

## **Africa's Mega Solar Initiative**

***By SegenSolar***

South Africa is one of the world's top-20 producers of greenhouse gases. The country is under immense pressure to deliver on a commitment to reduce its emissions by 42% before 2025.

### **South Africa steps up its game**

In line with promises made in 2009, South Africa is finally making plans to establish a clean energy financing initiative. The country is set to add 10GW of renewable energy production capacity over the next ten years, in turn reducing its CO2 emissions by 715 million tonnes by 2050.

South Africa has previously relied heavily on power utility Eskom for 95% of the country's electricity. Unfortunately, it is well-known that the company is stricken with debt and is unable to cater to the energy demand of the population. An investment in renewable energy — such as solar power — will substantially reduce the country's carbon footprint and propel it towards a cleaner future.

Eskom will be loaned the necessary cash from a Cape Town-based firm, securing loans in tranches over five years for repayment in the following 20 years. This funding is taking place on the condition that Eskom closes polluting coal plants immediately to make way for renewable energy systems.

### **A global push for renewable energy**

Africa's immense potential for solar has, historically, been untapped owing to a lack of public-private partnerships. Outside of South Africa, countries such as Namibia and Zimbabwe have now been looking to develop large-scale solar projects. These developments would have the capacity to add up to 5,000 MW of new energy over the next 20 years.

Several factors — including the abundant sunlight, low population density, job creation opportunities and access to foreign currency — support this push for clean power.

Three hundred days of intense sunlight a year means this handful of African countries have some of the highest solar irradiance potentials in the world. These nations have vast areas of flat, uninhabited land which is conducive to building land-intensive solar PV installations, as well as solar becoming a more price-competitive solution.

### **The United Nations' greener goal**

The UN's 'Goal 7' is to ensure access to affordable, reliable and sustainable energy for the global population by 2030. The proportion of renewable energy — out of the total consumption — increased from 16.6% in 2010 to 17.5% in 2016. Despite this progress, the world requires a much faster shift to meet climate goals, as only since 2012 has the growth of renewables outpaced the growth of total energy consumption. International financial cash-flow to developing countries in need of clean energy did, however, reach \$18.6 billion in 2016 — almost double that of 2010.

### **Clean power? Think smaller**

For decades, there has been an understanding that the only way to offer access to electricity means constructing large power plants connected to the grid. This perception could not be further from the truth. Small, solar-powered mini-grids will adequately

serve rural communities' needs and are easier to maintain and run than coal-powered plants.

Regrettably, these mini-grids remain uneconomical as the business models behind these systems need improvement to make them commercially viable. Nations are, however, in the process of defining a methodology to measure mini-grid retail tariffs and engage with developers.

Africa's variety of attributes mean there is a perfect opportunity for solar in the market. SegenSolar hopes South Africa follows through with the renewable initiative to improve the welfare of the millions of people currently fighting through periods of prolonged load shedding.

*Explore SegenSolar's variety of solar products now and learn how you can get involved in the fight to combat load shedding across Africa. Alternatively, explore SegenSolar's comments on the **energy crisis in Zimbabwe** as seen in Business Chief Africa.*