



PETROVIETNAM POWER CORPORATION
PETROVIETNAM POWER FUEL COMPANY
DAILY NEWS

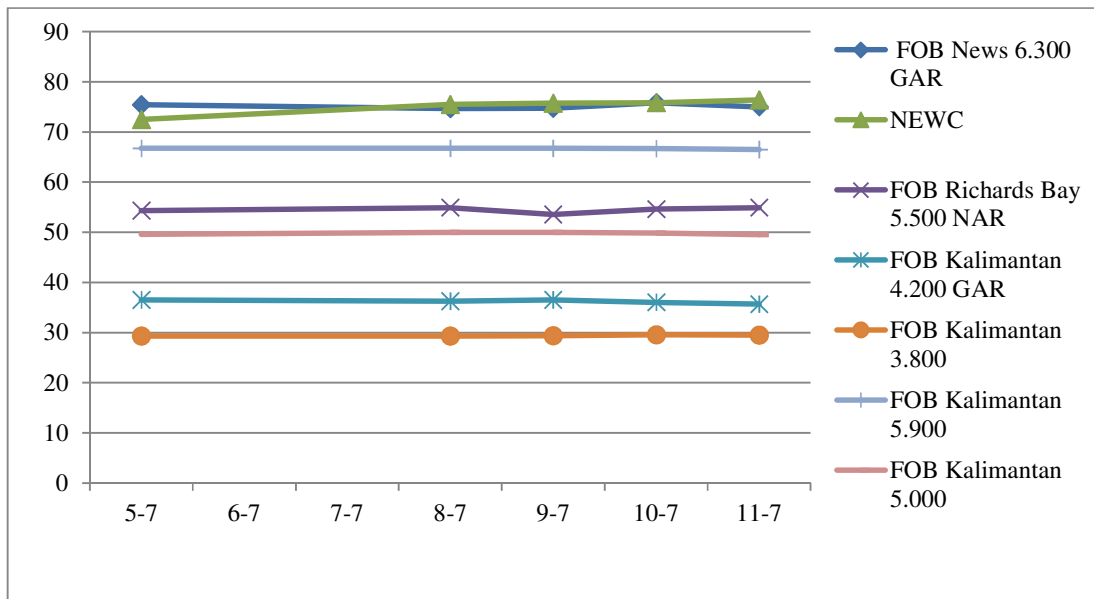
Date 15/07/2019

INTERNATIONAL COAL PRICE ASSESSMENTS

Daily prompt physical thermal coal assessments	Window 7 – 45 day	+/-	Window 90 - day	+/-
FOB Newcastle 6,300 GAR	75.00	-0.85	N/A	N/A
FOB Newcastle 6,000 NAR	76.39	+0.53	N/A	N/A
FOB Kalimantan 5,500 GAR	54.80	-0.10	N/A	N/A
FOB Kalimantan 5,900 GAR	N/A	N/A	66.50	-0.20
FOB Kalimantan 5,000 GAR	N/A	N/A	49.50	-0.40

China Coal Assessment	USD/tons	+/-	NDT/tons	+/-
PCC6 (CFR South China 3,800 NAR)	43.85	-0.20	299.94	-2.03
PCC7 (CFR South China 4,700 NAR)	57.65	-0.25	394.34	-2.58
PCC8 (CFR South China 5,500 NAR)	63.80	-0.20	436.40	-2.33

DAILY PROMPT PHYSICAL THERMAL COAL ASSESSMENTS IN 2019



(Source: Platts Coal Trader International – Date 11/07/2019)

DO PRICE ASSESSMENTS

Weekly international DO price assessments	Price (USD/lít)	+/-	Domestic DO price assessment	Price (VNĐ/lít)	+/-
China	0.92	+0.00	DO 0,05S - Area 1	15.160	+ 0.00
Malaysia	0.53	+0.00	DO 0,05S - Area 2	15.460	+ 0.00
Thailand	0.85	+0.00	DO 0,05 S –II - Area 1	16.940	+ 0.00
South Korea	1.15	+0.00	DO 0,05 S –II - Area 2	17.270	+ 0.00
Singapore	1.30	+0.00			
Russia	0.71	+0.00			

(Source: https://www.globalpetrolprices.com/diesel_prices/, www.giaxang.vietbao.vn -update)

NEWS

Chinese thermal coal demand to fall with launch of new power transmission line

China's thermal coal demand is likely to fall once the world's longest ultra-high voltage transmission line is completed by the Asian country, market sources said Thursday. China has launched its 3,324-km long transmission line that connects the coal-rich Xinjiang province in western China to Anhui province in the country's east, Xinhua News Agency, China's official news agency, reported Tuesday. Once completed, the transmission line is expected to reduce Chinese coal burn by about 30 million mt/y, according to the report. "In the past, it was difficult to transport coal out of Xinjiang, so the impact of Xinjiang coal production [on China's overall demand] had been minimal," an east China-based coal analyst said. "Now, with the direct power transmission, it's equivalent to adding a stable supply to the market. In addition, Xinjiang coal prices are much cheaper [than other regions]," he added.

