

Coal Trends

Trends in coal supply, demand and prices as seen from statistics
 Cold winter in New England slows progress with the shale gas revolution

Koji Morita, Board Member, Director, Electric Power & Coal Unit

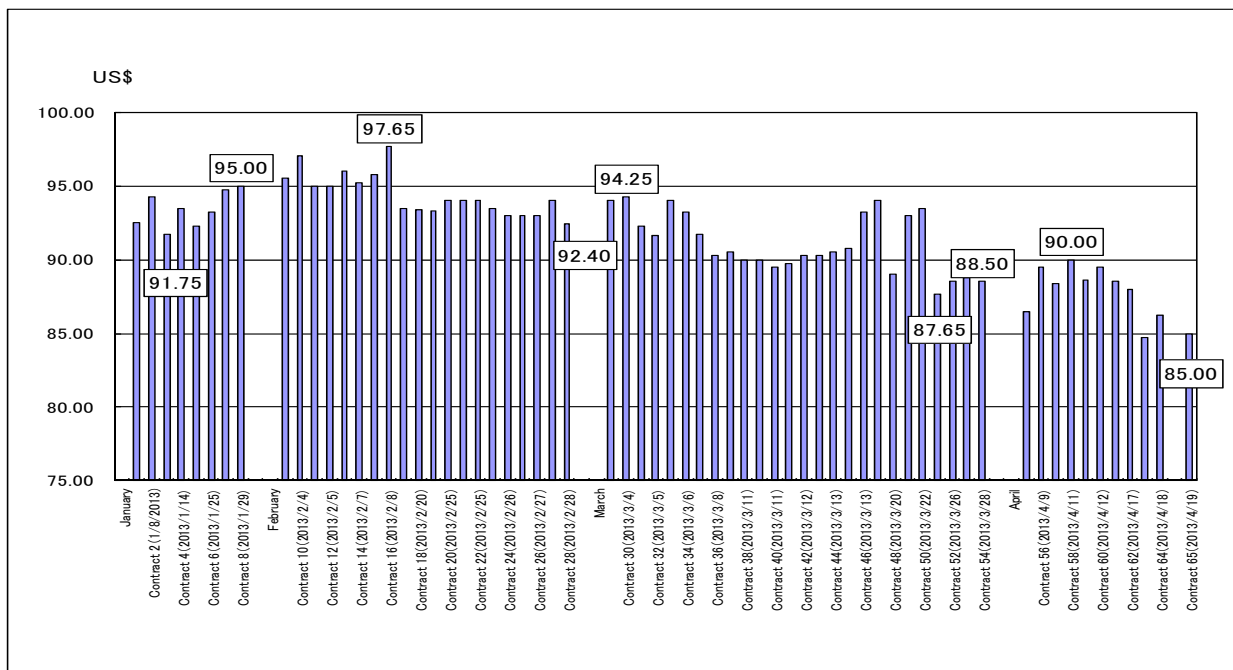
In this issue, we examine market conditions in Australia and South Africa, and trends in landed prices in Japan. We also take a look at conditions in the US, where coal is seeing a rapid recovery in the share of power fuel.

1. Spot prices for Australian and South African coal and landed prices in Japan (1) Actual trading price trends for Australian and South African thermal coal (Jan-Feb 2013)

– No end to the fall in spot prices –

Figure 1 shows contracted actual spot trading prices from January to April in a time-series for Newcastle (Australia).

Figure 1. Contract Prices FOB Newcastle (NC), Australia (Jan-April 2013, actual)



Source: Prepared using globalCOAL materials

For Newcastle, 54 actual spot trades were recorded in the three months from January to March in 2013. As of April 25, when this report was produced, 10 actual spot trades had been reported for April.

