



PETROVIETNAM POWER CORPORATION
PETROVIETNAM POWER COAL IMPORT AND SUPPLY COMPANY
DAILY NEWS

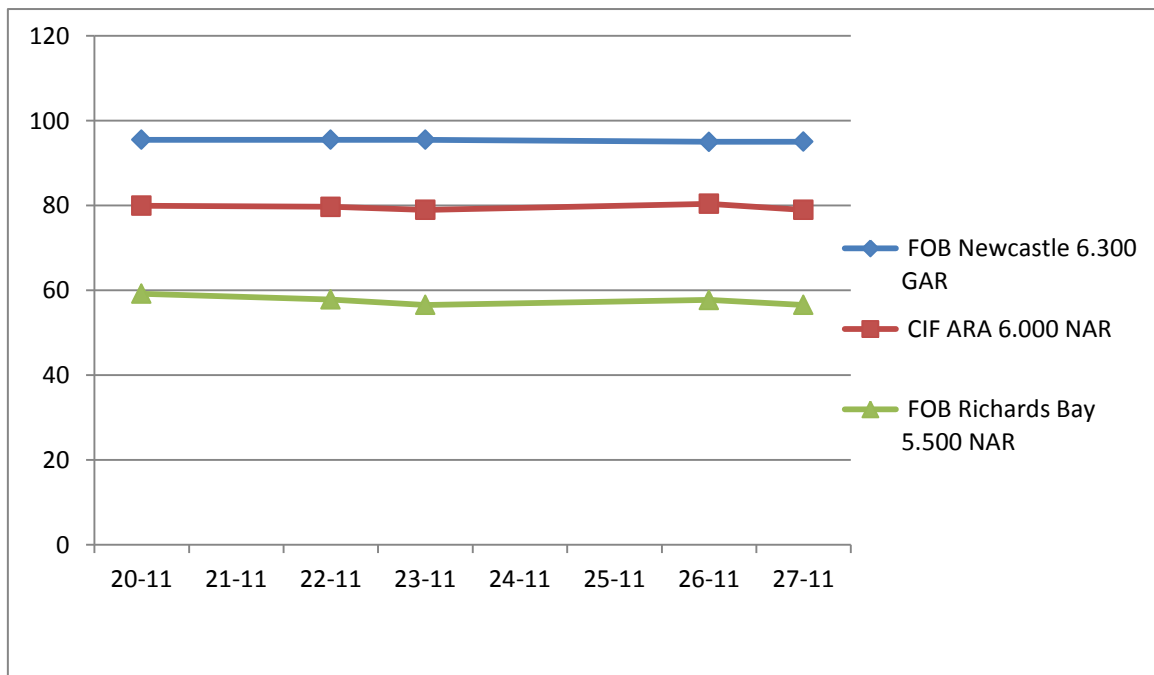
Date 13/12/2018

INTERNATIONAL COAL PRICE ASSESSMENTS

Daily prompt physical thermal coal assessments	Window 7 – 45 day	+/-	Window 90 - day	+/-
FOB Newcastle 6,300 GAR	95.65	+0.65	N/A	N/A
CIF ARA 6,000 NAR	82.15	+1.75	N/A	N/A
FOB Richards Bay 5,500 NAR	60.25	+2.55	N/A	N/A
FOB Kalimantan 5,900 GAR	N/A	N/A	67.75	-0.25
FOB Kalimantan 5,000 GAR	N/A	N/A	47.00	-0.30

China Coal Assessment	USD/tons	+/-	NDT/tons	+/-
PCC6 (CFR South China 3,800 NAR)	35.50	-0.50	245.73	-3.03
PCC7 (CFR South China 4,700 NAR)	54.00	-0.50	373.78	-2.81
PCC8 (CFR South China 5,500 NAR)	69.00	-0.20	477.61	-0.56

DAILY PROMPT PHYSICAL THERMAL COAL ASSESSMENTS IN 2018



(Source: Platts Coal Trader International – Date 27/11/2018)

NEWS

South Africa's NBC thermal coal output rises under Universal's ownership

Australia-listed Universal Coal has lifted the South African North Block Complex thermal coal operation's production almost 50% since taking ownership last month, and has earmarked all the coal for domestic use, the company said Wednesday. "The quick turnaround to full production at NBC has been well executed and proves the ability of the management team on site," Universal's CEO Tony Weber said. A production rate of 208,000 mt/month of saleable product was seen in November, compared with year-to-date average production levels of 140,000 mt/month by the previous owner, the company said. Universal completed the acquisition of the complex from Exxaro Coal for A\$8.9 million (\$6.44 million) last month. "Universal is confident that November's rate of production can be maintained going forward, with all saleable coal product expected to be sold for domestic supply to Eskom," it said. NBC is 51%-owned by Ndalamo Resources Proprietary and 49% by Universal and Energy Holdings South Africa, a subsidiary of Universal.

