



AIR FORCES

A UNIFIED APPROACH AND POLICY CERTAINTY ARE KEY TO REALISING
THE POTENTIAL OF RENEWABLES, SAYS BRENDA MARTIN, CEO OF THE
SOUTH AFRICAN WIND ENERGY ASSOCIATION

BY KERRY DIMMER

Profile

The time has come for all individuals and corporates to pay attention, and contribute, to the energy transition, says South African Wind Energy Association (SAWEA) CEO, Brenda Martin.

This statement comes in the wake of recent Cabinet changes, which have reintroduced the possibility of policy certainty for the renewable energy sector. 'The impact of the previous government not providing clearly defined regulations over the past three years has resulted in serious negative impacts on the South African renewable industry value chain,' she adds.

Policy certainty is critical to this relatively new sector in SA, Martin points out. This is particularly so for wind power, which, she says, being an abundant resource that is well-suited to utility-scale generation, contributes directly to the SA economy through least-cost power generated, construction on-budget and on-time, while creating jobs, advancing the transformation agenda and attracting much-needed foreign investment.

The delay in concluding power purchase agreements (PPAs) has led to declining manufacturing orders, job losses and unrealised rural economic benefits, according to Martin. And indirectly associated industries, such as steel, concrete, catering, cleaning and security services, have all felt the knock-on effects of development lag.

Martin has led several initiatives to unlock the impasse that surrounds renewable PPAs, by engaging with government, labour and civil society. Her efforts under the SAWEA banner have also raised considerable awareness and heightened attention to the value of wind energy.

'Harnessing wind power does not deplete valuable natural resources – virtually no water is used in the generation of wind energy and during generation it produces no air or water pollution,' she says. 'Wind farms also coexist with other farming practices, offering the best value for money when compared to other power supply options.'

This has been proven by the fact that wind power provides more than 50% of the total renewable power generated in the country, while accounting for 30% of the total renewable energy cost, says Martin. 'Approximately 900 wind turbines are now generating renewable electricity into the national grid.'

Sophisticated computer models run by Eskom and independent research institutes indicate that when mixing renewable energy generation options, a level of security of supply that is equivalent or even superior to what is currently achieved, provides the most effective and optimal advantage.

'These results consistently confirm that on a least-cost path, most of South Africa's new capacity has to be renewable, provided there is system support from gas turbines, as well as enough energy storage,' says Martin.

The CSIR and the University of Cape Town's Energy Research Centre have also undertaken studies, conclusively demonstrating that the option of new wind, solar PV and flexible generation capacity can deliver the least-cost electricity price trajectory in the years up to 2050 and beyond, as well as the least water consumption and lowest carbon emissions.'

In 2015, the Department of Energy confirmed that wind and solar power (in 2016) would cost just 62c per kWh. When compared to coal at some R1.03 per kWh, the costs of new wind and solar PV meant Eskom's average 2016/17 price of electricity could be lowered by 20%. However, this has not been realised in the market, due to the instability of the policy regime.

Martin agrees with Meridian Economics, which concluded from a study that 'Eskom's growing surplus capacity accelerated the transition in relative energy economics [and] that it will be cheaper to close Eskom's older power stations and rely on a combination of power from its newer and more efficient coal plants and new renewables'.



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'The study confirmed that South Africans would be in a much better position if three to five of Eskom's oldest coal stations were shut down rather than operated to their scheduled end-of-life, and the country's energy needs were instead met by new renewable power producers,' says Martin. And while she acknowledges that renewable power cannot replace all jobs lost in the transition away from coal, a recently published CSIR study has forecast that more than 2 270 000 direct, indirect and induced jobs could be created in the wind power sector – provided, Martin emphasises, procurement and policy certainty remain consistent.

Achieving the energy transition in SA will not happen overnight. The introduction of renewable energy must happen steadily and consistently with due consideration of the positive and negative effects, so that by 2050, a transformed SA energy landscape can be realised – one that is accountable, affordable and low risk with new, better jobs in low-carbon industries. 🌱