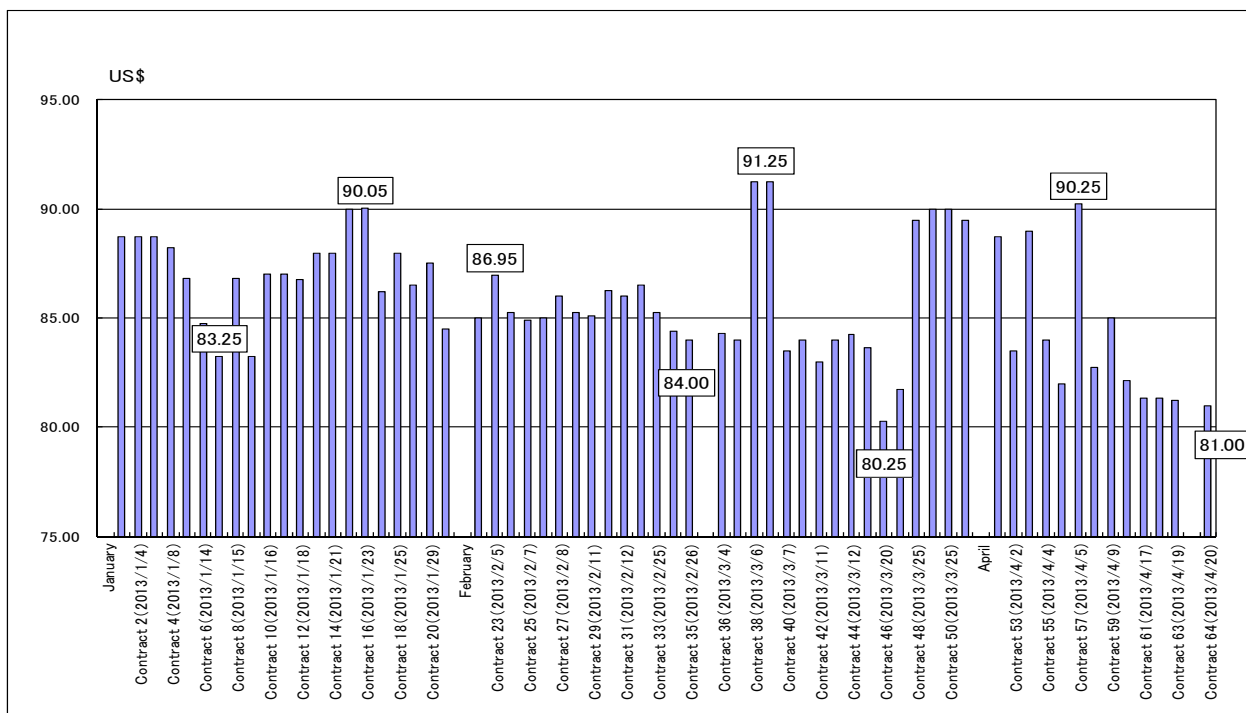
Price levels continued to fall, with March down on February and April down even further. Only one trade concluded in April reached US\$90 per metric ton. The tenth trade of the month for instance, on April 19, was priced at US\$85 per metric ton.

This is the first time that the price of Australian thermal coal has dipped as low as this in three years, since the period from October 2009 to April 2010, when imported coal from NSW was priced at AUS\$83-89 per metric ton (approximately US\$76-82).

Meanwhile, there were 51 contracts for FOB Richards Bay (RB), South Africa, from January to March 2013, with 13 actual spot trades reported for April (as of April 25). There were only two trades that exceeded (or reached) US\$90 per metric ton in January, four in March and one in April. Of the 13 trades concluded in April, only four exceeded (or reached) US\$85 per metric ton. The price for the most recent trade which was concluded on April 20 fell to US\$81 per metric ton.

Figure 2 illustrates the continuing decline in price levels, along similar lines to Newcastle.

Figure 2. Contract Prices FOB Richards Bay, South Africa (Jan-April 2013, actual)

