BTOR: GEF Portfolio Monitoring and Learning Review

Subject: CCM FA Pilot Mission to South Africa for the Renewable Energy GEF portfolio (UNDP/ South Africa Wind Energy Project and WB/Renewable Energy Market Transformation)

Place: Johannesburg, Pretoria, and Cape Town, South Africa

Time: November 1-10, 2010

GEF Team: Dimitrios Zevgolis / Josef Buchinger

Background and Summary of Findings

From November 1 to 10, 2010 we undertook a monitoring and learning review (MLR) mission to the active renewable energy portfolio in South Africa. This portfolio consists of two projects: the South Africa Wind Energy Programme (SAWEP) with UNDP and the Renewable Energy Market Transformation (REMT) with the World Bank.

The mission was joined by the Project Manager of the SAWEP, Andre Otto. Also, a part of the mission was joined by two UNDP officials, Marcel Alers (Principal Technical Adviser), and Lucas Black (Regional Technical Adviser).

The specific focus of the mission was to understand the catalytic effect of the portfolio in terms of creating environmental and local development benefits and in view of transforming the renewable energy market in the country.

There are significant findings of this review mission which should be considered during the design, review, implementation, monitoring, and evaluation of GEF programs and projects:

- Catalytic Impact: GEF projects can provide all the necessary information, knowledge, tools, and capacities for an enabling environment; however their catalytic impact is highly sensitive to the high-level decision makers.
- Delivery of Direct Benefits: The direct benefits of GEF RE projects usually come from private sector investments, which are not managed directly by the GEF PMUs. Therefore, the PMUs have limited role in taking action to secure the delivery of the direct benefits.
- Delivery of Indirect Benefits: The projects do not usually include monitoring for GEF reporting of their indirect benefits; this requires specific sustainable procedures to be included in the project design.
- Level of scrutiny at GEFSEC review stage: Under the current project cycle arrangements, the impact of exercising high-level scrutiny at the GEFSEC review stage is limited. Since the GEFSEC is not really involved in project implementation, issues that might be highlighted by the GEFSEC during project review remain practically at the agency's and the PMU's discretion, and as in this case are subject to the necessary adaptive management.
- Adaptive Management: The management of the projects usually adapts to the specific country needs and circumstances as they are expressed during implementation. Therefore, the actual project implementation can differ substantially from the initial design, but the actual impact can remain the same or similar. The dynamics of the project's environment should always be considered and flexibility for adaptive management granted.
- Choice of Project Manager: Selecting the right project manager is invaluable for the project's success. Mutual confidence between the manager, the executing partners, and the other stakeholders is required.
- Coordination with parallel initiatives: GEF projects can be complemented substantially by other initiatives - nationally funded or funded by bilateral/multilateral aid - even if they are not properly identified at the project design.

Portfolio Status

South Africa Wind Energy Programme

Original description

The objective of the project is to install and/or prepare the development of 50.2 MW of wind power, resulting in an annual reduction of approximately 105,671 tonnes of CO_2 equivalent. Thus over the lifetime of the wind farms (20 years) a total of 20 x 105,671 = 2.1 million tonnes of CO_2 equivalent will be reduced as direct impact (5.2 MW Darling wind farm) and direct post-project impact (feasibility analysis for up to 45 MW combined wind farm development) of the proposed initiative. Indirect emission reductions, as a result of wind farm developments beyond the 50 MW installed capacity (that are expected to be triggered by the proposed initiative) have been estimated as another 2.5 million tonnes of CO_2 equivalent. Thus the total anticipated emissions reductions are 4.6 million tons of CO_2 equivalent (over 20 years). The project will contribute to national development objectives, i.e.: to diversify power generation in South Africa's energy mix; to set up a wind energy industry that could generate employment and to promote sustainable development by making use of the nation's renewable, natural resources (such as wind).

