

**NATIONAL COUNCIL OF PROVINCES**

**QUESTION 321**

**QUESTION FOR WRITTEN REPLY**

**321. Mrs E C van Lingen (DA-EC) to ask the Minister of Energy:**

- (1) Whether her department has formulated a policy on (a) Renewable Energy and (b) Regulatory Framework to regulate the payment of financial incentives in order to encourage the development of practical application of wind energy; if not, why not; if so, what are her department's programmes that are available to support the development of (i) projects on the utilisation of wind energy as a sustainable renewable source of energy and (ii) other forms of sustainable renewable energy;
- (2) whether her department has (a) introduced any (i) formal guidelines, (ii) policy directives and (iii) site criteria, (b) published a wind resource map and (c) developed regional wind plans in respect of wind generation projects; if not, (i) why not and (ii) what is the anticipated date by which these projects will be introduced; if so, when will they be made available to the public;
- (3) whether her department has put any measures in place to assist provinces, regions and local government to put the necessary plans in place to manage the respective wind energy projects; if not, what is the anticipated date by which these measures will be adopted; if so, what measures? CW416E

**Reply**

- (1) The 2003 White Paper on Renewable Energy policy is currently under review. The updated White Paper on Renewable Energy policy will be submitted for Cabinet approval for public comment by the end of this year.

In March 2009, NERSA announced feed-in tariffs for wind R1.25/kWh, concentrated solar power R2.10/kWh, small hydro R0.94/kWh and landfill gas R0.90/kWh. They announced in October 2009 feed-in tariffs for concentrated solar power with storage R3.14/kWh, grid connected PV  $\geq$  1 MW, R3.94, biomass R1.18/kWh, biogas R0.96/kWh and concentrated solar power tower with 6 hrs storage/day.

Procurement of renewable energy and cogeneration under the REFIT program is governed by the Regulations on New Generation Capacity (Gov Gazette No 32378). The Integrated Resource Plan (IRP1) was approved in December 2009 and provides for projects under REFIT and MTPPP. The MYPD 2010/11 – 2012/13 provides for funding of these projects in IRP1.

The Renewable Energy Finance and Subsidy Office (REFSO) in the DoE and the Renewable Energy Market Transformation project (REMT), funded by the World Bank, provide financial assistance for projects during the developmental stages.

- (2) The Department of Minerals and Energy and Eskom published wind atlases in 1995 and 2001 respectively. A review of these wind atlases concluded:
- “The accuracy of the prediction of wind energy resource at potential sites based on the present wind atlases is very poor. The main reason is the location of the weather measuring masts close to buildings and other obstacles. Therefore the present wind atlases should not be used to predict the energy output at potential sites to be used in feasibility studies.”
  - “The accuracy of the resource estimates may be improved significantly by establishing a network of high quality wind measurements including at least 30 m masts.”
  - The review team also noted that as part of the analysis carried out the study indicate that the wind resources at potential sites are of magnitude comparable to the resources of several other locations around the world, which have been exploited for large scale wind power projects.

The South Africa Wind Energy Programme (SAWEP) is funded by the Global Environmental Facility (GEF) with the DoE as the Executing Agency and the UNDP country office the Implementing Agency. The Wind Atlas project is funded by SAWEP (R6.8 million) and the Royal Danish Embassy (RDE) DKK 9,998,441.2.

The Wind Atlas project overcame previous shortcomings by making use of 10x 60m high, properly designed, constructed and instrumentised wind measurement masts, covering areas of the Northern-, Western and Eastern Cape. Data from these wind measurement masts will be used to calibrate and verify models that will be used to develop the Wind Atlas and database. The modelled and verified Wind Atlas and database will be accurate enough to be used for feasibility studies, motivation of bankable projects and national resource planning. The data will be made public through wind data display and data download web sites to be launched at the 2nd Annual Wind Energy Seminar, 28 September 2010. The 1<sup>st</sup> Wind Atlas and database will be published, 12 months after the wind measurements started at the beginning of 2012.

The development of wind farms is influenced by several factors: renewable energy policy, integrated resource plan, funding, wind resource, land ownership, regulation and legislation, access to the grid, spatial development, environmental sensitive areas, etc.

All wind farm development has to undergo a full EIA process and can only proceed once a positive Record of Decision has been issued. The DoE is supporting an initiative of the Department of Water and Environmental Affairs and stakeholders (provincial departments, Eskom, fauna and flora conservation groups etc) in coming up with national guidelines, within a year, that can be used for resource planning and by investors, developers in identifying areas most suitable for wind farm development i.e. areas most likely that a positive RoD will be issued for wind farm development.