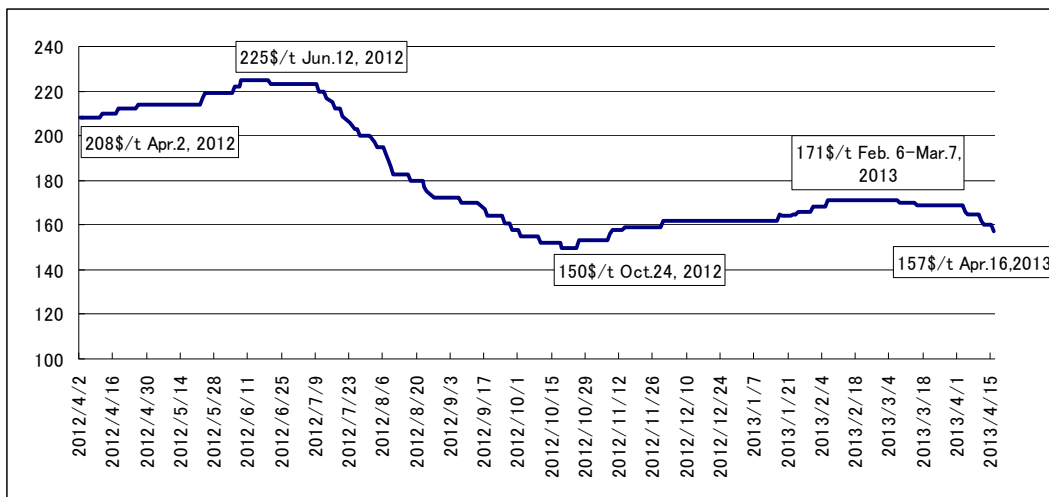


Source: Prepared using globalCOAL materials

(2) Coking coal spot index

Figure 3 shows the prices for Coking Coal Queensland (CCQ); in other words, the hard coking coal price index, ex East Coast Australia (Queensland), on a daily basis.

Figure 3. Energy Publishing’s CCQ (Coking Coal Queensland) Index



Source: Energy Publishing

After bottoming out at US\$150 per metric ton between October 19 and 25, 2012, the price of hard coking coal continued to recover at a gentle pace until reaching US\$171 per metric ton on February 6. Having remained at the same level until March 7 however, the gentle downward trend then started up again. By April 16, the price had fallen back to US\$157 per metric ton. (Energy Publishing website)

Compared to the preceding period (January-March 2013), the April to June 2013 prices of hard coking coal intended for blast furnaces in Japan reportedly rose by US\$17 per metric ton to settle at FOB US\$172 per metric ton, at some point after March 20. Since then, the market has started to weaken again.

(3) Import price to Japan

– Landed prices seem to have settled down, but have risen significantly in yen terms –

Table 1 shows import prices for all coal imports in October 2012, as well as January, February and March 2013.

In dollar terms first of all, the import price for all imports saw an increase of US\$4.14 per metric ton in March compared to the previous month (February). This is the second such increase for all imports this year, following a month-on-month increase of US\$1.77 per metric ton in January.

The rapid decline in prices since last year appears to have subsided for the time being with regard to coal types too, with prices up by US\$6.14 per metric ton for coking coal, down US\$0.69 for thermal coal, and up US\$2.03 for anthracite.

Looking ahead to landed prices from April onwards, it seems unlikely that coking coal prices will start to fall sharply again in and after April, especially considering that the April to June 2013 prices of hard coking coal intended for blast furnaces in Japan rose by US\$17 per metric ton to settle at FOB T US\$172 per metric ton, as mentioned previously.

However, since the Australian contract for thermal coal intended for power companies, which started in April 2013, was agreed at US\$95 per metric ton FOB T, down US\$20 per metric ton compared to the preceding year, prices are expected to start declining once again in the future.

Table 1. Japan Landed Imported Coal Prices (October 2012 - February 2013)

