**Minister Pandor's speech at the launch of the BioEnergy Atlas**

Department of Science and Technology

Friday, 24 March 2017

08:30

CSIR, Pretoria

It's a pleasure to launch the South African BioEnergy Atlas and the web portal this morning and to have an opportunity to talk about SAEON.

SAEON is a network of institutions with a mandate to undertake environmental research. SAEON receives core funding from the DST to run and maintain long-term environmental observation and data systems, together with an environmental science engagement programme.

Its research outputs contribute to our knowledge about land use, energy and global change and it shares its research infrastructure, databases and intellectual capacity with government, higher education and industry.

As such, its environmental research falls under the umbrella of the DST's Global Change Grand Challenge.

The DST commissioned SAEON to produce this version of the BioEnergy Atlas back in April 2012.

It was completed in September 2014 and SAEON submitted a closure report to DST through the NRF in March 2015. Basically the Atlas was prepared and a portal designed for data, reports, and decision-support tools.

The Atlas is an important addition to the work South Africans are undertaking in the field of global change. South African scientists are making critical contributions to global work, for example, by the International Panel on Climate Change.

Whether it is in the field of protecting biodiversity, or the development of more efficient management systems for natural resources, such as water, South African scientists count among the best. Our collective global ability to understand what is happening to our planet would be much the poorer without our contributions to many international observation systems.

Energy security is high on our environmental, but also scientific agenda. We are expanding our work in the renewable energy field, especially solar, but we can in biomass as well, as the SAEON scientists have shown.

As a country, South Africa has a long-term vision of a low-carbon economy. As a contribution to this vision the DST launched a bio-economy strategy in 2014. In so doing, South Africa joined the G7 industrialised economies and at least 20 other countries that have dedicated bio-economy strategies.

According to the strategy, “bio-based” products include bio-based chemicals (bulk and speciality chemicals, biocatalysts), bio-materials (bio-composites, bio-polymers) and bio-energy (bio-diesel, bio-ethanol, bio-butanol, and bio-gas). All these products would have to be derived from non-fossil products. The only known alternative to fossil fuel is biomass. The bio-based commercial and industrial products envisioned in the Bio-economy Strategy will therefore rely on biomass availability.

However, as we all know, South Africa is a semi-arid country with limited biomass potential.

We need a new policy on biomass use in order to be able to meet future competing options, to determine how preference should be given to food and medicines over animal feed, chemicals and materials. The new Integrated Resource Plan consultations are near complete, and what the BioEnergy Atlas shows is that we have higher potential in bioenergy than we thought.

We can't make policy without data and evidence, as we know to our cost. The lack of capacity and limited access to data at different spheres of government contributes to the delayed uptake of bioenergy in South Africa. The Atlas and the portal provide policy makers with a way to address this and it facilitates local and provincial government plans to exploit bioenergy resource opportunities. The web-based tool, supplemented by online and printed reports, will help us to attract potential investors into the emerging bioenergy sector and assist local and regional planners in identifying opportunities.

A word about the green economy.

Powerful forces are driving a green economic revolution worldwide, providing in the process a strong lever for broad-based economic development in many parts of the globe, and often re-orienting national development trajectories. South Africa, having one of the most carbon-intensive economies in the world, is no exception. Our government is strongly committed to unleashing the potential of the green economy.

Sustainable development is a core organising idea in the National Development Plan (NDP). Its the first plan we have developed that encompasses the whole of government. It sets out a vision 2030 for South Africa, with key targets to be met and identifies specific steps for implementation. It takes a strategic, wide-ranging view at the challenges and opportunities before us; and is based on an extensive consultation with the South African public. It is a plan for dealing with unemployment, inequality and poverty.

The NDP is an integrated approach to policy making, combining theory, evidence and practice with an aim of ensuring pragmatism and continuous learning in implementation and governance. It advocates a radical transformation in the economy within the context of a mixed economy. It calls for a strong and effective state that is able to intervene on behalf of the poor and marginalised in order to correct the historic imbalances of power and the accumulation of wealth. It proposes a dialogue between business, labour and government as a means towards ensuring investment, employment and growth.

The DST focuses on specific areas for R&D - astronomy, energy, bio economy - in which we intend to become world leaders. We aim to catalyse vibrant, knowledge-based activities in South Africa that will be driven by the quality of the scientists we train, the quality of our research and development infrastructure, and the enablers we have put in place to turn scientific research into technology. The DST has, over the years, made significant investments in centres of excellence, research chairs and national research facilities.

In closing, let me repeat that the NDP endorses the need to move to a low-carbon economy, while acknowledging that this transition will require innovative solutions.

Our cities need to become leaders in climate-change mitigation and adaptation. They are affected by urban sprawl, which reduces biodiversity and increases transportation emissions. Our cities are also affected by apartheid planning where the poorest communities live far away from services or on flood plains, increasing their vulnerability and also exacerbating the transportation emissions.

The DST has science, technology and innovation in the field of climate change as one of its Global Grand Challenges. It is important for all of us to understand the causes and impact of climate change, so that we can be empowered to become responsible citizens and to make changes in our lives that will improve not only our environment but also our quality of life. This behavioural change in society is crucial to a sustainable future.