

## ***Methodology and Specifications Guide***

### ***Coal***

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## PLATTS UNIFIED COAL PRICING METHODOLOGIES

*Platts'* weekly publications *Coal Outlook* and *Platts International Coal Report* and its daily publications *Platts Coal Trader* and *Platts' Coal Trader International* subscribe to basic standards of integrity, objectivity, and diligence in determining coal assessments. Except for Platts OTC Broker Index in the US (methodology below), assessments continue to be determined from "state of trade" discussions with sources believed to be reliable, including coal producers, consumers and representatives of the trading and brokering communities. Transactions and prices utilized in determining assessments are validated by cross-checks with multiple sources insofar as possible. Assessments are based to the extent possible on actual transactions. Distress or other one-of-a-kind sales are excluded. Assessments are made by independent journalists who use their professional experience in weighing data obtained. In conformance with the ethics requirements of The McGraw-Hill Companies, Inc. and of Platts, neither McGraw-Hill nor any *Platts* employee holds any financial interest in the markets covered, which ensures the integrity and independence of all assessments.

### 1- PLATTS' COAL PUBLICATIONS ASSESS PRICES IN THE FOLLOWING FORMATS:

- **Platts Coal Trader's Daily OTC Assessments**, which cover over-the-counter trading in coal for delivery in the prompt month plus one, three forward quarters, and forward calendar year for selected specifications used for price hedging and physical delivery;
- **Coal Outlook's Weekly U.S. Price Survey**, which covers trading for physical delivery in forward quarters and the forward calendar year in all major U.S. producing regions;
- **Coal Outlook's OTC Hedge Price Monitor**, which gives the previous week's average of over-the-counter trading for delivery in forward quarters and the forward calendar year in selected specifications used for price hedging as well as physical delivery;
- **International Coal Report's Steam Coal pricing tables**, which cover forward trading in the 180-day-ahead spot market for steam coal from major global shipment points;
- **International Coal Report's Key Steam Coal price table and Coal Trader International's Physical Coal Prices**, which cover trading in the forward three months and forward quarter for five benchmark specifications and the 90-day-ahead spot market for eight benchmark specifications for the physical and hedge markets;
- **International Coal Report's Coking Coal pricing tables**, which cover forward trading in the 180-day-ahead spot market; and
- **Platts Petcoke Assessments**, current spot prices for the forward 90 days at three terminals.

### 2- ALL PLATTS COAL ASSESSMENTS SHARE THE FOLLOWING FEATURES AND STANDARDS:

- **Term:** Assessments of forward months move forward with the month's end so, for instance, assessments of April delivery would cease as of issues dated the first business day in April, and May would become the prompt month. Assessments of forward quarters change with the calendar quarter; for example, assessments for the second quarter will cease with the last business day of March, and publications dated April 1 or thereafter will assess the third quarter as the prompt quarter. All prices are current prices for delivery in the specified forward period.
- **Frequency:** All steam coal and petcoke markets for physical delivery are assessed at least biweekly, and more often if market activity merits it, such as during periods of more active trading related to seasonal demand. Coking coal markets are assessed at least quarterly. The markets in Platts Coal Trader are assessed daily, and in Coal Trader International, at least weekly, and more often if market activity merits it. An exception is International Coal Report's US Hampton Roads and Baltimore specifications, whose spot market is highly variable. During prolonged periods of inactivity, Platts publishes "NA" to indicate insufficient spot trading for an assessment.
- **Market:** For physical delivery, assessments are based on direct supplier-consumer transactions and third-party transactions, and on bids and offers, whether via traders, brokers, the over-the-counter (OTC) market, or secondary deals among consumers. For the US OTC hedge market, assessments are based on trading within that market and the New York Mercantile Exchange futures contract trading.
- **Effective dates:** Prices are those prevailing in the week ending on the date of publication for Coal Outlook and International Coal Report. Prices are those prevailing in the previous day's OTC trading in Platts Coal Trader and Coal Trader International.
- **Specifications:** We have attempted to focus on a few of the most-traded specifications, since over the years there has been a fairly constant relationship among prices for various coal qualities in each region. See tables below.
- **Coal quality:** Heat and sulfur content are considered the primary determinants of steam coal price; ash as a secondary determinant is included in some international tables. All coking coal quotes are for hard coking coal except as noted in the table. Specifications in all tables should be considered a composite benchmark of physical characteristics of available coals in the region. They are not intended to represent a particular grade or brand of a given producer.
- **Source basis:** For Coal Outlook and Coal Trader: Prices are US\$/short ton based on FOB quotes at the rail or barge origin point. Geographic regions are based on US government definitions