	October-12		January-13		February-12		March-13	
	JPY/ton	US\$/ton	JPY/ton	US\$/ton	JPY/ton	US\$/ton	JPY/ton	US\$/ton
Total imports	11,543	147.41	11,819	134.93	11,811	127.56	12,391	131.70
By coal type								
Coking coal	14,084	179.86	13,589	155.14	12,936	140.98	13,841	147.12
Thermal coal	9,862	125.94	10,477	119.61	10,912	118.92	11,124	118.23
Anthracite	13,529	172.76	13,699	156.39	14,228	155.06	14,780	157.09
By source								
Australia	11,757	150.13	11,904	135.89	12,170	132.63	12,462	132.45
Indonesia	8,980	114.67	9,841	112.34	10,190	111.05	10,712	113.85
Canada	14,981	191.30	15,317	174.86	14,595	159.06	17,296	183.83
China	11,760	150.17	16,861	192.48	15,352	167.31	17,627	187.35
USA	15,197	194.06	16,595	189.45	13,710	149.41	14,793	157.23
Russia	10,308	131.63	10,776	123.04	11,683	127.32	11,626	123.57
South Africa	-	-	10,567	120.63	9,834	107.17	-	-
New Zealand	16,977	216.79	-	-	-	-	17,741	188.56
Vietnam	16,119	205.62	12,401	141.57	13,656	148.82	13,856	147.27
Mongolia	-	-	-	-	20,995	228.80	-	-
Mozambique	17,114	218.54	-	-	15,358	167.37	15,053	159.99
Colombia	10,616	135.56	9,890	112.90	-	-	-	-
Coking coal by source								
Australia	14,834	189.43	14,454	165.16	14,406	157.00	14,501	154.13
Indonesia	9,508	121.42	10,133	115.68	10,404	113.39	11,071	117.67
Canada	17,450	222.84	17,210	196.47	16,999	185.27	18,989	201.84
China	10,823	138.21	-	-	15,611	170.14	17,599	186.63
USA	16,668	212.85	18,033	205.87	15,969	174.03	16,200	172.19
Russia	13,938	177.99	12,113	138.29	13,143	143.23	13,214	140.45
New Zealand	16,978	216.81	-	-	-	-	17,741	188.57
Mongolia	-	-	-	-	20,995	228.81	-	-
Mozambique	17,115	218.56	-	-	15,358	167.38	15,054	160.00
Thermal coal by source								
Australia	10,186	130.08	10,650	121.58	11,227	122.36	11,430	121.49
Indonesia	8,434	107.70	9,314	106.33	9,956	108.51	10,169	108.09
Canada	9,141	116.73	10,759	122.82	11,248	122.58	9,252	98.34
China	11,111	141.89	13,696	156.36	13,019	141.89	11,649	123.82
USA	8,187	104.54	10,808	123.38	10,185	110.00	10,438	110.95
Russia	9,033	115.33	10,089	115.18	10,558	115.06	10,540	112.03
South Africa	-	-	10,568	120.64	9,834	107.18	-	-
Colombia	10,616	135.57	9,891	112.91	-	-	-	-

US1\$=JPY78.31

US1\$=JPY87.60

US1\$=JPY91.76

US1\$=JPY94.08

Source: Prepared using Trade Statistics of Japan Monthly Reports

Viewing landed prices in yen terms however, the situation looks quite different. In yen terms, landed prices are actually rising at an increasingly rapid pace.

In March 2013, the landed price for all imports rose by JPY580 per metric ton compared to the previous month. Whereas prices have fallen by US\$15.71 per metric ton compared to October last year in dollar terms, they have risen by JPY848 per metric ton in yen terms.

