

THERE IS SOME SERIOUS HEAD-SCRATCHING AHEAD FOR THE SOUTH AFRICAN ENERGY SECTOR.



Mr Andreas Carlgren, former Swedish minister of the environment in Sweden.

That much was clear when a panel of South African and international experts, after three days of brushing up on the technicalities of and technologies available to the sector, got down to the brass tacks of policy and strategy. The around 40 panellists had huddled together at the Stellenbosch Institute for Advanced Study (STIAS) for *Investment and Technology Choices in the SA Power Sector: Economic, social and environmental trade-offs*, a three-day workshop followed by, on 7 and 8 March, the first STIAS-Wallenberg Round Table Meeting.

The participants took as their point of departure South Africa's Integrated Resource Plan 2010-2030 (IRP2010) and the country's National Development Plan, among other guideline documents. The aim of the week-long meeting was to envisage a possible new power plan for South Africa, based on global trends in energy and related technological developments.

Those trends include the apparent fall from grace of nuclear energy. That's not simply the fallout from the Fukushima Daiichi nuclear disaster in Japan in 2011, but also the growing realisation that nuclear energy can no longer be justified economically, explained both Andreas Carlgren, former Swedish minister of energy, and Professor Tomas Kåberger, professor of industrial energy policy at Chalmers University of Technology, Sweden, and energy advisor to Japan.



Mr Saliem Fakier, head of the Living Planet Unit at WWF South Africa and Ms Maud Olofsson, former minister of energy in Sweden

A major player in the world energy market is China, both emissions culprit supreme and forerunner in the adoption of renewable energy, Carlgren and Kåberger pointed out. Not only has the amount of energy the country derives from wind power exceeded that from nuclear reactors, but there is also a chance that, based on current trajectories, China's investment in new renewable-energy installations could overtake that in coal-based installations in 2013.

South Africa may not be that far along in adopting renewable energy, but the country hasn't exactly been procrastinating, either. Professor Wikus van Niekerk, director of the Centre for Renewable and Sustainable Energy Studies (CRSES) at Stellenbosch University, took participants through the "onerous" Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), a national initiative for the provision of some 3 725 megawatts of renewable energy. One pleasing outcome from the REIPPPP, Van Niekerk showed, was that prices for the provision of most forms of renewable energy had dropped slowly but surely as the process went on.

"It shows that when you have a competitive bidding process, it does help bring the prices down," he said.

And the country has been pushing ahead with most other forms of renewable energy, projects fanned out across the country. South Africa is particularly suited to the use of solar energy systems, said Van Niekerk, although there are constraints – most notably access to water sources and to the national power grid.

One energy source that has to be, at the very least, given some serious consideration – and there are mixed feelings about it – is gas, explained Saliem Fakir, head of the Living Planet Unit at World Wide Fund for Nature: South Africa. It may not be as 'green' as wind turbines or solar energy, but it is an improvement on coal, and there have been recent developments to take into account. "There are now regional and domestic sources which are beginning to make us rethink gas," said Fakir.

Another area that has been overlooked is energy efficiency, agreed participants. Kåberger argued that, with the right (tax) incentives, there is room for substantial and profitable energy efficiencies, as Sweden found in its quirkily titled but, he argued, very successful Programme for Efficient Energy Efficiency.

And after a dark period in which national policy was written up almost in isolation – the state steering clear of scientists and academics – there are now again opportunities for those in the energy field to shape policy, said Professor Anton Eberhard, an energy expert at the Graduate School of Business at the University of Cape Town. Most notably through the National Development Plan. But that requires the right kind of input.

"And I hope we invest again in research capacity that supports policy development," Eberhard told the meeting. "This country is in desperate need of quality and good policies and the capacity to implement these policies."

- REPORTING BY MORGAN MORRIS

Source: <http://blogs.sun.ac.za/news/2013/03/11/meeting-explores-state-and-future-of-sa-energy-landscape/> (dated 11 March 2013, accessed 19 March 2013)