Originally, the SAWEP project was designed as a 5-year program to contribute to the removal of barriers, but was split into 2 phases, respectively a 2-year 'Technical Assistance' phase followed by a 3-year combined 'Technical Assistance and Investment phase'. Accordingly, the Executive Summary was approved by the GEF Council in 2004. Reflecting changes in GEF policies and procedures during project preparation, it was decided in 2006 to restructure 'Phase 1' into a stand-alone project with a consistent set of activities that can create sustainably improved market conditions. The project has been divided into six main outcomes to contribute to a first lowering of the identified barriers within a full-size project of a two-year period. Each component is associated with specific outputs and a set of activities. These outputs are the following:

- Output 1.1: Detailed financial instruments to stimulate commercial wind energy developments have been designed and accepted for implementation by the Government
- Output 2.1: Green power guarantee scheme designed under the PDF B has been fine-tuned and is under implementation in the City of Cape Town
- Output 2.2: Green power marketing activities for selected urban centres are designed and actively supported by UNDP/GEF
- Output 2.3: A system for Tradable Renewable Energy Certificates (TREC) has been designed, set-up and under implementation
- Output 3.1: A long-term policy for wind energy, including an implementation strategy and policy (financial) instruments has been designed and accepted by the Government for inclusion into their overall renewable energy policy and implementation strategy
- Output 4.1: Wind measurements and monitoring at 20 sites has been supported
- Output 4.2: Up to ten private developers have been assisted with their wind measurements for sites identified for commercial wind farm developments
- Output 5.1: Private developers have been assisted at a pre-feasibility level with project development activities for wind power development up to 45 MW
- Output 6.1: The technical capacity of the main actors involved in wind power generation has been strengthened

- Output 6.2: The South African institutional capacity of the key institutions involved in renewable energy (power) development has increased
- Output 6.3: The South African Wind Energy Association (SAWEA) has been strengthened and institutionalized
- Output 6.4: Lessons learned from experiences in South Africa have been distilled and disseminated to a larger audience; a follow-up phase has been formulated
- Output 7.1: Monitoring, learning, adaptive feedback and evaluation

Current status

The project's implementation started in March 2008. According to the PIR 2009 and the assessment of the UNDP RTA, "progress has generally been satisfactory with significant achievements recorded for almost all target outcomes. The installation and operation of the Darling Wind Farm was a positive achievement, as is the confirmation of the purchase of 6 GWh of electricity from Darling to Cape Town since May 2008. The signing of a second PPA with another entity is also noteworthy, as are project activities in the areas of capacity building of local stakeholders, wind resource assessment studies and assisting PS actors with feasibility studies. The 45 MW target remains an ambitious goal but signs indicate that the project should be expected to achieve that goal based on progress to date. GEF disbursements are proceeding well but one issue of concern relates to the absence of disbursements by partner entities."

According to the input by the project manager provided during the mission, the budget of the project has been reallocated among the different activities, in order to reflect the actual priorities of the executing agency (Department of Energy – DoE). Thus, the project focused its efforts in the following outputs:

- Development of Wind Atlas (Output 4.1, but with highly increased budget through the reallocation of funds from other outputs)
- Design and support of the guarantee scheme for the Darling Wind Plant – City of Cape Town PPA (outputs 2.1 and 2.3)
- Development of business plan for SAWEA (relevant to output 6.3)
- Investigation into the development of a Wind Industrial Strategy for South Africa (relevant to output 3.1)
- Monitoring, learning, adaptive feedback and evaluation (output 7.1)

The rest of the originally identified outputs haven't been pursued due to the reprioritization of the project's objectives during the implementation. It should be noted that, parallel to this project, other national initiatives, funded by the government and bilateral donors, produced significant results that complement the activities of the SAWEP. The SAWEP manager has been actively involved in representing the DoE in the deployment of these parallel initiatives. In that manner, he acted as an information hub on behalf of the DoE and secured that those initiatives have been complementary to the SAWEP. Thus the project indirectly has achieved outputs 3.1 and 6.1.

The project has reached its conclusion; however UNDP plans to request its extension, in order to keep on supporting the development of the Wind Atlas. Financing of this extension will be covered by the use of the unclaimed guarantee scheme funding. A modified Phase 2 of the project is currently under discussion.

Renewable Energy Market Transformation

Original description

The project objective is to establish policy and regulatory frameworks and build institutional capacity for renewable energy development in South Africa. The project has two components:

- TA and capacity building for renewable-based power generation in South Africa.
- TA and capacity building for commercial solar water heating.

