# **IRIS KYOTO** Innovative risk coverage and financing in CDM projects in India and Morocco

# MINUTES



# Workshop April 19 2004, Brussels

The workshop brought together developers, financial institutions and representatives of the public authorities from India and Morocco as well as bilateral (public and private) and multilateral, particularly European potential financial partners. The exchange of views between partners helped in particular to clearly understand the main bottlenecks to CDM project closure, and collect a set of suggestions from the audience regarding risk management instruments for Renewable Energy, Energy Efficiency projects from the Moroccan and Indian project portfolio and to provide information on current trends in carbon finance including the emerging relationship between the CDM and the European Emissions Trading Scheme .

Risks analysis and approaches to risk mitigation have been addressed in depth by the financial community and most of the risks related to traditional project risks and financial institutions are being covered through the development of a range of instruments. However, the linking directive is a very new feature, with the potential of considerably mitigating the risk of non signature of the KP and offering higher "rewards" as the European buyers would buy at a much higher price than the currently ongoing 3 to 4 \$ a ton of CO2 eq. avoided. Some "standard issues and approaches" have been developed in terms of risks which are not termed as "basic risks", including:

- risks related to the development costs which are too high: some "purchasing funds" are offering finance to cover these costs (CDCF and PCF have the "plus" funds the EIB is considering a facility to help with project finalisation and closure). In some cases the "deal" is to refund this on the carbon revenue streams;
- risk of the KP not being signed: some funds take the risk and this is why the price is low
- difficulty of reaching financial closure as carbon comes only later as an income stream: some banks are agreeing to offer bank guarantees, encouraging buyers to buy a few years' worth of credits in advance (CDCF).

### **Objectives of the Workshop :**

- To discuss the specific problems and risks related to CDM implementation of selected projects,
- To further work up the findings of the Paris workshop and the preliminary project studies,
- To review the status and view points of CDM developments in Europe, India and Morocco and understand the innovative risk management instruments being put in place private and public perspective.

# Opening of the session by Mr. Fluxa-Garcia, EC

- Mr Fluxa Garcia described the recent policy developments of the EU in terms of CDM, ETS, Linking Directive and the objectives of the Synergy programme. A particular concern was attributed to the replicability of projects in the RE sector.
- In 2003, 10 projects relating to CDM were funded, of which IRIS-Kyoto is one. The 10 projects together cover different regions of the world (Latin America, MEDA, China, Asia, and Sub-Saharan Africa) so as to gain as much experience for the EU as possible. The EU has commissioned these studies to have a good understanding of the CDM developments and obtain direction for its own internal policy .
- The problem to date is the fact that the Kyoto protocol is still waiting to be ratified. These blocks the EU activities to a certain degree.
- The EU has taken direct action in this regards and DG Environment has launched an emission trading scheme. This represents a step forward to the Kyoto protocol, the two mechanisms (ETS and CDM) will work concurrently once and if the Kyoto protocol is ratified. This has opened the window for collaboration.
- Mr Fluxa-Garcia welcomed the delegates to the meeting and wished a successful meeting and successful development of the project.

# Presentation of the IRIS project by Mrs. Anjali Shanker, IED

 During her overview on the recent and coming project activities she distinguished between conventional risks related to the underlying project and risks related to the carbon transaction.

- In India most of the installation material is locally produced which reduces the investment cost by a significant factor compared to Morocco where systems (specifically relevant to Solar Water Heaters (SWH)) are mostly imported.
- TERI is actually carrying out a baseline study related to the avoided CO2 amount per generated kWh in every state.
- The Guaranteed Solar Result (GRS Garantie de résultat solaire) was conceptualised in 1988 in France by suppliers of SWH. They guarantee a certain amount of energy generated by their plant/installation. If this amount is not achieved the seller commits himself to pay a remuneration.
- The costs accrued by a project developer to enter the administrative process can amount to up to 120,000 USD – the additional costs for a monitoring scheme, especially in a slightly more complicated project profile, may further hinder the decision process of a potential CER holder.

## Presentation of Mr. Sethi, MOEF, Indian DNA

- Canada, UNDP and UNFCCC helped to develop the institutional set-up in India needed for CDM procedures
- benchmarks: GDP 8%, energy consumption is 8% of world-wide average, 3700 MW RE installed, will be doubled by 2007
- in 12/2003 National CDM Authority has been established, consists of a inter-ministerial committee of 9 members (MOEF=chairman)
- validation cost lower than in other countries (<100.000\$)</li>
- the transaction cost in India is estimated at 100,000 USD
- DNA only cares for national criteria, not for additionality
- ICFRA is applying for DOE
- IDFC and Rabobank are active in financing
- the DNA was established on 2 December 2003
- The per capita total energy consumption represents 20% of the global average. Much lower rates.
- The DNA is a dynamic body that as the project portfolio increases so will the DNA.
- The DNA has assumed a proactive role in disseminating information all across India since its was set-up in December 2003, four meetings have taken place
- A 60 day lag period is taken for an approval of a PDD