Coal's steady retreat from power generation gets underway

China has never disguised the fact that coal still dominates its electricity generation sector. But as people focus their attention on the quality of the air they breathe, and on the impact of climate change, the country is seeing a surge in renewable power generation. As part of the 13th Five-Year Plan (2016-20), a total of 150 gigawatts of new coal capacity has been canceled or postponed until at least 2020. Increasingly strict controls on total coal capacity and power plant emissions are expected to see the closure of older plants producing up to 20 gW, and spur technological upgrades to China's remaining 1,000 gW of coal power, according to analysts. However, coal remains the country's largest source of electricity, accounting for more than 72 percent of its generation in 2015. This is likely to change, though. Coal's share of power generation is expected to fall steadily to nearly 50 percent by 2040, as renewables and nuclear sources increase, according to the International Energy Agency.

"Climate change is real," said Chen Ning, vice-president at Goldwind Australia, a wholly-owned subsidiary of Xinjiang Goldwind Science & Technology Co, one of China's largest wind turbine manufacturers. Clean energy, including nonfossil energy and natural gas, will replace coal as the primary source by 2030 and account for more than half of China's energy mix by about 2045, according to the CNPC Research Institute of Economics and Technology, a leading Chinese economic think tank. In its long-term energy outlook released on Aug 15, it said that by 2050, coal, nonfossil energy, and oil and gas will each comprise one-third of the country's energy mix. Yang Hua, planning director at China National Petroleum Corp, said in August the global energy mix is moving in a "high-efficiency, clean and low-carbon direction". Considering China's significant role in global energy consumption, the country's shift toward cleaner energy will be a role model for the rest of the world, Yang said.

For years, the dominant energy narrative on China concentrated on the extraordinary pace of the country's development, the success in lifting hundreds of millions of people out of poverty (including energy poverty), the scale of industrialization and the demand for energy resources, most notably coal. Now, the country is moving quickly toward a services-based economy and a much cleaner energy mix, according to the IEA's World Energy Outlook published in November last year. This new direction will have consequences that are equally significant for China and the world, the IEA said. The Institute for Energy Economics and Financial Analysis, in Cleveland, United States, which carries out research and analysis of financial and economic issues related to energy and the environment, said solar and wind generation have grown more rapidly than other electricity-generation sources in recent years. Nicolas Pechet, a partner at the Asia-focused corporate strategy consulting company Solidiance in Shanghai, said China recognizes that cutting energy consumption alone will not be sufficient to reduce its greenhouse gas emissions from coal. "It also needs to generate more renewable energy," he said.

Since 2013, China has been the world's leading installer of solar photovoltaics - the process of converting sunlight into electricity. In 2015, the country became the world's largest producer of

photovoltaic power, narrowly surpassing Germany. Chinese solar panel manufacturers are estimated to have a 20 percent cost advantage over their US peers, owing to economies of scale and more advanced supply chain development, Pechet said. A large part of the installed capacity for solar power in China is in the form of large solar photovoltaic power plants in the west of the country, which are much less populated than eastern areas, but boast better solar resources and available land. "Ironically, one way China is expanding its solar capacity is by building solar panels on abandoned coal mines," Pechet said. "One such project in Shanxi province covers 160 hectares and can produce enough electricity to power 30,000 homes," he said.

A report by Bloomberg New Energy Finance in August said wind and solar energy will account for about 50 percent of the power produced globally by 2050, aided largely by lower costs, with China leading the way. The country will be at the forefront of increased clean energy generation, while power storage will benefit from rapid advances in battery technologies, the report said.

Russia-Ukraine spat unlikely to hit Black Sea coal flows to Turkey: traders

Flows of thermal coal from Russia's Black Sea ports to Turkey are unlikely to be affected by rising tensions between Ukraine and Russia following a naval confrontation in the Kerch Strait, seaborne coal traders said Thursday. "For sure it is an issue, but we do not see any coal loaded from Ukrainian ports," a European trader of Russian coal into Turkey said. Despite being a concern for traders of Black Sea coal, the trader said he did not expect any disruptions to flows into Turkey. Another European trader said cargoes were currently still able to pass through the strait, which is located in the northeast corner of the Black Sea. "I haven't seen a market reaction yet," the trader said. An analyst said that most Russian sellers using the Black Sea have moved out of Ukrainian ports. "So I don't see that as an issue," the analyst said. "The real danger is if this escalates." Although there appears to be no apparent threat to trade flows from Russia to Turkey, the analyst said an escalation of the latest tensions between Russia and Ukraine could have an impact on when the Taman port expansion becomes operational, adding that traders could be deterred from shipping out of Taman. The proposed expansion at Taman would increase capacity for all commodities to 35 million mt from 20 million mt and would accommodate vessels up to 220,000 mt. As it stands the terminal exports LNG, grains and other dry bulk commodities, but does not yet export coal.

(Source: [wwwhttp://www.china.org.cn](http://www.china.org.cn))

INTERNATIONAL SPOT DRY BULK FREIGHT ASSESSMENTS

				<i>Unit: USD/ton</i>	
Size	From	To	Freight rates	Change	
Capesize (150.000 tons)	Australia	China	10.35	+0.75	
	Queensland	Japan	11.90	+0.90	
	New South Wales	South Korea	12.75	+0.90	
Panamax (70.000 tons)	Richards Bay	India West	12.75	-0.05	
	Kalimantan	India West	8.50	+0.15	
	Richards Bay	India East	12.95	-0.05	
	Kalimantan	India East	7.05	+0.15	
	Australia	China	12.10	+0.55	
	Australia	India	13.60	+0.55	

(Source: *Platts Coal Trader International* – Date 27/11/2018)