of coal mining districts and embrace all major coal-producing regions in the US in which significant trading volume occurs. The NYMEX look-alike price is based on trading using the specifications in the New York Mercantile Exchange futures contract.

For International Coal Report and Coal Trader International: Prices are in US\$/metric ton FOB (Free On Board Trimmed for vessel balance) at the port of shipment, except Europe/ARA and the Japan and Korea West benchmarks which are CIF. Steam coal is quoted on a GAR (Gross As Received) basis, except for Europe/ARA, Richards Bay 6,000 kcal/kg, and Japan and West CIF, which are quoted on a NAR (Net As Received) basis.

Assessments reflect actual trading at the pricing point; the Japan CIF assessment only is calculated from a basket of coal prices FOB Japan's main supplier countries, weighted according to the previous five years' buying patterns, plus a freight component. Current weightings are: Australia (Newcastle), 60.5%; China (Qinhuangdao), 21.5%; and Indonesia (Kalimantan), 18%.

■ **Price spreads:** Used only in international assessments for physical delivery, ranges generally reflect variances in delivery times, transport method, and physical qualities.

### 3- OTHER INDICES AND PRICING DATA

■ **OTC Broker Indexes:** By agreement with the five active US coal brokers, Platts receives prompt month and prompt quarter assessments for four coal benchmarks and one spread, and calculates daily, monthly and quarterly indices. Participating brokers are A.E. Bruggemann & Co., Evolution Markets LLC, ICAP Energy (formerly APB Energy Inc.), Natsource LLC, and United Power Inc. Each business day, each broker gives Platts his independent assessment of the market for each specification/spread. For the daily index, Platts takes the day's assessments from all five brokers, checks that none of the numbers are outside plus or minus 1.8 standard deviations from the numbers' mean, and averages the numbers for each specification's index. A number falling outside the mean is examined by Platts to determine if it represents actual trades or is otherwise legitimate; the number may, at Platts' sole judgment, be excluded from the index calculation if Platts finds the number not credible. Platts holds all numbers confidential and uses them only to calculate the indices. If at least two figures are not received for any specification, no index is calculated for that day. For the monthly and quarterly indices, the daily indices are averaged.

The specifications are: New York Mercantile Exchange look-alike, a 12,000 Btu/lb, 1% sulfur barge coal; CSX-origin (Big Sandy/Kanawha rate district), 12,500 Btu/lb, 1% sulfur rail coal; Powder River Basin 8,800 Btu/lb, 0.35% sulfur rail coal; Powder River Basin 8,400 Btu/lb, 0.35% sulfur rail coal; and the Central Appalachian 12,500 Btu/lb. coal spread between 1% sulfur and compliance (<0.75% sulfur) coal.

The OTC Broker Indexes are the follow-on to the groundbreaking Evolution-United Indexes published from Jan. 22, 2002 through April 10, 2003.

■ **Cross-fuel comparisons, US:** Platts Coal Trader editors designed these comparisons by tracking major flows of coal, as shown in Department of Energy and Federal Energy Regulatory Commission records, from the Appalachian and Western coal fields, particularly the heavily traded NYMEX spec (12,000 Btu/lb, <1% sulfur) and Powder River Basin 8,800 Btu/lb, 0.35% sulfur spec coals. Usage concentrations for coal were matched as closely as possible with hubs where spot trading in natural gas and electricity are active. This process found three regions of substantial coal use where natural gas is also traded and used, centered generally around Cincinnati, Atlanta, and Kansas City. The latter two of these areas have a significant nuclear component in their electricity mixes as well.