This review focuses on the first component, and especially on its relevance to the wind energy market transformation in the country. The project will develop legal, policy and regulatory framework, taking account of the experience with promoting grid-connected renewable energy power generation in both developed and developing countries, particularly the feed-in laws, renewable energy portfolio standards, and competitive tendering. The project will also adopt a mandated market policy that is appropriate for South Africa to achieve the renewable energy target and reduce costs. Currently, the South African government is contemplating to adopt a feed-in tariff scheme to promote renewable energy (REFIT). This project will assist the government in developing a detailed design of the feed-in tariff policy and development of a draft Renewable Energy Law. The project will also carry out capacity building activities to strengthen the relevant public and private sector institutions, and to enable them to meet the renewable energy power generation target. It will build capacity for government agencies such as Department of Mines and Energy (DME) and National Energy Regulator of South Africa (NERSA), as well as industries and financial institutions. It also will set up a Help Desk to provide advisory services and matching grants for project developers to conduct pre-feasibility studies to facilitate private sector investment in renewable energy. It includes the following sub-components:

- Reviewing renewable energy policy instruments and financing mechanisms of successful renewable energy programs worldwide, and recommending their adoption to South Africa;
- Supporting DME and NERSA to develop a legal, policy, and regulatory framework for renewable energy;
- Developing detailed financing mechanisms for covering the incremental cost between renewable and conventional energy; and
- Updating resource-specific supply curves in terms of the renewable energy target set in the government's White Paper on Renewable Energy, all through the provision of technical advisory services.
- Developing public and private sector institutional capacity for renewable energy investments;
- Developing resource information and dissemination of renewable energy related information, all through the provision of technical advisory services; and
- Provision of Matching Grants to strengthen the capacity of the private sector to implement renewable energy Capacity Building Subprojects, and development of a "help desk", including: (i) facilitating activities for renewable energy investments; (ii) preparing to pre-feasibility level renewable energy investments; and (iii) facilitating activities for promotion of off-grid renewable energy.

As a result of the technical assistance, it is expected that in the four-year project period, renewable energy projects will be undertaken in conversion of landfill gas to electricity, sugar mill and pulp & paper cogeneration, and small hydro power generation. The total renewable generation capacity installed is

expected to be about 100–135 MW (yielding about 600–800 GWh) with a capital cost of US$90–120 million.

Current status

The project commenced in November 2008 and it has duration of 4 years. According to the ISR prepared in June 2010, the Project submitted comments to the NERSA on the REFIT during public hearings on 3 September 2009. The project has provided support to the DoE to be able to articulate a good case before the regulator and this contributed positively to the outcome. It seems somewhat optimistic that all activities can be completed before the current closing date of September 30, 2011.

According to the input by the project manager, Moeketsi Thobela, the project had a slow start and its implementation has been hindered by the resignation of the initial manager, but now it is fully operational. REMT is currently supporting the review of the White Paper for renewable energy which has been originally prepared by DoE. The first draft of the revised White Paper has been received by the DoE and it is under consultation. Also, the project supports the legal review of the power purchase agreement (PPA) template for different technologies under the Renewable Energy Feed-In Tariff scheme (REFIT). The project has also hosted a Renewable Energy Summit on 19 - 20 March 2009, which took place in Centurion, Pretoria. The summit report is available on the REMT website: www.remtproject.org/FileDownload.aspx?FileID=8.

Moreover, the project's website has been launched and it is fully accessible. The project is also preparing to offer an amount of 1 million USD in Matching Grants to strengthen the capacity of the eligible beneficiaries to implement renewable energy power generation projects including facilitating activities leading to the financial closure of renewable energy investments; and preparing pre-feasibility and feasibility studies for renewable energy investments. There is a cap of 100,000 USD for each recipient. 15 potential beneficiaries have already been shortlisted, and according to information provided after the completion of the visit, eight submitted their applications on time (i.e. by 1 December 2010), while two were late and thus not evaluated. Out of the eight that were evaluated on 7 December 2010, two were disqualified (one for changing the project used as a basis for short-listing and the other for having not completed registration as a company in South Africa). Of the remaining six, three were provisionally recommended for approval – these cover solar PV, biogas and solar water heating. The Procurement Report was submitted to the World Bank on 15 December 2010, following its consideration by the inaugural meeting of the Grant Approval Committee on 10 December 2010. The expectation is to receive a response by end-January 2011. For those confirmed as successful, contract negotiations will commence from end-January/February 2011. A second round of applications is planned for commencement February/March 2011.

