, 2000, Recommendations for operation of JI/CDM Projects, www.defra.gov.uk/environment/acbe/pubs/jicdm/default.htm

Table 6: Summary of United Kingdom

United Kingdom	
<p>Policy, Institutions, structures</p> <ul style="list-style-type: none"> -Currently ahead of EU KP obligations of 12.5% re 1990. Set own domestic level of <20% re 2110. -Flexible mechanisms still sought CDM/JI -Intends CC to impact upon various sectors of economy -Security, price, diversity and energy efficiency is prime objective -DEFRA =DNA, with CCPO & technology office, SUSAC for ACP countries promoted. 	<p>Support provided and sector focus</p> <ul style="list-style-type: none"> -Sector focus is building regulations for private & public sector, mkt transformation for business, h/holds, transport. -UK wide emission trading gives CER a forum for pricing, 1st in EU. Budget £215m -CCPO channel for SA to access project assistance from UK firms, -SUSAC, GEF support is relevant for SA -SA focus, forestry & agric since 1997 -Other CDM areas gas capture, RE, & EE in 8 countries
<p>Factors driving investment decisions</p> <ul style="list-style-type: none"> -Policy driven by ACBE, thru COP via DEFRA -Real GHG reductions, low cost CERs, low transaction costs, min. bureaucracy, few restrictions, SDC in host are assisted, low levies. -Shell/Eskom solar project used as case study -High UK FDI & EU FTA drive CDM in SA 	<p>General lessons</p> <ul style="list-style-type: none"> -Convergence with sectors selected -Emphasis on low cost CER – other costs -Utilize capacity building as entrée to CDM projects -Capitalize on current FDI and CDM projects emerging -Use Trading system as means of getting best value CER's versus CERUPT

3.4. LESSONS FOR SOUTH AFRICA

3.4.1 Lessons from Competitor Nations

The three developing countries analysed indicate a varied approach and progress made in terms of how CDM institutions are being constructed, how international agencies are assisting, how transaction costs are offset, how local DOE's are being cultivated, and how CDM investment is generally being promoted in these three countries.

3.4.1.1 Brazil

In the case of Brazil the main lessons South Africa can draw upon is the quick reaction it had to the Kyoto Protocol Flexible Mechanisms and the fact that it set up its DNA as early as 1999. The pragmatic manner in which it drew in a whole range of Ministries and the fact that it elevated the DNA to have a direct link to the Presidency by involving Ministers from the Presidents Office is instructive for South Africa. There was an early acknowledgement that CDM would affect a wide variety of Ministries and as such a broad coalition of Ministers were drawn into the CIDES/DNA.

The procedures being contemplated for the DNA have been subject to public comment and there is a sense of urgency in ensuring that these are widely accepted and understood by business in Brazil. Further, a clear set of eligibility criteria have been set out and made publicly available, which would lower investor perception of risk that projects will be subject to an unknown bureaucratic process. While Brazil has not created an overt mechanism to lower transaction costs by providing cost offsetting measures, this is not precluded from occurring.

The results have been that Brazil has attracted the most CDM projects to date that have actually had buyers for CER's. The wide range of buyers suggests that the efforts made in CDM by the Government are being rewarded. While Brazil has not overtly promoted these CDM opportunities, the thinking by the DNA was that it may do so as it organizes the DNA and its procedures.

3.4.1.2 India

India has been a late entry in terms of setting up its CDM infrastructure and the NSS is still to be completed. It has however recognized that the DNA will have to be set up in the interim and the NSS, which seems to be more comprehensively scoped than the South African version, will comment in fine tuning the DNA. The fact that the DNA will get Cabinet approval suggests that it is elevated in the Indian Government context and this suggests that a broad spectrum of Ministries will have to give their support and commitment to the DNA. CDM projects have been opened by the Prime Minister and this has elevated the status of CDM in the country.

India has been the recipient of intense CDM interest by international agencies mainly due to its energy profile and the size of its market. This has resulted in a variety of capacity building and institutional building activities which position the country to take advantage of CDM project possibilities. India has been able to attract the second highest number of CDM projects after Brazil and this is indicative of the high profile which CDM enjoys in the country. This contrasts with the South African experience where only a few institutions are aware of CDM and are actively trying to utilize its benefits. South Africa does not have the domestic market power of India or the profile for CDM and will need to actively market itself as an attractive destination.

There are programmes in place in India to lower the costs associated with PDD, PINs, and even if DOE status is sought by local firms. The latter capacity building exercise has met with little success due to the risks involved in DOE registration. This is an area that South Africa could be successful since it has good systems in place regarding local branches of global consulting and auditing firms. This is the subject of Chapter 4 in this study and will be examined in the light of the Indian experience.

3.4.1.3 China

China's late entry into gearing up for CDM has not deterred investors and international agencies in doing capacity building and even investing in CDM projects. The fact that China's projects have generated less than a third of the CER's that South Africa's projects have generated will not continue into the future. The Chinese are now seeking parliamentary approval for its DNA and the principles that the DNA will operate under have been publicly stated. China has also set the DNA up as one stop point for CDM approval, which will satisfy investors wary of the layers of bureaucracy in the country. The process of setting up the DNA – called the National CDM Management Office has involved many key Ministries and Commissions which suggest that it will have an important profile in Chinese political structures which.

The international community has been eager to engage with China in capacity building exercise due to the huge potential in the Chinese economy that is largely driven by energy from coal and extremely inefficient technology that would need to be upgraded. The current capacity building and research programmes will result in an effective institution and this will help the country to attract investment to what is the largest recipient of FDI currently. There are no real offers to lower transaction costs, and the current incentives are geared towards general industrial infrastructure such as ready built factory space and utilities.

South Africa will have to overcome perceptions of its FDI risk profile and the fact that it has a small domestic market, which the countries examined, will easily overcome for CDM purposes if their plans materialize.

3.5 LESSONS FROM CDM INVESTOR COUNTRIES

The lessons emerging from the three possible investor countries are quite uniform for the three countries examined. The results are that the following factors need to be addressed by South Africa if investment is to be attracted for CDM projects:

- Proactive in setting up of institutions such as the DNA with clear and fast approval processes and eligibility criteria stemming from sustainable development criteria
- Ensure that the CDM institutions are efficient and do not create overly burdensome procedures versus our competitors
- Utilize capacity building programmes and cost contributions from international sources to lower costs, and supplement this with domestic sources
- South Africa should be prepared to sign a series of bilateral agreements with Governments it sees as being sources of CDM investment as prerequisite for getting CDM projects supported locally
- Ensure that for specific projects the countries interested in this area are contacted and exposed to the projects
- How does the country lower costs of CERs generated versus our main competitors and can the projects be fast tracked to deliver CER's since many investors in CDM want to beat the 2012 deadline.
- Have a differentiated approach to various countries, ie the Dutch are interested more in CER purchasing while the Danes have longer term outlook about climate change. The UK has less domestic pressure to buy CERs and consequently may not be as active as the Danes who have a more onerous commitment and need to acquire CERs globally.
- Enter into agreements where the investor country eg. Denmark selects South Africa (plus Malaysia and Thailand) as a focal point for CER generation
- The UK position is that it would like to see more ACP countries also benefit from CDM rather than the major share going to Brazil, China and India. This should be a point that South Africa utilizes to ensure that UK assistance and project interest is diverted locally.