

SOUTH AFRICA WIND ENERGY PROGRAMME (SAWEP)

BACKGROUND

SAWEP originated from the declaration by the Minister of Minerals and Energy in June 2000 of the Darling Wind Farm as a National Demonstration Project and her request for international assistance in particular from GEF and Danida.

Global Environmental Facility (GEF) assistance

The SAWEP PDF B (preparation phase) document was endorsed by DEAT in February 2001. GEF approved the project in November 2001. The DME Director-General approved the DME as Executing Agency in May 2002 with the UNDP as the GEF Implementing Agency.

SAWEP PDF B (preparation phase: March 2003 – June 2004):

GEF: \$295000

The following activities have been undertaken: (reports can be downloaded here http://www.dme.gov.za/energy/renew_wind.stm)

- Financial Engineering
 - Sub-contracts:
 - Financing of Wind Farms in South Africa: Financial and Policy instruments (Report: Financing of wind farms in South Africa January 2005)
 - Barriers to wind development identified and described.

 Assess and quick scan of 4 current wind farm developments (Report: <u>Practical</u> barrier assessment and removal 2004)
 - Assessment of the barriers to the Availability and Accessibility of Investment Capital for wind power development, and potential activities for their removal (Report: Assessment of Financing barriers April 2004)
 - Financial Model workshopped and updated with key stakeholders (e.g. DBSA, CEF, developers) (Report: Financial Model for Wind farms May 2004)
- GEF Technical Specialist and Green Funding Sources and Mechanisms Sub-contracts:
 - Green Power Market Survey
 - City of Johannesburg: industry and commerce (Report: <u>Green Power</u> Survey City Power January 2004)

- Research and describe issues related to the certification and trade of "green" power certificates and design a mechanism to implement the process of certification and trade (Report: Green funding Sources and Mechanisms September 2004)
- "Green" Power Guarantee Scheme for City of Cape Town (SAWEP FSP, Annex 3)
- Commercial Requirements Power Sales Sub contracts:
 - Power Purchase Agreement (generic) (Report: Generic PPA 2004)
 - Power Wheeling Agreement (generic) (Report: Generic PWA 2004)

The outcome of the activities undertaken as part of the SAWEP PDF B phase has been used to compile the SAWEP Full Size Project document.

GEF accepted the investment in the Darling National Demonstration Wind farm project as South Africa co-financing of the SAWEP FSP.

SAWEP Full Size Project (Phase 1: Technical Assistance)

GEF: \$2,000,000

Co-financing: \$10,049,000 (Darling National Demonstration Wind farm, City of Cape

Town "Green" Power Marketing)

In kind: \$300,000 Total: \$12,339,000

The SAWEP Full Size Project, Phase 1 document was endorsed by DEAT in November 2004. GEF approved the project in 30 May 2007. The DME Director-General approved the DME as Executing Agency on 11 July 2007 with the UNDP as the GEF Implementing Agency.

SAWEP Phase 1

SAWEP Phase 1 is a two year (February 2008 – March 2010) technical assistance project. The SAWEP Phase 1 project document can be found here http://aonrg.com/SAWEP1.pdf

Goal

To reduce GHG emissions generated by thermal power in the national inter-connected system.

Objective

To install and operate up to 5.2 MW Darling wind farm and prepare the development of 45 MW and more combined wind farms.

Expected outcomes

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. By successfully implementing activities under these six outcomes the project will contribute towards the achievement of the project goal and objective.

- ➤ Increased public sector incremental cost funding, by assisting the Government of South Africa with detailing the most appropriate financial instruments that should be made available to stimulate commercial wind energy developments;
 - > REFIT Implementation, CDM
- ➤ Green power funding initialised, by assisting initiatives geared towards green power marketing and setting up and implementing Tradable Renewable Energy Certificates (TRECs) as well as implementing a green power guarantee scheme developed under the PDF B:
 - ➤ Tradable Renewable Energy Certificates (Domain Protocol)
- ➤ Long-term policy and implementation framework for wind energy developed, by assisting the Government of South Africa;
 - > Review of White Paper on Renewable Energy
- ➤ Wind resource assessment, by assisting interested public and private sectors entities with the generation of reliable wind energy data and other necessary information for wind energy development;
 - ➤ Wind Atlas
 - Wind Energy Capacity Credit
- ➤ Commercial wind energy development promoted, by assisting private sector developers with the (pre-) feasibility of a number of wind farms up to 45 MW installed capacity.
 - ➤ Wind Energy Industrial Development Strategy
- ➤ Built capacity building and strengthened institutions, such as key government departments (e.g. national and provincial environmental departments), public agencies (e.g. financing), wind farm industry (e.g. South African Wind Energy Association) and independent private firms involved in wind energy development.
 - > SAWEA, workshops (Standards, Wind Atlas etc)

A Project Management Unit (PMU) has been established. The PMU provides secretariat, coordination and overall management functions and tasks related to the different outputs. The PMU reports to the DME Director Renewable Energy and present progress reports to the SAWEP Project Steering Committee (PSC). The PSC established an Advisory Committee that could function as a platform to present and share ideas as well as to solicit specific inputs from its members that are envisaged to come from different sections within the wind project development community (Eskom, academic, finance, consulting engineers, NGO's and project developers/owners)

Organogram