The next activities of the project are expected to involve the replication of some of the SAWEP activities (integration requirements for wind energy) in other renewable energy resources, by acquiring more resource information in order to provide input on specific policies for these resources (solar, hydro, biomass).

Learnings

Catalytic Impact

All the interviews with the projects' stakeholders highlighted that the projects have significant impact for the market development; however there is a different view on how this impact is manifested. The governmental authorities (DoE, NERSA) consider that they missed information to address and evaluate sufficiently the resource potential and the interest of the private sector, so they deem that the SAWEP project provided them with the tools to achieve these targets. On the other hand, the private sector recognizes that the GEF projects add to the political acceptability of the wind power, however they also believe that there is unnecessary delay since the private interest precedes the deliverables of the SAWEP, i.e. the Wind Atlas will not affect the potential developers since they already have enough information to select potential areas and undertake wind measurements for specific sites, but nonetheless it acknowledges that smaller developers could use the results.

Another lesson is that when a GEF project includes the demonstration of technologies, it is highly valuable to provide a national priority status to the demonstration plant so as to maximize the engagement of the authorities. Nevertheless, in the case of the Darling wind power plant, the technical failures of the plant could have a negative demonstration effect. According to the SAWEP project manager, there is a missing link between the national demonstration status of the project and its executing mechanism. So the lesson should be that adverse impact could be mitigated by involving the national authorities in the execution of the demonstration plant when it is considered a national priority.

Finally, the clear lesson is that the market transformation highly depends on the decision makers at the government level. The GEF projects can offer information and build capacities, but the private sector can only put investments on the ground when it get the final clearance by the government. So GEF projects can be catalytic but the transformation process also requires an extra catalyst: the commitment of the politician to take decisions when sufficient information is presented to them.

Delivery of Direct Benefits

The original project design had identified two sources of direct benefits: the emission abatement due to the Darling wind farm, and the post-project direct emission reduction due to the pre-feasibility studies for 45MW. Only the emission abatement due to the Darling project can be directly attributed to the project. The project didn't support any pre-feasibility studies, so the post-project direct target will not be delivered.

The review made it clear that when the direct benefits are expected by private-sector investments, the GEF projects are not able to control their delivery, since they do not have any role in the specific investment decision making process. In the case of the Darling wind farm, neither the SAWEP steering committee nor the PMU had any formal involvement in the governance of the project. So, in the unfortunate case of investments facing managerial or technical problems, the GEF project has none or limited potential to take corrective action and achieve its targets (at least those linked to the investments). This inherent risk of the GEF CC-M projects should be clearly accounted at the level of project design and relevant mitigation measures should be prepared.

Delivery of Indirect Benefits

The SAWEP project has indirectly supported the development of the wind energy market in the country, and in that sense it has significant indirect benefits. Nevertheless, indirect benefits are subject to the

decisions of the government about the allocation of production rights to the potential producers, and the actual response by the investment community.

However, the project doesn't include any monitoring activity for GEF reporting of its indirect benefits. The issue of accounting of indirect benefits gets more perplexed in the cases when parallel or subsequent GEF projects target the same markets. The South Africa GEF portfolio is such a case since both the SAWEP project and the REMT project could account as their indirect benefits the same wind power investments that will happen in the future.

Possibly these issues could be addressed by the following:

- Requiring the development of sustainable reporting mechanisms under the GEF projects;
- And providing a much clearer definition of the indirect benefits of GEF projects, either by developing a quantitative attribution method that takes into account all the parallel or other planned activities, or by redefining the indirect benefits at the level of the total mitigation potential without requiring any attribution to the specific project.

Level of scrutiny at GEFSEC review stage

The design of GEF projects is a process that also involves GEFSEC resources at the stage of PIF and final project document review. GEFSEC comments frequently lead to project design modifications. However, the GEFSEC hasn't any formal role during the project implementation, while it receives limited information about the project implementation through the AMR process.

When a project that has been under development for many years prior to GEF review and when it takes years from the initial PIF to the final CEO endorsement, adjustments of the initial project idea to current developments during implementation are inevitable. In some cases the project documents at the CEO Endorsement level might not reflect the actual situation, and instead be much closer to the initial design (as expressed in the PIF) in order to avoid justifying any changes. In such case, during implementation the project adapts to the actual situation in a manner that might contradicts the GEFSEC recommendations at the review stage.

