WERKSMANS
ATTORNEYS

INFRASTRUCTURE & ENERGY

Original Integrated Resource plan should still be SA's roadmap to solving energy crisis

3 June 2019 *4 min read*

The original Integrated Resource Plan (IRP) of 2010 should still be our roadmap to solving South Africa's energy problems. The plan set the target of about 45% of our total energy mix to come from renewables by 2030. We are already halfway there and are way behind targets.

But can we catch up?

The updated IRP which is sitting with the National Economic Development and Labour Council (Nedlac) for comment, has cut the renewables target to a mere 32%.
The latest plan proposes an energy mix by 2030 of 34 000 MW of coal (46%); 1 860 MW of nuclear (2.5%); 4 696 MW of hydro (6%); 2 912 MW of pumped storage (4%); 7 958 MW of solar PV (10%); 11 442 MW of wind (15%); 11 930 MW of gas (16%) and 600 MW of concentrated solar power (1%).

Energymix infograph for article

Unfortunately, we lost four valuable years for implementing renewables when the smooth Power Purchase Agreements process to buy renewable energy from independent power producers (IPPs) was abruptly halted in October 2015, with no logical explanation. If we were on track to our original 2030 goals we would by now be getting about 22% of our energy from renewables. And we wouldn't be having to face frequent rolling blackouts that do so much damage to our economy.

The outlook is not all bleak. A number of quick wins could get us back on track to meet the approximately 45% renewable target in the next decade. In fact, we may well be on track again sooner than later following the recognition by former Energy Minister Jeff Radebe that we need to act with extreme urgency in addressing the energy crisis in South Africa. Then Minister Radebe notified Nersa that he had approved deviation from the IRP (2010-2030) in accordance with section 10(2)(g) of the Electricity Regulation Act of 2006 for the granting of licences to small-scale embedded generation (SSEG) projects, with a combined capacity of 500 MW. This means that IPP developers will not have to get permission from the minister for a deviation from the IRP.

Government should double the capacity to be brought on board in each of the next three rounds of Renewable Energy Independent Power Producer Procurement Programme (REIPPPP).

Renewables are a no-brainer for our cash-strapped government. Renewable energy, combined with flexible generation or storage, is the most cost-effective power to produce. Wind and solar photovoltaic are now the cheapest forms of power generation per kilowatt hour (kWh) while the cost of renewables is expected to continue dropping.

SA would need to implement battery technology to store renewable energy – a good investment compared to the alternatives, such as continuing to rely solely on a struggling Eskom. Renewables and Eskom should both be part of the solution to our energy crisis.

Before REIPPPP was put on ice in October 2015, we had global investors lining up to invest. They may have been put off by the uncertainty, but if government commits to a 45% target by 2030, and shows it has the appetite to follow through, foreign investors would return to our shores. There is already interest, which will be shored up by the proactive conduct of government in removing the regulatory hurdles in relation to SSEGs, as these are generally considered the quickest and cheapest way for South Africa to address its electricity capacity crisis. After all, there are few opportunities in renewables in other markets like Europe which are largely saturated.
Nedlac should call on government to relook the IRP to reconsider the renewable energy targets. In the absence of readily available energy

from Eskom, South Africa should increase its reliance on renewables. After all they are cheaper and quicker to install to keep the lights on – and this is exactly what we desperately need.

@werksmans