

# Wind power blows into Africa

May 26 2013, by Justine Gerardy

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Wind turbines in the Ngong Hills, some 25 kms south-west of Nairobi, October 29, 2010, which are owned and run by Kenya's main power generating company KENGEN. Giant turbines churning in the wind are a rare sight in Africa—but that will not be the case for long.

Giant turbines churning in the wind are a rare sight in Africa—but that will not be the case for long. Until now the meagre amounts of investment in African wind energy have predominantly come from governments and foreign donors.

But this is changing fast, say experts.

Private investors smell profit in beefing-up the continent's over-stretched [power grids](#) and swarms of new [wind turbines](#) are soon expected to emerge.

If all plans on the table come to fruition, capacity will increase tenfold.

"When you look at the on-going and planned projects, you see actually over 50 percent of the projects being sponsored by the private sector," said African Development Bank economist Emelly Mutambatsere.

Today wind makes up one percent of [electricity production](#), or just 1.1 [gigawatts](#).

But an additional 10.5 gigawatts is in the pipeline.

According to an African Development Bank study of 76 [wind projects](#), two thirds are pending.

Liberalisation of electricity markets has helped prise open the sluice gates for investment.

"The state still plays a big role in a lot of the countries," Mutambatsere told AFP. "But a number of countries have liberalised to some extent."

North Africa—including Egypt, Tunisia and Morocco—have led the way. But [sub-Saharan Africa](#) is catching up.

This year saw the first large commercial wind farm in the region come on line, a 52 megawatt project in Ethiopia.

Further south, the continent's heaviest carbon emitter South Africa is a

striking example of the sector's growth.

The coal-rich nation —gunning for an extra 18 gigawatts of capacity from renewables such as wind—has opened power production projects to private bidders for the first time.

The first bidding round of 28 projects drew \$5 billion in investments, according to the [energy ministry](#).

"There's a huge boom going on in South Africa in wind and renewables," said South African Wind Energy Association CEO Johan van den Berg.

"South Africa previously had eight operative wind towers or turbines and there's about 250 under construction at the moment."

Last year, investment in South African renewable energy increased in excess of 20,000 percent, he said.

Meanwhile in Kenya the \$815 million, 300 megawatt Lake Turkana Wind Power Project is hoping to break ground in November.

With wind flow of 11.8 metres per second the project is "a dream" according to chairman Carlo van Wageningen.

According to Richard Doyle of renewable energy consulting firm 3E, tough conditions in key green markets like Europe have played a role in the pivot to Africa.

So too, the healthy returns promised in developing markets.

"There's been a veritable flood of companies out of their home markets in Europe into developing economies generally and Africa is one of those focal areas."

However, he added that any "boom" tag had to be qualified by recognising conditions elsewhere.

"If markets were less tight in Europe, would as many developers be in Africa? Almost certainly not," he said.

And the Global Wind Energy Council secretary general Steve Sawyer says public financing will always play a role in smoothing out erratic investment flows.

However, he said, there was growing understanding among governments that "in order to create a sustainable energy system, a large degree of private investment is required".

"That level of investment can only be achieved by creating the kind of policy environment which sufficiently reduces the risks to investors such that they are willing to do project finance," he added.

With just 0.1 percent of the 2011 world market in Africa and the Middle East, the continent is still playing catch up.

Large-upfront costs mean wind is a long way away from overtaking dirtier but cheaper energy sources like coal and gas.

By 2030, wind is only expected to account for two percent of Africa's power mix, according to the International Energy Agency.

Coal is set to remain king at 37 percent, followed by gas at 32 percent.

"It won't become a dominant power source but it will become an important contributor to the [energy](#) mix," said the bank's Mutambatsere.

Citation: Wind power blows into Africa (2013, May 26) retrieved 12 May 2024 from <https://phys.org/news/2013-05-power-africa.html>

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