For each region, Platts Coal Trader gives daily price assessments, taken from Platts Coal Trader for coal and from Platts Energy Trader/Gas Daily for natural gas, converted into dollars per megawatt-hour of heat value for the median plant using that fuel in the area. A transportation component, representing editors' assessment of the regional average, is added to the coal FOB prices. The index for the region for the day's electricity spot market is quoted courtesy of Platts Energy Trader. A regional assessment of average marginal nuclear costs for fuel and operations, courtesy of Nucleonics Week, is given for the two regions with a substantial nuclear generating component.

Priced for the Cincinnati region are the following: NYMEX spec coal plus barge transportation, Columbia Gas Transmission natural gas hub, and Into Cinergy electricity hub. Priced for the Atlanta region are: NYMEX spec coal, rail transportation, Transcontinental Gas Pipeline (pooling 3 hub), and Southern electricity hub. Priced for Kansas City are: PRB 8,800 coal, rail transportation, Reliant Energy Gas Transmission/East hub, and Into Entergy electricity hub. Prices for next month's natural gas is the day's settlement price for the next month's contract for the nationally traded Henry Hub for gas, and for electricity, the day's forward price assessments for next month on trading Into Cinergy and Into Entergy for the Cincinnati and Kansas City regions, respectively. There is no active forwards trading for Southern.

■ **Cross-Fuel Comparisons, Europe:** Platts Coal Trader International's Spark Spreads show the difference, in the UK and in Germany, between the prevailing spot price of electric power and the cost of generating a MWh with coal and with gas. The differences are given in US\$, British pounds, and euros, for several different efficiencies of generating plant. Prices used are the Coal Trader International prompt month delivered coal price into ARA, averages of the UK and German prompt month power prices courtesy of Platts European Power Daily, and the prompt month UK index and prompt month Bunde-Oude assessment for natural gas from European Natural Gas Report.

■ **TFS and Global Coal indices:** Platts Coal Trader International reports bids and offers forming daily forward curves from TFS (Tradition Financial Services) and globalCOAL, with permission. The TFS curves are for API#4® (FOB Richards Bay, 6,000 kcal/kg NAR) and API#2® (CIF ARA, 6,000 kcal/kg NAR). The globalCOAL curves and weekly indices are for PhysRB1™ (Richards Bay 1) and PhysNewc™ (Newcastle), both

standard physical contracts for a minimum of 6,000 kcal/kg NAR coal.

■ **Freight indicators.** Coal Trader International carries Freight FFAs for three forward months and the prompt year courtesy of Clarkson Securities Ltd. International Coal Report carries typical spot rates for coal loadings for key routes worldwide courtesy of Simpson, Spence & Young, and current vessel loadings courtesy Lalemant and Skaarup Chartering Corp. All freight data is reproduced with the permission of the data provider.

■ **Due diligence:** Data in the table are covered by the publisher's general due diligence policy. All information in Platts coal publications is published under copyright.

**Platts Coal Outlook, Coal Trader, International Coal Report, and Coal Trader International** welcome all subscriber comments and ideas, particularly on the accuracy and usefulness of the data in these tables. Please don't hesitate to contact us, by e-mail at coal@platts.com; or by phone at 1-202-383-2190; by fax at 1-202-383-2187; or by post at: 1200 G Street NW, Suite 1100, Washington D.C. 20005. In Europe, you may contact our London office, phone +44-20-7176-6661; fax +44-20-7176-6657; or by post at 20 Canada Square, Canary Wharf, London E14 5LH, U.K.