Taking into account these considerations, the GEFSEC should further discuss what should be the right level of scrutiny and guidance at the project review stage, and whether it is possible to enforce this guidance during the project implementation. In this case, the level of scrutiny at GEFSEC review stage might need to be more flexible to accept changes, or to allow very general and vague outputs. The implications of such adjustment should be the subject of discussion among the GEFSEC and the agencies.

Adaptive Management

One of the findings of the review is that actual project outputs can differ substantially from those initial designed, but the actual project impact can remain the same or similar. This indicates two points: one is the loose link between outputs and impact; and the other is the need of project management to adapt in the dynamic environment, as manifested by the changing needs of the clients and other factors (i.e. decisions of stakeholders which are independent to the outcomes of the GEF project) which could make certain outputs redundant or unnecessary.

In the specific case of the SAWEP project, the minutes of the steering committee show that it has been flexible to modify the program of activities by removing certain activities and using their initially allocated GEF funding in order to support other activities which were considered more essential. This happened in response to the need of the government to get more information regarding the wind

potential of the country, but also because the initial cost estimation for the specific activity has been completely inappropriate.

Choice of Project Manager

One of the highlights of this review is that the choice of the project manager is critical for the success of a project. In the specific case of the SAWEP project, the selected project manager has demonstrated another skill that goes beyond the technical and managerial skills that are considered *sine qua non* to manage the project: due to his experience in working with all the project stakeholders and the confidence of the executing agency to his skills, he managed to act as the necessary active hub for all the interaction between the executing agency and the other stakeholders (other ministries, local administration, private developers, and industries) and thus catalyzed a lot of dialogue and development. It should be noted that everyone of the interviewed stakeholders has praised the contribution and performance of the project manager.

A significant lesson could be that the selection of a local project manager could enhance the level of confidence among the executing partners, and add the benefit of better understanding of local conditions.

In the case of the REMT, it is obvious that the process of changing the project manager during implementation has added significant delay. This fact shows that the selection of the project manager should be considered as an issue of the highest priority. The fact that the project has now a stable project manager is reflected in the significant acceleration of the project activities.

Another issue is the level of commitment of the project manager. Definitely the professional skills of the candidates should be decisive for the selection of the right project manager, nevertheless the factor of personal commitment to the general objective of the project should be considered too. We would dare to say that it takes a bit more than professionalism - we could call it passion or affection for the subject - for a project manager to be not just good, but also a champion for the cause of the project.

Coordination with Parallel initiatives

The GEF portfolio in South Africa is complemented by several initiatives by bilateral donors, such as GTZ and DANIDA. DANIDA funded a business plan on renewable energy for the DME that addresses the possibilities and future of the Renewable Energy Sector in South Africa. Further DANIDA has contributed seed-funding towards the establishment of the Eastern Cape Community Wind Energy Development Association (ECCWEDA) that was established to protect vulnerable communities (landowners) in project development through community education, lobbying of relevant stakeholders for the development of wind farms, and commitment to equitable sharing of benefits. GTZ has supported a Wind Capacity Credit Study for ESMAP and the DME and elaborated a Regional Regulatory Action Plan to improve the framework conditions for renewable energy.

Besides these initiatives, only the grant financing of the Darling wind farm by DANIDA has been clearly identified at the GEF project design, however the impact of all the activities to the GEF projects is significant. This impact concerns the fact that these parallel have focused in specific activities - such as the capacity credit study supported by GTZ - which provided input to the executing partners of the GEF projects.

This experience highlights that GEF projects can be complemented substantially by other initiatives - nationally funded or funded by bilateral/multilateral aid - even if they are not properly identified at the project design.

Lessons from the Pilot MLR Mission

We deemed as appropriate to choose the wind energy market development as the thematic issue and the relevant projects in South Africa for the filed visit because wind energy is a quite prominent theme in the GEF renewable energy portfolio, and South Africa is the one country in sub-Saharan Africa with high development rates and an industrial base that could potentially serve as a renewable energy technology provider at regional level. From the analytical framework we developed for preparating the field visit, we had adequately covered all the necessary angles for a productive and successful missionThese experiences will help us to evaluate the potential for up-scaling RE investments, and to draw more general lessons learnt for our portfolio in GEF-5 for further advancement of the RBM framework.

