



African Energy Data Book charts growth in continent's generation capacity

(Embargoed until 16.00GMT on 14 November)

Hastings, 14 November:

The generation capacity of a majority of African electricity supply industries (ESIs) has seen strong growth since the start of the decade, according to the first *African Energy Data Book*, which will be launched at the fifth annual [African Investment Exchange: Power and Renewables](#) meeting in London on 14 November. Across the continent, installed capacity has increased by more than 63% to 236GW since 2010, the data from African Energy show. In sub-Saharan Africa (SSA), capacity at end-2018 is expected to be nearly 50% greater than in 2010.

Supported by Power Africa, the African Energy Data Book has been designed to support industry professionals with 128 pages of comprehensive statistics on the energy mix in each of the continent's countries and regions. The book will complement the established and hugely popular *African Energy Atlas* to ensure that up-to-date and reliable information is always at hand.

Progress towards meeting a range of targets is charted on a 'scorecard'.

Africa scorecard for the year to 1 September 2018

	Installed capacity kept up with population*	Installed capacity kept up with GDP*	Proportion of renewables increased	Proportion of non-hydro renewables increased	Increase in non-hydro renewables growth rate**	Proportion of liquid fuels*** decreased
AFRICA	YES (6.1% / 1.7%)	YES (6.1% / 2.5%)	NO (20.6% / 21.4%)	NO (4.7% / 4.7%)	YES (9.2% / 6.2%)	YES (9.2% / 9.9%)
North Africa	YES (11.3% / 2.0%)	YES (11.3% / 3.6%)	NO (8.4% / 9.0%)	YES (3.6% / 3.3%)	YES (29.0% / 0%)	YES (5.2% / 6.2%)
West Africa	YES (1.9% / 1.8%)	NO (1.9% / 2.2%)	NO (20.6% / 21.4%)	NO (1.8% / 1.9%)	NO (0% / 16.3%)	YES (9.2% / 9.9%)
Central Africa	YES (2.2% / 1.9%)	YES (2.2% / 1.4%)	YES (65.9% / 65.1%)	YES (0.13% / 0.11%)	YES (16.5% / 0%)	YES (11.5% / 11.7%)
East Africa	YES (4.9% / 1.6%)	YES (4.9% / 2.9%)	NO (60.9% / 62.3%)	YES (11.3% / 11.1%)	NO (3.2% / 4.5%)	YES (26.1% / 26.6%)
Southern Africa	YES (1.62% / 1.56%)	YES (1.6% / 0.7%)	NO (20.7% / 21.1%)	NO (6.2% / 6.3%)	NO (0.4% / 10.7%)	NO (8.4% / 8.3%)

*1 September equivalent rate **same period rate

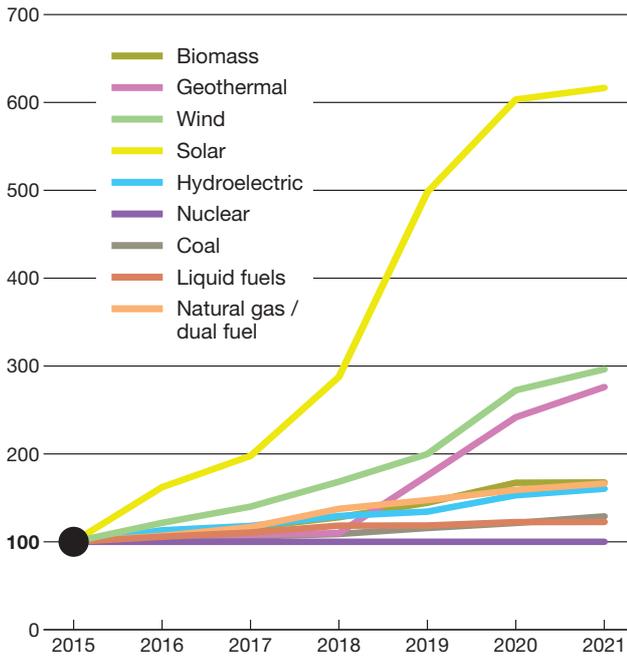
***only plants running exclusively on liquid fuels are included in this figure

Sources: population and GDP from the International Monetary Fund (2018); African Energy Live Data

© African Energy 2018
(www.africa-energy.com)



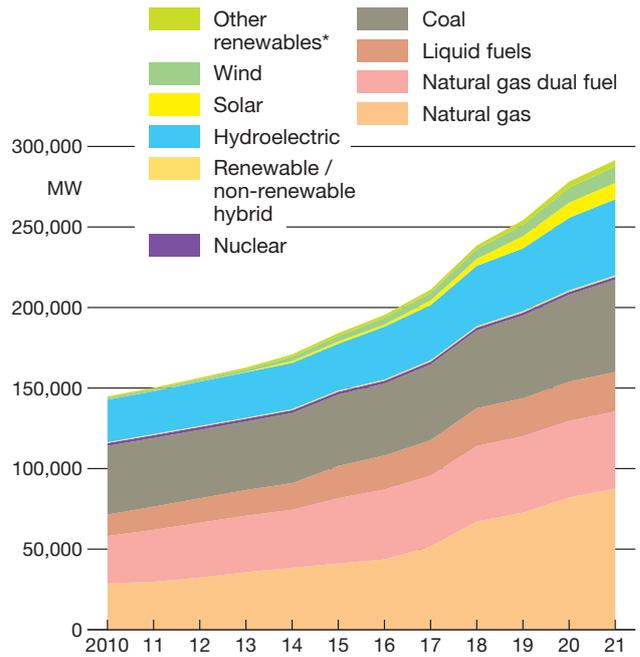
GENERATION CAPACITY INDEX, 2015=100



Source: African Energy Live Data

© African Energy 2018
 (www.africa-energy.com)

