

Blinkered view on nuclear is bad for SA's economic future

Issued by [UCT Graduate School of Business](#)

2 Sep 2016

If South Africa and the rest of the continent are to have any hope at long-term power sector reform, it's essential to have a more honest conversation about the role of renewables.

Bill Gates, delivering the Nelson Mandela Annual Lecture in 2016, told South Africans: “In the long run, what Africa needs is what the whole world needs: a breakthrough energy miracle that provides cheap, clean energy for everyone.”

It was an optimistic statement, given that in the same lecture he noted that 7 in 10 Africans still [don't have power](#). By an energy miracle, he's previously clarified, he means “some form of energy whose 24-hour cost really is competitive with hydrocarbons given, say, 20 years of learning curve. You invent it, then you look at how much its costs go down over the next 20 years, that it really beats hydrocarbons.”

On the African continent, renewables are rapidly moving in this direction, although Gates himself has expressed some scepticism about the real cost advantages of wind and solar. Necessity being the mother of invention, Africa's impending population explosion – combined with the fact that roughly [\http://www.africaprogresspanel.org/publications/policy-papers/2015-africa-progress-report/ 620 million Africans]] are currently living without power – means the continent has sped ahead in terms of energy innovations. Caroline Kende-Robb, executive director of the [Africa Progress Panel](#), recently told [CNN](#) that Africa was well on its way to becoming a clean energy superpower. The International Renewable Energy Agency Africa 2030 report, meanwhile, has argued that renewable energy has the potential to more than quadruple by 2030 to [22% of total power supply](#), compared to around 5% today.

There can be no question that in South Africa, which has been something of a trailblazer through its REIPP programme, renewables is more than a buzzword. The REIPPP was launched in 2011 to promote private sector investment into grid-connected RE generation, and has shown that there are real and tangible advantages in renewables compared to the continued – and ill-fated – battle for nuclear power. Business Day recently reported that the sheer cost, combined with a string of other logistical problems, could well spell the end for nuclear.

“The Integrated Resource Plan (IRP), the government's long-term plan for electricity generation, is again stuck in the works, despite being six years out of date, with modellers and government officials wrestling over an appropriate price estimate for nuclear energy,” the publication reported. “Should the cost of nuclear energy come in too high compared to other technologies, then the nuclear build programme, could be blown out of the water.”

Eskom, of course, is stuck between a rock and a hard place, with multiple other stakes to protect, all while attempting to disentangle problems that began before the millennium. Analyst Dirk de Vos recently summed up its unique predicament, arguing: “Eskom has to run two separate and incompatible stories concurrently. To Nersa, it is full of dark warnings about the catastrophic outcomes should Nersa not grant its MYPD tariff applications, but to National Treasury and its debt holders in its annual financial reporting, everything is just fine, management is of a superb quality and it is about to turn the corner into a glorious future.”

To date, a frank discussion of the true state of South Africa's energy environment has been avoided, misunderstandings and misinformation abound, and support survives for one more step down an already ruinous path to inefficient and costly energy provision.

The cost of this blinkered view is considerable, and wasted. According to Professor Anton Eberhard, who runs the Managing Power Sector Reform and Regulation executive education course at the UCT Graduate School of Business (GSB), South Africa simply does not need an ambitious nuclear power deal. For multiple reasons. “Electricity demand has

been more or less flat and is currently lower than it was ten years ago. South Africans are, also, simply more energy-efficient today. Most importantly, the price of nuclear is more expensive than other power options.”

The Department of Energy has signed off long-term renewable energy price contracts that are as low as 57c/kWh. As things stand, Eskom's average selling price is much higher than these new IPP contracts.

“In a country where energy provision has already been so hampered by confusion and misinformation, it is enormously encouraging that the REIPPP model has been so successful – literally the light at the end of the tunnel. It has demonstrated so clearly the alternative future within our grasp. The competitive tender model used via REIPPP not only stimulates innovation, it reduces the chances of corruption. The bidding process awards multiple bidders in each competitive tender, and this model has managed to maintain high levels of transparency and security to ensure objectivity during bid evaluations. South Africa's REIPP programme is widely viewed as a leader in its field, not only for scientific innovation but also a highly successful business model,” says Eberhard.

A number of challenges still remain if the REIPPP model is to be replicated elsewhere in Africa and, including conducive business environments, unstable political leadership in some nations, and sometimes a lack of political will. But the Management Programme in Infrastructure Reform and Regulation at the UCT GSB has conducted a detailed review of the REIPP programme providing a number of useful recommendations that pave the way for other countries to achieve equal or greater success.

Africa has the potential, led by South Africa's innovators in science and business, to become and remain a world leader in the provision of renewable energy. And although investment is still [sorely needed](#), renewables have long since proven to be [a viable and cost-effective alternative](#) and/or supplement to fossil fuels, especially gas

“If we are honest about what is best for our energy future, this conclusion is inescapable,” comments Eberhard.

For more information on the Managing Power Sector Reform and Regulation executive education course, please visit <http://www.gsb.uct.ac.za/power-sector>. The course will run from 12 to 16 October 2015.

- **UCT GSB'S Executive MBA ranked Top 5 globally for gender diversity** 19 Oct 2023
- **African startups take centre stage in local accelerator programmes** 17 Jul 2023
- **Inaugural Africa Impact Summit to showcase how impact investing can transform the continent** 5 Apr 2023
- **Take your startup to the next level! Join the e-Track programme** 1 Mar 2023
- **UCT GSB conference to share insights on how to do business in Africa** 6 Dec 2022

[UCT Graduate School of Business](#)



The University of Cape Town Graduate School of Business (GSB) is recognised as one of the best business schools in the world. Its innovative approaches to teaching and learning and commitment to relevance and social impact set it apart from most.

[Profile](#) | [News](#) | [Contact](#) | [Twitter](#) | [Facebook](#) | [RSS Feed](#)

For more, visit: <https://www.bizcommunity.com>