Highlights of lessons we learnt from the pilot mission are as follows:

- Timing, duration and logistics: Timing of the pilot mission with a scheduled Subregional Workshop in South Africa was an advantage because it permitted to reduce costs by engaging GEF staff in both missions. We found the full 9 working days quite appropriate for consultations, field visits, and writing. However, the short time available for planning the mission meant that arrangements for meetings had to be rushed. It would have been best to have this done well in advance, especially because a lot of different administrative levels of government had to be involved. In terms of logistics, our team size of two GEF staff was adequate, however the inclusion of an extra member could offer an extra learning opportunity, and it would enhance the availability to meet more stakeholders. However, clear guidelines should be developed regarding the costs of Agency staff that could potentially be covered by the mission's budget.
- Focus of the MLR: The ToR provided sufficient and appropriate guidance for monitoring and learning. It turned out to be a huge advantage that we explicitly focused on monitoring and learning with an unbiased approach. Our emphasis on monitoring and learning as opposed to results and impact made our team welcome by all stakeholders as discussion partners, and they shared information and their experiences with us in an open manner. It also clearly signaled that GEF engagement with projects to understand lessons, challenges and problems during implementation is very much appreciated by executing entities.
- Choice of Country Portfolio: Even though that the wind energy portfolio in another country (Mexico) has been originally selected (mainly due to lower airfare costs), the South Africa portfolio was also shortlisted for the pilot mission. It turned out that conducting the pilot in South Africa was a good decision because the country's renewable energy market is at a critical point; the fruit of the GEF projects and other initiatives is ready to be reaped as long as the government takes immediate action. Also, we expect that our discussions with key stakeholders helped to clarify issues that will be useful in deciding on GEF-5 CC priorities. Because GEF is a strategic financing partner, we believe that the potential for contributing useful information to the government could be an important consideration when selecting projects for missions.
- 360^{o} Approach: Individual meetings should be organized with all the stakeholders that participate in or are affected by the project directly or indirectly. These include, at minimum, officials from all the relevant ministries, provincial and municipal authorities, private developers (individual and their association representatives), NGOs, and financial institutions. Never, never forget to involve the taxi driver: he can provide useful insights about the national situation and the impact of the project!

- Agency involvement: It is invaluable to engage the agencies country officials and the PMUs of the relevant projects in the mission. Their engagement opens the doors of the stakeholders, and saves valuable time. It further gives higher officials a chance to learn about their portfolio as well.
- Reality check: The mission was especially useful in "bringing life" to many of the abstract terms and concepts that we use daily in the GEF Secretariat, by putting them into a realistic context that we hope will add value to our review of project concepts and final documents, especially with regard to:
  - Understanding of how the catalytic role of the GEF is demonstrated in practice;
  - Distinguishing between actual co-financing of the incremental activities financed by GEF and leveraging of co-financing through the link to the baseline project; i.e. understanding perceptions of what exactly is a "GEF Project";
  - Understanding of the catalytic effect of extra funding for studies, consultations and other activities on the political framework.
  - Understanding of the actual comparative advantage of GEF agencies and assessing their capacity for project implementation in the country; and
  - Creation of global environmental benefits and challenges for their measurement.

Figure 1: Stakeholders and team of mission at the Darling Wind farm (f.l.t.r.: Hermann Ölsen, DARLIPP; Dimitrios Zevgolis, GEF SEC; Lucas Black and Marcel Alers, UNDP; André Otto, SAWEP; Josef Buchinger, GEF SEC).