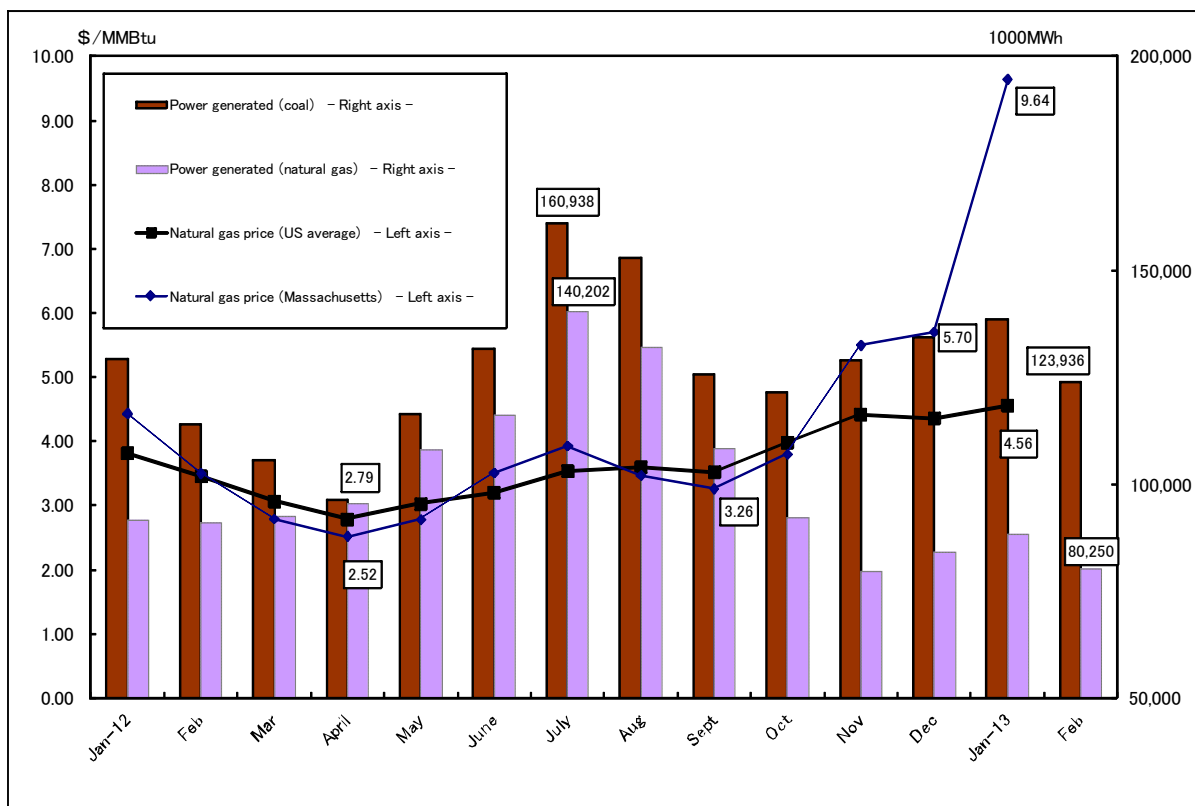
The increase in prices for thermal coal is even greater, up by JPY1,262 per metric ton compared to October last year.

2. Cold winters in New England slows progress with the shale gas revolution

The graph below shows natural gas retail prices for the US power industry from 2012 onwards, alongside power generated according to source.

Supply and demand of natural gas has eased off due to increased production of shale gas in recent years, with prices remaining at a low level. Prices were particularly low at the start of 2012, with the US national average retail price for the power industry falling to US\$2.79 MMBtu in April. Prices started to rise after that point however, as natural gas retail prices for the power industry gathered pace ahead of the peak demand season from fall to winter. By January 2013, prices had increased to US\$4.56 MMBtu.

Figure 4. Natural Gas Retail Prices for the US Power Industry and Power Generated According to Source



Source: Energy Information Administration, US Department of Energy

In particular, natural gas retail prices for the power industry increased substantially in New England, located in the northeastern area of the US, which has extremely cold winters and limited pipeline capacity. In the state of Massachusetts, natural gas prices rocketed up to US\$9.64 MMBtu in January this year. Rising prices in New England are contributing to an increase in price levels nationwide.

The bar chart in Figure 4 meanwhile shows power generated according to source. The bar on the left represents coal-fired power and the bar on the right power generated from natural gas.

We have previously looked at the US shale gas revolution in Issue No.5 of this publication (December 2012), including the fact that coal was losing out to natural gas, which was increasing its share of the power fuel market due to falling prices. Coal went from a 42% share of the market in 2011 to 37% in 2012. Natural gas meanwhile increased its share from 25% to 30%.

In April 2012, when the US national average natural gas price reached a record low of US\$2.79 MMBtu, coal and natural gas were more or less even, with a 33% and 32% share of the market respectively. During the period from January to February 2013 however, shares reverted to 2011 levels, at 40% and 26% respectively. In Massachusetts for instance, coal-fired power saw an increase of 110% compared to the period from January to February 2012, while natural gas-fired power fell by 30%.

The cold winter in New England has served as a reminder. Natural gas may be an outstanding fuel, one that even warrants being hailed as a revolution, but the harsh reality is that people will never embrace it unless it offers them economic advantages too.

(To be continued in the next issue)

Please direct inquiries to: report@tky.ieej.or.jp