GENERATION BREAKDOWN BY FUEL



*geothermal, wave/tidal, biomass
 Source: African Energy Live Data

© African Energy 2018
 (www.africa-energy.com)

Key findings and trends

The *African Energy Data Book* charts a number of key trends in the continent's ESIs:

- Natural gas and dual-fuel plants have seen significant growth. In 2010 these plants accounted for 40% of generation capacity, but by end-2018 this will likely increase to nearly 48%.
- This trend is not restricted to North Africa, where the bulk of gas and dual-fuel plants are located. In SSA, gas and dual-fuel plants are expected to account for 19% of capacity by end-2018, up from around 14% in 2010.
- By end-2018 coal-fired installed capacity will have grown by 13% since 2010 – and is not expected to peak in capacity terms until 2022, at about 60GW. However, coal-fired capacity has fallen from around 29% of the generation mix in 2010 to 20% in 2018; in SSA, coal's role has diminished even further, from 47% to 35%.
- Despite large-scale commitments of finance and investment to solar, wind and other projects, the proportion of renewable energy in the generation mix has actually declined so far in 2018 in all but one region.

African Energy is a brand of Cross-border Information (London) Ltd is a company registered in England

Company Registration Number 07655147 VAT Registration Number 114 8313 39

T: + 44 (0) 1424 721 667 F: +44 (0) 1424 721 721 E: subscriptions@cbi-publishing.com



- Installed solar – mostly photovoltaic (PV) – capacity has increased more than 45 times since 2010 and is expected to double again in just two years, reaching as much as 8,711MW by end-2020, from 4GW in 2018. However, by end-2018 it will still only account for 1.8% of Africa’s total generation capacity.
- Wind capacity is set to nearly double by 2021, increasing from 5.7GW to more than 10GW. It will already be more than five times larger by end-2018 than it was in 2010, but the technology will still represent only 2.4% of installed capacity.
- Despite promising trends in a few key markets, geothermal and biomass barely register at an aggregate level. However, geothermal development is expanding rapidly: projects progressing in Kenya and Ethiopia mean that geothermal capacity should double by 2020 and could treble by 2023.
- There has been a spike in the development of liquid fuels (diesel, HFO, and other fuel oils) in North Africa, where plants powered entirely using liquid fuels have increased by 72% since 2010 – despite the region’s abundance of natural gas and renewable resources.
- In SSA, plants powered entirely by liquid fuel account for 12.4% of capacity in 2018 compared with 10.3% in 2010. (The data do not include the huge number of smaller diesel-fired gensets that still dominate generation in Nigeria and other countries in SSA.)
- Despite this longer-term trend, in the eight months to 1 September, the proportion of liquid fuels in the generation mix has fallen slightly in all regions other than Southern Africa.
- The total capacity of projects signing power purchase agreements in Africa has increased from less than 1GW/yr in 2010 and 2011 to 5-6GW/yr in 2016-17.

The authority behind the African Energy Data Book’s projections comes from the giant database underpinning the African Energy Live Data platform. This contains records on more than 5,500 generation projects, which are individually curated and updated by the African Energy. In this process, each figure can be traced back to real developments (rather than from a generalised algorithm or hypothetical policy move). Analysis of the data shows that the last decade’s ESI growth is based on a number of significant trends highlighted below.

“We at African Energy have spent a huge amount of time, effort and resources in gathering and checking the underlying data and assembling it in the most useful format for industry participants. We know they will be as excited as we are to explore the results, and the extra clarity they bring to often opaque markets,” said African Energy Live Data director John Hamilton.

The African Energy Data Book is available for pre-order at the price of £275 from the African Energy website: www.africa-energy.com.

A launch event will be held for members of the press in the Durham Street auditorium of RSA House, London on 14 November at 16.00GMT. To register to attend please contact: harry@africa-energy.com.



About African Energy

Now in its 21st year, African Energy's subscription-based newsletter helps keep senior energy executives up to date with what is happening across the continent, including news and analysis of market developments, project awards and the political and governance issues that impact on the business environment.

About African Energy Live Data

Data collection and analysis has been central to African Energy's work since it was established in 1998. In September 2017 we launched African Energy Live Data, an innovative and interactive data platform that is changing the way investors and developers identify power plants and analyse markets across the continent.

The product of more than 20 years of research, knowledge and expertise by our African energy sector experts, Live Data will help keep you up to date with the crucial data you need to consider at every point of the investment and development process.

Alongside constantly monitored project level detail on more than 5,500 operating, under-construction and pipeline electricity generation projects, Live Data subscriptions include access to the Data Tool – a full suite of analytical tools to analyse electricity sector vital statistics and demographics alongside the project pipeline, including past, current and future electricity generating capacity by ownership, connection and fuel type.

Further information

For more information about the African Energy Data Book or African Energy Live Data, or the African Investment Exchange: Power and Renewables event please contact:

John Hamilton, j.hamilton@cbi-research.com

Nick Carn, nick@cbi-research.com

Tel: +44 (0)1424 721667