

Africa Lights Up With Gen Sets

Electricity

The continent's economies hum with non-public utility power supply

Exports of diesel fired generating sets to Africa rose 28 per cent by value in 2008, compared with total global sales increase of 18%.

This figure does not include small gasoline gen sets, mostly less than 7KV in capacity, which produce the bulk of power supply in residential households in some of sub-Saharan Africa's most populated cities.

Imports of diesel gen sets into the continent totaled an estimated \$1.45billion, a surge of \$315Million past 2007 sales. In a year when profits around the globe generally headed south, the planet's poorest continent ensured that generating set manufacturers enjoyed a relative boom. Africa accounted for nearly 20% of global import of generating sets.

South Africa bought \$237 million worth of diesel generating sets, coming from far behind to pick up the number two position behind Nigeria, which retained the lead with \$287Million and 20% of the gen sets coming into Africa. Along with these top two countries, Angola, Algeria and Egypt, all hydrocarbon rich countries, accounted for 64% (or \$925Million) of this type of generator sales in Africa.

Now that's a clear opportunity. Nigeria is so chronically deficient in public power delivery that its economy spends more than a quarter of a billion dollars to import generating sets.

That's a huge advantage for companies that can produce small scale power for businesses. See story on page 15.

Increased sale of generating sets is always tied to economic prosperity in nations that haven't figured a way out of getting power to everyone. As the macro economy improves, new hotels, office and apartment blocks, even some road construction are on the upturn, requiring standby generators to function.

So the boom in generator usage in Africa



Photo: Kazeem James

Nigeria's largest banks install huge generators to mitigate effects of power outages

is a result of improved economic conditions on the continent. But it also reflects the challenges of generating and distributing power through properly structured public or public/private power supply grid.

In Angola, a country of 13 million people where power supply is chronically short, the purchase of a standby generator as part of public power supply is even officially sanctioned. Empresa Nacional de Electricidade (ENE) - Angola's power supply authority - recently placed a 90MW temporary power station contract with Aggreko, the British company.

Angola's import of diesel fired

generating sets has doubled (by value) every year for the last four. In 2005 the South West African oil producer imported \$21.7Million worth, and by 2008 this figure had risen to \$164.3Million, drawing in 24,580 units in all sizes.

The growing middle class in Luanda, Angola's capital city, used money they made from the country's oil boom to purchase over 3,000 individual 7.5-75 kVA units at an estimated value of \$8Million. The 75-375KVA range accounted for 2052 units worth approximately \$17.3Million, and sets over 375 up to 2,000 kVA accounted for the remaining \$85.2Million.

Twenty three African countries account for 96 per cent of the total, of which just five countries - Nigeria, South Africa, - accounted for 64 per cent \$925million.

Every serious producer of generating sets benefited from the boom in sales to the dark continent in 2008, the year that other businesses headed into decline. U.S exports which are minimal in comparison with the size of its economy, almost trebled from \$26.7Million, in 2007 to \$80 Million, in 2008. China, in particular made more than double the value of sales it made in 2007, jumping from \$126Million to \$387.6Million, Japan and the European Union, show a healthy increase of diesel generating sets exported to Africa, but Turkey has shown a big rise (up by \$2.3Million to \$31.3Million). This has been in the larger - over-500 kVA size range - of gen-sets.

Imports into South Africa accounted for the bigger sizes of diesel fired generators, over 75KVA, were valued at \$133.7Million and in the smaller sizes, up to 75kVA, \$104Million with 39,000 units. In all South Africa imported over 46,000 units in 2008.

Algeria purchased \$110Million worth of diesel fired generating sets in 2008, with France taking the lion's share at \$23Million. Egypt and the Sudan between them took \$195mn-worth in the year, with both taking over 1000 units each in the 75-375kVA sizes, while above these outputs Sudan imported 523 units and

TOP IMPORTING COUNTRIES 2008

Country	RANGE 1 TO OVER 200KVA		
	Up to 75 KVA	75 - 375 KVA	Above 375 KVA
Nigeria	29527	15393	4381
South Africa	39004	6431	1234
Angola	20832	2157	1559
Algeria	3177	2052	1679
Egypt	2641	1608	909
Sudan	4555	1199	523
Congo Rep	7966	568	95
Kenya	3218	328	162
Madagascar	3506	329	49
Ethiopia	6110	380	464
Congo Dem Rep	5609	665	131
Senegal	1628	385	83
Ghana	1438	441	150
Libya	4483	777	173
Morocco	1778	544	174
Gabon	563	289	59
Tanzania	2087	327	108
Tunisia	309	304	148
Ivory Coast	1143	236	32
Mauritania	1090	45	90
Uganda	1133	82	48
Cameroon	1422	79	26
Zambia	1706	194	103

