



## REPORT TO THE NCCRP WORKSHOP

# PROGRESS REPORT ON CLIMATE CHANGE ACTIVITIES OF THE KZN

by

**Timothy Adebayo Fasheun** 

PhD, Pr.Sci.Nat, Cphys, FlnstP





## **Background**

- The Province of KwaZulu-Natal played a pivotal role in hosting the COP17 in Durban.
- Both the PRE-COP17 and COP17 activities that took place in the province stimulated renewed interests amongst stakeholders and government on climate change management impacts issues.
- Report is in terms of institutional and operational framework.





## nstitutional Framework KZN Council for Climate Change and Sustainable Development

- KZN Council for Climate Change and Sustainable Development established n 2012 to coordinate climate change management activities in the province.
- The council functions on committee basis- Technical Committee and Policy Committees. The committees comprise of reps from some government departments, municipalities, government entities, etc
- Since its inception the Council has had several meetings and initiated a lot of bi-laterals with some foreign governments. The Council participated at the Rio+20 Sustainable Development in 2011 and also at the COP18 at Doha, Qatar.
- The Council aims to pursue localization of manufacturing of renewable energy plant components, and also encourages our tertiary institutions to pursue more vigorously Innovation, science and technology in the green industries related sectors





## **Institutional Framework -KZN Renewable Energy Working Group**

- KZN promotes Green Economy through its KZN Renewable Energy
  Working Group to improve synergies between government departments as
  well as between government and business in renewable energy related
  projects and initiatives.
- The Group is chaired by the Department of Economic Affairs and Tourism.
   The KZN Trade and Investment which is a government entity plays a major project implementation role.

#### The KZN Renewable Energy Working Group is responsible for:

- Project Facilitation & Packaging,
- Funding Facilitation,
- Production & Dissemination of Research, and
- Capacity Building





### **Institutional Framework - The Climate Group....**

- During COP17 the province was approached by the Climate Change Group, which is a regional body made up of sub-nations or provinces of the world.
- The aim of the Climate Group is to promote understanding of climate change issues and promote auctioning climate change impact management plans at that level of government. It also provides a platform whereby healthy discussion and debates on various aspects of Climate Change Management by various sub-nations
- The Province became a member of the group in September 2011.
   Since then the province has participated in the Group's programme in Spain, Brazil and Qatar





#### Institutional Framework -The Climate Group

- At various for the Group is of the opinion that climate change mgt issues can only be dealt with more meaningfully at sub-national level of government.
- The Climate Group, during Rio+20 summit in Brazil and COP18 in Qatar in 2012 enjoined sub-nations (provinces) to play more active role in actioning climate change impacts management.
- To this end, the province is of the opinion that African sub-nations can make a case to the African Union, to air their views and discuss their challenges. African nations have challenges in accessing funds for climate change related projects. It is also believed that it is possible to generate regional funds through the African financial structures to fund projects.





### Provincial Summit on Climate Change 2013

KZNCCSD has seen the needs to convene a Provincial Climate Change Summit in 2013 to discuss these issues. It is planned that findings shall be shared amongst other countries' states or provincial entities during a proposed African Sub-national Climate Change Summit, later in the year or early in 2014.

The Provincial Summit will provide for robust discussion on topical issues and challenges facing provinces in fulfilling its emission commitments. As such, the Summit will be well represented in terms of the various stakeholders, politicians, technocrats, financial institutions, academia, NGOs, etc.

The purpose of the Summit is to:

- Initiate debates and discussions on the challenges faced by provinces and municipalities in responding to climate change issues,
- Explore exchange of knowledge and initiatives amongst stakeholders
- Explore inter-provincial and inter-municipality cooperation –best practices, and
- Explore accessibility to Green Funds.

It is expected that the Summit will be hosted in 2013 at Durban.





#### **Operational Framework-The Renewable Energy System**

#### The KwaZulu-Natal Wind Atlas and Solar Maps

The KwaZulu-Natal Wind Atlas has been developed to determine the mean wind speed of KZN and surrounding regions

#### **Solar maps**

Solar maps have also been developed for the province showing direct normal Irradiation, global horizontal Irradiation and global tilted Irradiation. These variables were used to identify photovoltaic installation potential in the province.

The maps are publicly available for download in pdf on www.kzngreengrowth.co.za.

#### **Potential Wave power**

Some parts of the KwaZulu-Natal coast-line have shown wave energy potential in terms of ocean currents and thermal gradients in the sea. A desk-top study of utilising ocean currents in the province has also been completed by both an NGO and government.





### **Operational Framework-The Renewable Energy System**

#### **Biodiesel Facility at the Isithebe**

The Renewable Energy – Moringa tree plantations and biodiesel production project still engages our attention. This is a community-based rural biodiesel plantation and production facility. An EIA authorisation has been issued for the commencement of the project. The plant shall process the moringa plant and used oil to produce diesel fuel which will be used by the llembe District municipality's vehicular fleet.

#### The Sisonke District Green Building at Ixopo

The Sisonke District Green Building at Ixopo is a low energy efficient building design with passive solar heating and cooling, natural ventilation, rainwater harvesting and the use of natural/local construction materials as far as possible in order to conserve and minimise the use of energy and water supplies. The building is the Department of Public Work's pilot project and model for future infrastructure projects and as an example of an efficient low-energy design against which future KZN Public Works projects could be measured. The R20-million project, due to be completed in Ixopo has received a five-star Green Star SA Office v1 Design rating from the Green Building Council of South Africa





#### **Operational Framework-Carbon storage**

The Atlas on the geological storage of carbon dioxide in South Africa has shown that some areas in Zululand have potential for carbon storage in the province. The South African Centre for Carbon Capture and Storage, an entity of the Department of Energy, is undertaking stakeholders' consultation is this regards.





## **THANK YOU**

timothy.fasheun@kzndae.gov.za