

## **Tallying the benefits of South Africa's Renewable Energy Power Producer's Procurement Programme PRESS RELEASE**

As energy investors eagerly await announcements of the preferred bidders in the latest round of South Africa's renewable IPP programme – the so-called expedited bid window - it is worth reflecting on the successes of the country's Renewable Energy Power Producer's Procurement Programme (REIPPPP) and why it has achieved what many commentators believed was an unachievable feat.

"The REIPPPP has been a resounding success, spurring not only investment into South Africa's energy sector, but in the broader region," says Scott Brodsky, Partner and energy lawyer at international law firm Macfarlanes, who are advising clients across Sub-Saharan Africa on all aspects of renewable and other energy projects, including project financing and bankable power purchase agreements.

"The effect of load shedding on life, on businesses and the wider economies is devastating. Although South Africa is having temporary respite from load shedding, some countries in the region are experiencing 12 to 16 hours per day with no electricity. The good news is that IPPs are helping tremendously and the need for new generation has translated into significant new opportunities," says Brodsky.

The successes of the REIPPPP have been notable; Brodsky and the Sub-Saharan Africa team of Macfarlanes have power and energy specialists based in their offices in Johannesburg and London.. They are currently advising on energy projects throughout the region, including in South Africa, Namibia, Zambia, and Mozambique.

The success story of South Africa's renewable energy programme is impressive when one views the figures. Sandra Coetzee, Head of Strategy at the Department of Energy's IPP Office, recently shared the Department of Energy's latest figures at the third annual IPP conference held in Sandton.

"Launched in 2011, the REIPPPP Programme is bringing about a tangible transformation to our country's power sector and economic and physical landscape. The competitive bidding approach clearly demonstrates that renewable energy options, and specifically onshore wind and solar PV power, can already be delivered at lower costs in energy terms, than new build fossil fuel solutions," said Coetzee.

### **Here are some of the facts and figures:**

- The AfDB estimates that nearly 654 million Africans still have no access to energy. This signals enormous potential for energy investment on the continent.
- In 2010, the South African government adopted a plan to grow the share of renewable energy in the electricity mix from 0% to 21% over the 20-year planning horizon to 2030, simultaneously reducing the capacity share of fossil fuels in the electricity mix from 86.5% to 57%.
- The REIPPPP Programme has attracted vibrant investor interest both locally and abroad. Commitments to the value of 194 billion rand have been raised, contributing to South Africa being rated by the Climate Scope Index as 3<sup>rd</sup> and 4<sup>th</sup> most attractive renewable energy investment destination among emerging markets (in 2014 and 2015 respectively).

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- The annual competitive bidding process effectively leveraged rapid global renewable energy technologies and price strengths, buying cleaner and cleaner rates with every bid cycle. Consequently South African citizens are getting the benefit of renewable energy at some of the lowest tariffs in the world.
- At the end of 2015, 6376 MW of power was successfully procured from 102 IPPs in four bid rounds of the Renewable Energy Independent Power Producer's Procurement Programme.
- This 6376 MW of power procured represents an extraordinary 92.1% of the target 6925 MW renewable energy to be operational by 2020.
- Of the 6376 MW of renewable energy procured, just over 2GW of electrical generation capacity has been connected to the national grid. This is equivalent to half of the capacity of an additional coal powered station, delivered in only a third of the time.
- This renewable energy capacity is contributed by 40 operational renewable energy plants that will be producing approximately 5.12 terawatt hours of clean energy per year, enough to supply 1.5 million average South African households with power for a year.
- South Africa's renewable energy share of installed capacity has grown from 0% to in 5% in five short years, making it one of the fastest growing renewable energy programmes in the world.
- Onshore wind has contributed 3308 gigawatt hours to the national grid, making it the biggest wind energy producer in Africa, followed by Morocco, whose installed capacity stood at 787 MW in 2015.
- South Africa was recognised among the top 10 countries with the largest installed utility scale solar photovoltaic capacity in the world, having reached 3300 gigawatt hours by December 2015. Concentrated solar power's contribution to the grid was 181 gigawatt hours, whilst small hydro technologies made 40 gigawatt hours.
- A study by the Council for Scientific and Industrial Research (CSIR) found that the wind and solar power capacity operational during 2015 showed an R800 million net benefit to the economy achieved during that year, followed by a further marked increase in the first 6 months of 2015, helping to save more than an additional 4 billion rand in costs to the economy.
- From programme inception to date, 7 million tons of CO<sub>2</sub> equivalent reductions have been realised, of which 4.7 million tons alone were realised in 2014/2015. The procured renewable energy portfolio is projected to produce well over 19 terawatt hours per annum of clean energy, reducing the need for conventional fossil fuel based power supply.
- The environmental benefit of the renewable energy portfolio at full operation will displace 45 million tons of CO<sub>2</sub> emissions per annum. Over 20 years this will amount to a total of 902 million tons, in other words, the equivalent of four full years of South Africa's current electricity emissions at the reported 2014/2015 levels.
- The environmental significance and benefits of the renewable energy portfolio extend beyond the reduction of the country's carbon footprint. Our current power system requires 1.4 litres of water for every kWh of energy produced. In comparison, wind and solar PV technologies require and consume hardly any water, offering a means to supply our energy needs without further burdening our scarce water resources.

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*Beyond diversifying the supply and nature of SA's electrical energy production, the programme is also providing a vehicle for delivering the country's social and economic development objectives:*

- The renewable energy IPPs have committed 19.2 billion rand towards social economic development initiatives in the country, with 15.2 billion thereof specifically allocated to local communities.
- Over 23 000 job year opportunities have been created to date for South African citizens; which continue to grow beyond the original expectations of project developers.
- At least 12 new industrial facilities that have been established in the country in direct response to the REIPPPP to date.
- The Programme has been called a flagship public private partnership model for South Africa and the rest of Africa by the WWF and is considered a blueprint to inform programme design in other African countries.
- The country has benefitted from an influx of foreign direct investment. The REIPPPP has attracted 53.4 billion rand in foreign investment and financing to date. Foreign equity in the REIPPPP is 35 billion rand, equivalent to 56.9 percent of the inward FDI attracted by SA during 2014.

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