

**First Southern African Solar Energy Conference (SASEC),
21-23 May 2012, Stellenbosch, South Africa**

**Welcoming address by Prof H Russel Botman,
Rector and Vice-Chancellor of Stellenbosch University**

Thank you. Good morning, everyone. Distinguished guests:

- Ms Helen Zille, Premier of the Western Cape Province
- Prof Wikus van Niekerk, Director of the Centre for Renewable and Sustainable Energy Studies, and Chair of the Organising Committee of this Conference
- Dr Christoph Richter of the German Aerospace Centre, DLR
- Prof Jürgen Werner of Stuttgart University
- Mr Stephen Koopman of Eskom, main sponsor of this event
- Dr Tsakani Mthombeni of the Technology Innovation Agency, also a sponsor
- Delegates from all over the world;
- Colleagues, ladies and gentlemen ...

... it gives me great pleasure to welcome all of you to Stellenbosch for the first Southern African Solar Energy Conference (SASEC).

The 19th century French author Victor Hugo once said: “You can resist an invading army but you cannot resist an idea whose time has come.”

Surely this event is one such an idea. Globally, renewable energy is high on the agenda, and solar power is one of the key focus areas for a world looking for sustainable solutions to its energy needs.

Our country and region – in fact, our continent – has an abundance of sunshine, which puts us in an excellent position to make use of this resource.

Currently, over 90% of South Africa’s electricity is generated from coal. But like all fossil fuels, coal is a finite resource – it is only a matter of time before it runs out.

The other problem with coal, of course, is the carbon dioxide that is released when it burns. The emission of greenhouse gases has been implicated in global warming and climate change, which threatens all life on our planet.

So, we have to urgently fast-track our ability to sustainably exploit renewable energy.

We know that there are various sources of renewable energy – hydroelectric and geothermal power, the wind, the ocean -- but of all of these, the sun is the hottest, if you’ll excuse the pun, especially in our part of the world.

In Europe, Spain is well known for its sunshine; and it is very advanced in solar energy. But South Africa receives 50% more sunshine than Spain, which is an advantage that we should make better use of.

The good news is that South Africa is on the verge of commissioning large renewable-energy power stations. And these could actually come on line before the controversial coal-fired power stations currently under construction.

We have reached the point on the curve where renewable energy is starting to compete with conventional sources – for three reasons:

- Technology is advancing fast;
- Private investors are putting their hands up; and
- Government is working with industry to make things happen

What we need to do now, is to keep up the momentum. This conference can help us do exactly that. It brings together leading experts and role-players with the aim to discuss the latest advances in both Solar Photovoltaic technologies; and Solar Thermal Energy technologies.

Stellenbosch University is proud to be a significant role player in renewable energy. Let me highlight some of our contributions, which are made in collaboration with colleagues from other universities – both in South Africa and further afield.

- Our Faculty of Engineering hosts the Centre for Renewable and Sustainable Energy Studies, which trains engineers and scientists, and provides research support to the industry.
- Our Department of Mechanical and Mechatronic Engineering hosts the Solar Thermal Energy Research Group, the largest of its kind in the country.
- The Department of Microbiology in our Faculty of Science hosts the SANERI Chair in Biofuels.
- And lastly, Eskom has designated Stellenbosch University as a Centre of Expertise in Renewable Energy Technology.

Other supporters and funders of these ventures include Sasol, the Department of Science and Technology, the National Research Foundation; and various private companies.

The Provincial Government of the Western Cape also lends a helping hand in various ways. That is why we appreciate your presence here, Madam Premier.

We also have formal collaborations on renewable energy with the universities of Cape Town, Pretoria, and KwaZulu-Natal; as well as the Cape Peninsula University of Technology;

and, as can be seen in the programme, with research institutions and universities the world over.

It is important for universities to pursue not only excellence but also relevance. Tackling a major challenge that humanity is grappling with, such as sustainability, is our way of making a relevant contribution.

At Stellenbosch University, we follow a science-for-society approach. The vehicle that we use to drive our endeavours is the HOPE Project. Its themes were distilled from the Millennium Development Goals of the United Nations. Balancing sustainability with a competitive industry is one of our priorities. Our other goals are to eradicate poverty, promote human dignity and health, consolidate democracy and human rights, and to advance peace and security.

Renewable energy – in particular solar energy – has a major role to play in changing the world. And those who doubt it can just go to Enkanini, which is an informal settlement a few kilometres from here. There they will find a joint project between Stellenbosch Municipality and the University. It is called the iShack, which is a prototype dwelling erected by postgraduate students in Sustainable Development. They are working with the Municipality on an upgrading programme for informal settlements.

On the roof of the iShack is a small photovoltaic panel that generates enough electricity for two electric lights; and for charging a cellphone. It does not sound like much, but this is exactly the kind of innovation that can improve the quality of life of the poorest of the poor in developing countries the world over.

Crucial for this kind of project to succeed is close collaboration between different role players. That is why we value the role played by our partner in the iShack project, the Stellenbosch Municipality.

In similar vein, the collaborations that can flow from this Conference can really boost solar energy in Southern Africa and beyond.

Ladies and gentlemen, may your conference be fruitful – or shall I say, may the sun shine brightly on your endeavours ... for all our sakes.