About 66 billion kWh of electricity a year will be transmitted from Xinjiang to east China with a voltage of 1,100 kv upon completion, Xinhua reported. "Demand for thermal coal from coal-fired power plants in east China will fall further [with the launch of the new line]," an east China based trader said. The line, once fully operational, will not only affect the demand for imported thermal coal, but also pressure domestic coal prices, the coal-analyst added. "It's not announced when it will be fully ready, probably another six months to a year," the analyst said.

Thermal coal demand remained subdued amid uncertainties over the country's import policy as it reined in import volume. China imported about 281 million mt of thermal coal in 2018, and produced 3.55 billion mt of the fuel, according to government data. Market sources added that besides lower summer temperatures, weak Chinese demand for thermal coal this year is also due to higher electricity delivery from existing inter-regional power transmission grid systems. Electricity delivered across China from January to May was up 12% year on year, while power generated from coal-fired power plants was up 0.2% from last year, according to a report from the China Electricity Council. Nuclear and hydro power generation was up 24.3% and 12.8%, respectively, over the same period, data from the report showed.

US May coal exports total 8.24 million mt, down 5.8%

Total US coal exports totaled 8.24 million mt in May, up 9.7% from April but down 5.8% from the year-ago month, according to US Census data Wednesday. Exports recovered in May as tonnage began moving again on the Mississippi River following April floods. On a year-over-year basis, exports declined in May as the previous year saw East Coast terminals working through a backlog of shipments caused by freezing weather early in 2018. Through May, US coal exports totaled 38.6 million mt, down 11.2% from the same period last year. The drop in exports is due largely to a fall in European-delivered CIF ARA thermal coal prices. In the first five months of 2018, the CIF ARA price averaged \$85.98/mt compared with \$67.59/mt over the same time period in 2019.

Bituminous coal exports in May totaled 3.3 million mt, up 21.1% from the prior month and 9% from the year-ago month. Year-to-date bituminous coal exports totaled 14.9 million mt, down 9.7%

from the same period last year. Top bituminous coal destinations in May were India, at 704,596 mt compared with 850,101 mt in the year-ago month; the Netherlands, at 576,648 mt compared with 218,813 mt; and Japan, at 473,482 mt compared with 322,217 mt. For the year to date, the top bituminous coal export destinations were India, at 4.3 million mt compared with 4.4 million mt in the year-ago period; the Netherlands, at 2.3 million mt compared with 1.9 million mt; and Japan with 1.7 million mt compared with 1.3 million mt.

(Source: S&P Global Platts)

South Korean Tech Breakthrough Could Change Biofuels Forever

Researchers in South Korea have made a major breakthrough in using bacteria to sustainably and efficiently produce biofuels. The team of scientists from the Korea Advanced Institute of Science and Technology (KAIST) report that they have developed a new kind of engineered microorganisms that are capable of producing greater volumes of the fatty acids that make up biodiesel than ever before. At present, standard biodiesel is produced by transesterifying vegetable oils or animal fats, a process in organic chemistry that creates a reaction exchanging ester for alcohol. This creates a problem, however, as the production of biofuels requires huge amounts of organic material and agricultural products for its creation, taking up valuable land area that could otherwise be used for food production. This is where the South Korean team's bacterial breakthrough comes into play. KAIST's new study has developed an engineered bacterium that is capable of creating more fatty acids than ever before, creating potential for the most efficient form of biofuel production yet. In the present study, Lee and his team used a different strain—*Rhodococcus opacus*—to produce fatty acids from glucose, one of the most abundant and cheap sugars derived from non-edible biomass. What this translates to, in layman's terms, is the highest concentrations of the kind of fatty acids that make up biofuels and biodiesel than ever reported before. These record-breaking microbial fermentations have the potential to revolutionize biofuel, making it more realistic for mass consumption and a better potential replacement for high-emissions fossil fuels like gasoline than ever before.

Professor Lee said of his team's breakthrough: "This technology creates fatty acids and biodiesel with high efficiency by utilizing lignocellulose, one of the most abundant resources on the Earth, without depending on fossil fuels and vegetable or animal oils. This will provide new opportunities for oil and petroleum industries, which have long relied on fossil fuels, to turn to sustainable and eco-friendly biotechnologies." If the world has any hope of reaching the targets aimed at combating climate change set by the Paris Agreement (which polls show that most U.S. citizens still support, even after President Donald Trump backed out of the agreement, biofuel will have a large role to play in reducing greenhouse gas emissions. So far, however, biofuel just hasn't been as efficient or affordable as it needs to be to be adopted on a wide scale. A breakthrough like this could go a long way toward tipping the scales toward a greener future.

(Source: <https://oilprice.com/Energy/Energy-General/South-Korean-Tech-Breakthrough-Could-Change-Biofuels-Forever.html>)

INTERNATIONAL SPOT DRY BULK FREIGHT ASSESSMENT

Size	From	To	Freight rates	Change	Unit: USD/ton
Capesize (150.000 tons)	Australia	China	11.30	+0.10	
	Queensland	Japan	12.90	+0.10	
	New South Wales	South Korea	13.90	+0.10	
Panamax (70.000 tons)	Richards Bay	India West	14.50	+0.25	
	Kalimantan	India West	10.20	+0.70	
	Richards Bay	India East	14.65	+0.25	
	Kalimantan	India East	8.70	+0.70	
	Australia	China	13.25	+1.00	
	Australia	India	15.25	+1.25	

(Source: Platts Coal Trader International – Date 11/07/2019)