State of Renewable Energy in South Africa: September 2015

Introduction

Every month the NSTF publishes a 'Policy Brief' online, focusing on public policy relevant to science, engineering and technology. Here follows a summary of the 2015 State of Renewable Energy report, and critical comments on some of its contents. Readers are encouraged to respond to this document to the NSTF office at enquiries@nstf.co.za or on our LinkedIn profile (National Science and Technology Forum (NSTF)). Feedback to the office is to be published online at the discretion of the NSTF, and can be submitted anonymously.

Disclaimer

The comments in this document are those of the Executive Director only, and not necessarily the views of the NSTF structures or members.

Background

The Department of Energy published the report on the State of Renewable Energy in September 2015 as a "consolidated and authoritative account of progress made thus far in advancing renewable energy (RE) technologies to the economy and citizens at large". As stated in the foreword by the Minister of Energy, Ms Tina Joemat-Pettersson, the aim of the document is to serve as "…a quick reference point to hold the Department of Energy to account and to provide additional advice on areas that need more attention or intervention".

Summary

The report highlights the main policy documents, legislative framework and institutions that are responsible for driving the RE agenda. It highlights the integral role of research, development and human capital development, which are priorities for ensuring that South Africa keeps up with technological developments in the field. As stated in the Executive Summary, "…a thread that runs through this report is that South Africa could not be where it is now without the financial and technical support of the international community and various aid agencies."

Specific projects and initiatives mentioned in the report include the following:

- Solar Data and Resource Mapping study, which aims to promote the use of solar energy in SADC member states and to improve the quality of satellite-derived solar data available for the area. The study is conducted by the Southern African Universities Radiometric Network (SAURAN) and up-to-date progress can be found on the website, www.sauran.net.
- Wind Atlas for South Africa (WASA I). The WASA has confirmed results from the previous Wind Atlases developed in 1995 and 2001, which showed greater potential for wind energy in the coastal areas. In addition, the WASA has also demonstrated significant wind energy potential inland.

- Potential for new small-scale hydro development – in the region of 247 MW – in the rural areas of the Eastern Cape, Free State, KwaZulu-Natal and Mpumalanga. These are embedded in water transfer and gravity-fed systems throughout the country.

- Work has begun to develop a Biomass Action Plan for South Africa. The results from this 18-month project, which includes biomass resource assessment, are expected by June 2016.

The report also details the extent of the abundance of national RE resources, as well as progress on the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). Other aspects covered include managing the development of the grid infrastructure to support RE deployment; and an overview of RE research and development in SA.

In conclusion, the report recognises that "…there are remaining areas requiring additional support to catalyse development and/or unlock the full spectrum of potential benefits. Initiatives such as biofuels, biogas, solar home systems and distributed RE generation will be important focus points in the continuing journey".

Comments from the NSTF Executive Director

This comprehensive report provides a welcome update and source of information. It is wonderful to note the progress made with the mapping of RE sources and the deployment of RE projects. It is commendable that the government takes the development and roll-out of RE seriously and has listened to experts and stakeholders in this regard.

Useful links

The state of renewable energy in SA (City Press, Feb 2016)

Renewable Energy White Paper (May 2004)

National Climate Change Response White Paper (2011)