Annex I: Table of meetings

Date	Institution	Whom	Specific Topics
Mon Nov 1	Eskom Convention Centre, Midrand	André Otto, DME; Further ESKOM, NERSA, GTZ	Participating in the *Wind Energy Capacity Credit Work Shops;* Introduction and initial discussions
	Eskom System Operation/ Transmisison	Kevin Leask, ESKOM	Short introduction into the current status of generation, load and transmission in South Africa
Tue Nov 2	Central Energy Fund (Pty) Ltd., Energy Development Corporation (EDC)	Temakasi, SAWEP, wind resource mapping; Tebogo Snyer, Project Manager for DARLING; Sibusiso Ngubane, Head of Department, Local and International Relations	Involvement of CEF and EDC in SAWEP; status of REFIT; impact of GEF in country
Wed Nov 3	GEF CSP, Sandton	GEF OFP	GEF Sub-Regional Meeting
	Eskom Convention Centre, Midrand	Various Wind Energy Stakeholders of South Africa	*Presentation of Capacity Credit of Wind Energy in South Africa*
	DANIDA, Danish Embassy, Pretoria	Carsten Holländer Laugesen, Counsellor, Development	donor coordination
Thu Nov 4	GEF CSP, Sandton	GEF OFP	GEF Sub-Regional Meeting
Fri Nov 5	Department of Energy, Pretoria	M Mathekgana, DoE; Daniel Odhise, New and Renewable Energy, DoE; Nomawethu Qase, Director New and Renewable Energy, DoE; Mpho Nenweli, Programme Manager – Environment and Energy, DoE; Mukezi Thobela, PM for REMT; Marcel Alers, Lucas Black, M. Nenweli, all UNDP	policy framework, support of SAWEP for DoE, REFIT, possible phase II
	NERSA, Pretoria	Ronald Chaoge, Finance department;	REFIT, policy framework

Mon Nov 8	DARLIPP, Darling, near Cape Town	Hermann Ölsen, DARLIPP	Site visit at the Darling Wind Farm, upcoming investments, status of private sector
Tue Nov 9	Private Sector, SAWEA, Cape Town	Mark Tanton, Managing Director, Red Cap Investments	SAWEA, Wind Atlas, standards, grid study, upcoming investments, status of private sector
	Provincial Government of the Western Cape (PGWC), Department of Economic Development and Tourism, Cape Town	Fernel Abrahams, Manager: Renewable Energies, Directorate: Manufacturing Industry Development	Relationship with DBSA, Green Cape Initiative
	City of Cape Town, Cape Town	Brian Jones, Head: Green Energy, Utility Services: Electricity Services	Green certificates
Wed Nov 10	Department of Environmental Affairs and Development Planning, Cape Town	Dipolelo Elford, Chief Director: Environmental Sustainability, Department of Environmental Affairs and Development Planning; Nigel Gwynne-Evans, Director Manufacturing Industries, Dep of Economic Development & Tourism	Status of developments in Western Cape Province, local industry,
	ESKOM, Brackenfell	Riaan Smit, Chief Engineer: Network Planning, ESKOM, Western Region	grid capacity study, Transmission & Distribution, Future of the market in the country
	Private Sector, RE Systems, Cape Town	Duncan Ayling, Development Manager, RE Systems	Market, REFIT, upcoming investments, status of private sector

Annex II: Agenda of capacity credit study workshops

Location: Eskom Convention Centre, Midrand

Monday 1 November 2010

10:00 – 12:00	Presentation of Study Methodology and Results, *Markus Poller (DigSilent)*
12:00 – 13:00	LUNCH
13:00 – 14:30	Discussion of results and presentation on the Wind estimation methodology used for study *Markus Poller & Francis Jackson (Wind Lab)*
15:00 – 16:30	further discussion on Study results, *Markus Poller*

Tuesday 2 November 2010

09:00 – 10:30	Presentation & comments on proposed SA Wind Grid Code, *Markus Poller*
11:00 – 12:30	Set up and running of one study scenario for case study, *Markus Poller*
12:30 – 13:30	LUNCH
13:30 – 15:00	Continue with running of case study, *Markus Poller*
15:30 – 16:30	Review of public presentations and final report, *Markus Poller/Eskom/DoE*

Participants: Markus Pöller, DIGSilend; ESKOM: Francis Jackson, Kevin Leask, Robby Palackal, Teresa Carolin, Lucky Ngidi, Bruce Siauhe, Mavo Solomon; Ronald Chanke, NERSA; Daniel Werner, gtz

Wednesday 3 November 2010

09:00 – 13:00	Public Stakeholder Presentation on The Capacity Credit of Wind Energy in South Africa Welcome by Eskom, DoE and GTZ Renewable Energies in the future South African Electricity Mix – the policy perspective (DoE) Renewable Energies in the future South African Electricity Mix – a system operations perspective (Eskom) *Capacity Credit of Wind Energy in South Africa – Implications for Capacity Planning and System Operation (Dr. Markus Pöller, DIgSILENT)*

Participants: ESKOM, DME, SAWEP, SAWEA, DANIDA, GTZ, private wind developers, others