- A number of project have already been cleared and are in the pipeline for CER credits. 21
   / 22 projects already approved
- There are no fees charged by the DNA for processing the PDD's
- Important that sustainable development criteria are met
- Sustainable Development criteria are very broad
- Needs to be proven technology
- For foreign owned companies an additional criteria is that they have to have economic IRR
- Risks private sector driven the cost of carbon per tonne is low so no difference in IRR
   / balance sheet.
- The CDM message has not gone to the state governments very easily. Hence capacity building activities at the state level is being conducted.
- Federation of Industry in India have been and are very active in spreading the news about CDM.
- A lot is in learning by doing
- Big potential for small projects looking for creative and functional ways on how to bundle them together
- Countries like India are very interested in the European developments ETS.

#### Presentation of Mr. Yahyaoui, UCC-SEE, Moroccan DNA

- institutional set-up w/ UNEP and UNDP support
- designation of Moroccan DNA by end 2002
- National council and permanent secretary
- Potential emission reduction avoided : 4.5 M tCO2eq/per year (45 M tCO2eq /10 years)

#### Presentation of Mr. Amor, Lafarge Morocco

- half of the year: good wind in Tétouan
- project is not financially viable, not competitive to grid
- Lafarge intends to reduce his emissions world-wide by 20%
- during peak times ONE/grid power is expensive
- in Morocco only up to 10 MW allowed for IPPs (indep. power producer), in India 25 MW
- emission reduction factor : 0,766 tCO2e / kWh generated
- project assessed in four weeks
- DNA established in 2002

- CDM 20% of investment
- Risks CDM and low cost for carbon and multiple investment partners

#### Presentation of Mr. Thomas Verheye, DG ENV

- Linking directive: in first commitment period there will be no 6% limit EU-wide
- there might be a total cap for CERs/ERUs but it is up to member states to decide
- w/o Kyoto ratification ERUS will not be available, CERs will be, but low amount
- double accounting allowed up to 2012
- JREC: Johannesburg RE Coalition
- not only for Kyoto, and Climate change, also Access2energy, poverty alleviation, RE etc.
- Feasibility studies not yet done, no closure up to now
- intend to facilitate private equity financing, "close the gap"
- EIB: 500 M€ fund 10 M€ tech. assistance
- announcement 10/2003, previous closure mid 2004

#### Presentation of Mr. Zapfel, Austrian Kommunalkredit

- open for proposals 12/03 09/04, no fixed deadline
- purchase goal : 3-5 MtCo2/a, total goal: 15-25 MtCo2
- 30% advance payment on ERPA
- Austrian target 13% reduction equal to 18 mt/CO2
- Projects not open to nuclear
- Exclusion of projects that have already or are nearly operating
- 14 projects have been approved
- prepayment up to 30% of the CER value after the project has been validated
- can also help with financing baseline studies, development and environmental impact assessment
- Fund 11 Million Euro this year
- The project once approved by DNA and EB will then go through the evaluation of the bank

#### Presentation of Mr. Gupta, Rabobank India

- Rabo is a commercial lender, 1 wind park, RE financing
- weather insurance by ICICI Lombard
- Environmental Asset management: sustainability development fund 50 M\$

- Risk management services in Environmental Markets
- Learning by doing approach
- CER not a tangible commodity
- No visible transaction has yet been made
- A project has its own complexity and then you add the complexity of the Kyoto on top of it (plus timing)
- Capital or revenue receipt not many people know about this

#### Main Discussions:

- one of the main risks for buyers is the long term duration of contracts: the budget has to be reserved for projects which can fail in the meantime. Fixing a budget to a project can also lead to a projects failure – the CER's will be produced after so many years.
- It should be noted that CDM represents one of many other types of instruments available for financing environmentally friendly actions. CDM can only assist in cash flow – not in capital cost.
- CDM it was argued has its niche with large companies. For example, big companies like
  Lafarge should be supported to pave the way in developing a framework with the
  financing institutions etc. These big large players already have a good working
  relationship with banking institutes so are already more credible in the eyes of bankers. Its
  getting these big companies to start thinking towards environmental projects that is the
  challenge. Once the way is paved then smaller developers can step at lower costs.
- In Morocco standard processes for electricity from landfill gas are being developed so that developers are facilitated in terms of developing baselines. This provides support in the development of small projects.
- It was also discussed that Memorandum of Understanding's between countries reduce the risk of not having a buyer for the CERs that are being produced - this also helps to clarify basic issues. However the political framework for CDM is changing so frequently that the MOU has to change accordingly.
- Finally it was concluded that a critical mass of projects is required for the whole procedure to operate smoothly – this will need "models" and procedures, baselines, MOU, awareness activities etc.