

MINISTER OF ENERGY, DIKOBE BEN MARTINS:
Speech at the Carbon Capture and Storage Conference
Woodmead, Johannesburg
3 October 2013

Programme Director

Chief Executive of the SA National Energy Development Institute (SANEDI)

Her excellency, Ambassador of Norway to South Africa

Officials of the Department of Energy

Representatives of State Owned Companies and Regulators

Representatives of the energy industry

Distinguished and esteemed guests from the African and other partner countries

Ladies and Gentlemen

Thank you for the invitation and opportunity to join you this morning to deliver the Address to mark the start of the 3rd South African Carbon Capture and Storage Conference 2013.

The planet has been the home to human kind from the time human species developed.

Over millennia, our planet has gone through many changes with energy acting as one of the major catalysts. From the utilization of fire by cave dwellers to modern electricity generation, energy has been at the centre of this transformative motive force in the lives of human beings.

Notwithstanding the technological advances that have resulted in the harnessing of nuclear energy, among other latest innovations, we are still reliant on the exothermic chemical reaction of the combustion of fossil fuels.

One of the impacts of the combustion of fossil fuels, and to some extent the burning of biomass, is the release of greenhouse gases and in particular carbon dioxide into the atmosphere.

It is generally agreed that the increasing concentration of greenhouse gases in the atmosphere leads to global climate change with its attendant impacts on the biosphere - impacts on our lives and the ability to develop.

Evidence of these adverse impacts is seen and felt daily with the devastating hurricanes, tornados, flooding, rising sea levels and other natural tragedies. A few more decades without the requisite remedial action will unleash devastating outcomes on humanity and life in general. We have a responsibility to act fast before it is too late.

To address this problem, the United Nations Framework Convention for Climate Change was established – a Convention to which South Africa acceded in 1997. The Convention and the subsequent Kyoto Protocol were aimed at curbing greenhouse gas emissions and consequently global climate change.

South Africa has immense mineral resources that have formed the basis of its economic and industrial development. Mineral resources at our disposal include copious reserves and resources of coal.

In the absence of other forms of economically exploitable energy sources, coal over the years formed the back-bone of energy supply in South Africa, for the generation of electricity, the production of synthetic liquid fuels and other industrial processes such as cement production and metal smelting.

Over the years, South Africa developed skills that have made it possible to burn coal efficiently and economically in order to generate various products. Unfortunately, this has also led to unintended consequences of greenhouse gas emissions.

In response to this reality, South Africa has, as a matter of policy, subscribed to the principle that it should contribute towards limiting emissions while, at the same time, also ensuring that other national socio-economic developmental goals are met.

At the United Nations Framework Convention on Climate Change 15th Conference of Parties held in Copenhagen, in 2010, His Excellency President Jacob Zuma stated that:

“With financial and technological support from developed countries, South Africa for example will be able to reduce emissions by 34% below ‘business as usual’ levels by 2020 and by 42% by 2025”.

This will be made possible by a combination of measures, including the implementation of:

- Energy efficiency measures;
- Renewable energies;
- Nuclear energy;
- Fuel switching; and
- Carbon Capture and Storage (CCS).

For the purposes of this conference, we are focusing on the Carbon Capture and Storage.

The National Development Plan, a plan to fast track growth and development in South Africa, promotes a co-ordinated approach in response to the challenges facing South Africa, which include efforts to address the Carbon emission challenge. Accordingly, the plan states that:

“International experience shows that the most effective way to achieve a just and managed transition to a low-carbon economy and encourage emitters to change their practices is to internalise the social and environmental costs of their behaviour. This can be done through adequately pricing carbon. Coordination of policy and approaches in government helps to establish a carbon-pricing strategy, and the government has identified two instruments in this respect:

- *Carbon pricing; and*
- *The carbon budget approach”.*

Notwithstanding advances to a low-carbon energy economy, South Africa will remain reliant on coal for its major primary energy requirements for the short to medium term. As stated, South Africa is exploring the feasibility of using carbon capture and storage as a transitional measure from fossil fuels to a renewable/nuclear future.

Carbon capture and storage has already proven itself internationally for the past few decades – mainly for enhanced oil recovery. The factors that each country must address for itself – while learning from international success stories - are the geological storage and the regulatory regime.

In this regard, the National Development Plan enjoins us to:

“..increase the efficiency of coal conversion, and any new coal power investments should incorporate the latest technology. As the existing fleet of old coal-fired power stations is replaced, significant reductions in carbon emissions could be achieved. Cleaner coal technologies will be supported through research and development and technology transfer agreements in ultra-supercritical coal power plants, fluidised-bed combustion, underground coal gasification, integrated gasification combined cycle plants, and carbon capture and storage, among others”.

The National Development Plan further commits our country to also explore cleaner coal technologies:

“Cleaner coal technologies will be promoted through research and development investments and technology-transfer agreements in, among others, the use of ultra-supercritical coal-power plants, fluidised-bed combustion, underground coal gasification, integrated gasification combined cycle and carbon capture and storage”.

Cabinet has given a go ahead for the Department of Energy to pursue the Carbon Capture and Storage Initiative. In May 2012, Cabinet approved the Carbon Capture and Storage Roadmap. Since then, the Department of Energy has taken tangible steps to implement this mandate, working with its agency, the SA National Energy Development Institute (SANEDI), and other stakeholders in the energy industry.

A significant amount of financial resources have been set aside for the purpose, and this will increase with time as the scope of the project continues to expand. Recently, the Department allocated R197 million over the next three years towards carbon capture and storage.

This conference gives us an opportunity to share ideas and expertise on how we can work together to address one of the foremost challenge of our times, the efficient and effective management of Carbon emissions. We are encouraged to note that a significant number of state owned and private sector companies are already part of this initiative.

As His Excellency President Zuma indicated in his address at Copenhagen in 2010, the success of this endeavor will also depend on the contribution of developed countries, both in terms of financial and technical assistance. There is no doubt that this challenge is as important to developing countries as it is to the developed world, and working together, we can overcome the scourge, and thus, create a better environment for many generations to come.

Programme Director,

Allow me to conclude by officially opening this conference. I have no doubt that the outcome of this conference will go a long way to position our country as an important participant among others in global endeavors to combat Carbon emissions.

I THANK YOU