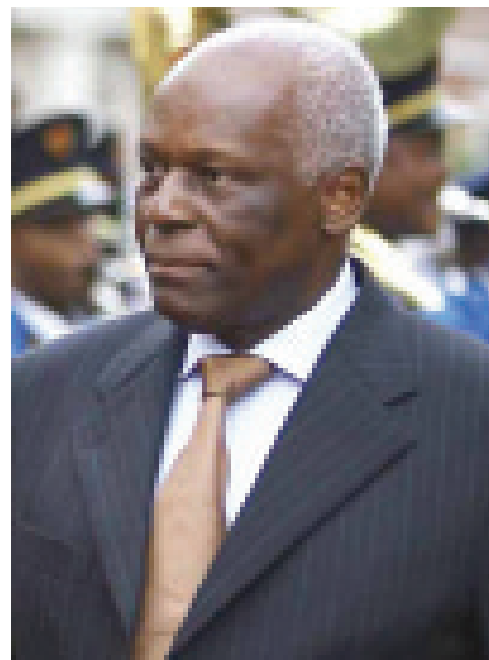
Egypt over 900.

In the Congo, import of generating sets totaled \$52Million.

An increasing number of countries in Africa now contract to have large temporary power stations in the 30-100MW sizes installed, to offset an increase in electrical demand that the existing power grid cannot handle. Or in some cases, severe drought, reducing their hydropower output. ■

Angola Is Big Genset User

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AFRICA'S TOP IMPORTERS 2008				
RANGE 1 TO OVER 2000KVA		US \$ Million		
Country	*2008	*2007	2006	2005
Nigeria	286.9	306.9	200.6	152.3
South Africa	265.9	66.4	23.8	19.9
Angola	164.3	105.9	44.9	21.7
Algeria	110.5	51.6	41.3	27.8
Egypt	97.6	57.1	27.5	32.0
Sudan	96.3	60.3	38.6	40.6
Congo Rep	43.6	41.6	26.2	9.8
Kenya	38.8	21.5	15.8	7.3
Madagascar	36.9	26.1	NR	NR
Ethiopia	32.7	8.8	6.3	4.6
Congo Dem Rep	32.6	ND*	ND	ND
Senegal	27.8	17.0	13.8	12.1
Ghana	25.3	72.3	8.8	6.1
Libya	21.9	16.3	7.8	7.7
Morocco	21.5	19.2	9.3	7.2
Gabon	17.9	16.0	6.6	2.8
Tanzania	14.8	18.7	9.2	4.8
Tunisia	13.0	ND	ND	ND
Ivory Coast	11.6	15.4	3.6	3.0
Mauritania	9.3	16.3	ND	ND
Uganda	8.8	25.9	5.6	3.7
Cameroon	8.4	11.2	3.9	3.8
Zambia	8.3	ND	ND	ND
Total	1394.7	984.4	493.6	364.2

*ND: No Data

Cummins: Local Is Lekker

Cummins, the US based manufacturer of engines and related technologies, including fuel systems, and electrical power generation systems, finds the Nigerian demand for generating sets so huge it agreed to set up a manufacturing line in the country. "2008 was our best ever year", says John Dorman General Sales Manager in charge of Africa and the Middle East for Cummins Power Generations.

This is despite the fact that the United States is one of the least enthusiastic exporters of generating sets into Africa. Cummins produces generating sets locally in Nigeria through a joint venture with Leventis, an old, sales merchant in the country. The company hopes to double its market share in 2009.

All the Cummins gen sets in Nigeria are produced using Cummins products throughout and are designed to meet the international standard of quality that Cummins insists on when the equipment is branded as a Cummins Power Generation unit. The company has cause to be confident about its future in Africa, as sales have doubled every year since 2004.

With a well established network of professionally trained distributors, undertaking a comprehensive back-up service throughout most countries, Cummins now produce a product range that extends from small 7 kVA units right up to 3,000 kVA.



Photo: Kazeem James

Cummins: Expanding their operations in West Africa

Dorman is so optimistic: "In 2009, we will continue to grow our business in Africa. We believe that quality is remembered long after price is forgotten, so also is reliability

and back-up by local distributors. Cummins intends to build on that reputation." Well, as the South Africans will say, "Local Is Lekker (Better)". ■