## SPECIFICATIONS

### Platts Coal Outlook:

#### Weekly US Price Survey

US Basin	Origin (FOB transport)	Btu/lb	SO <sub>2</sub> lb	Transport Mode
Northern Appalachia	Pittsburgh Seam	13,000	<3.0	Rail
		13,000	4.0	Rail
	Upper Ohio River	12,500	6+	Barge
Central Appalachia	NYMEX look-alike	12,000	1.67	Barge
	Big Sandy River	12,500	1.5	CSX
		12,500	1.2	CSX
	Thacker/Kenova	12,500	1.5	NS
		12,500	1.2	NS
Big Sandy/Ohio River	12,000	1.2	Barge	
Illinois Basin		11,800	5.0	Rail
		11,500	2.5	Rail
		11,000	5.0	Barge
		10,500	6+	Rail
Powder River Basin		8,800	0.80	Rail
		8,400	0.80	Rail
Rocky Mountain	Colorado	11,700	0.80	Rail
		11,000	0.80	Rail
	Utah	11,500	0.80	Rail

#### OTC Hedge Price Monitor (and Platts Coal Trader)

Region	Transport	Btu/lb	Sulfur Lbs/mmBtu	Sulfur Percent
NYMEX Central App.				
Big Sandy	Barge	12,000	1.67	1.00
Powder River Basin				
Wyoming	Rail	8,800	0.8	0.35
	Rail	8,400	0.8	0.35

#### Platts OTC Broker Index

Region	Transport	Btu/lb	Sulfur Lbs/mmBtu	Sulfur Percent
NYMEX Central App.				
Big Sandy	Barge	12,000	1.67	1.00
CSX (Big Sandy/ Kanawha)				
	Rail	12,500	1.67	1.00
Powder River Basin				
Wyoming	Rail	8,800	0.8	0.35
	Rail	8,400	0.8	0.35
Central App. Spread				
	--	12,500	1.67	1.00
	--	12,500	<1.20	<0.75

### International Coal Report:

#### Key Steam Coal Prices

Nation/Area	Basi479s	Kcal/kg
Europe ARA	CIF NAR	6,000
Richards Bay	FOBT NAR	6,000
Newcastle	FOBT GAR	6,300
Bolivar	FOBT GAR	6,300
Qinhuangdao	FOBT GAR	6,200
Kalimantan	FOBT GAR	6,300
Japan	CIF Japan NAR	6,080
Korea West	CIF Korea NAR	6,080

## Steam Coal Pricing Table

Nation/Region	Btu/lb	Kcal/kg	Sulf.	Ash
<b>Atlantic Market</b>				
ARA CIF - Europe	10,800	6,000	1.0	16
<b>Colombia</b>				
Bolivar	11,600	6,450	0.8	9
	11,300	6,300	0.8	9
<b>Poland</b>				
Baltic	11,300	6,300	0.8	15
<b>Russia</b>				
Baltic	11,500	6,400	1.0	16
<b>South Africa</b>				
Richards Bay	11,200	6,200	1.0	16
<b>United States</b>				
Hampton Roads	12,500	6,950	1.0	10
Baltimore	12,500	6,950	2.5	12

Nation/Region	Btu/lb	Kcal/kg	Sulf.	Ash
<b>Venezuela</b>				
Maracaibo	12,600	7,000	0.8	7
<b>Pacific Market</b>				
<b>Australia</b>				
Gladstone	11,700	6,500	0.6	12
Newcastle	11,340	6,300	0.8	13
<b>China</b>				
Qinhuangdao	11,200	6,200	0.8	10
<b>Indonesia</b>				
Kalimantan	11,300	6,300	1.0	10
	9,400	5,200	0.1	1
<b>Russia</b>				
Pacific	11,300	6,300	0.4	15

## Coking Coal Pricing Table

Nation/Region	Vol.	Sulfur%	Ash%
<b>United States</b>			
Hampton Roads	17-20	0.8	6.0
	23-25	0.7	7.0
	28-32	0.8	7.0
	34-36	1.0	7.0
East Coast (Blend)	23-30	1.0	8.0
<b>Canada</b>			
West Coast	19-24	0.5	9.0
	25-29	0.5	9.0
(semi-soft)	20-25	0.6	11.5
<b>Australia</b>			
NSW	25-28	0.5	9.0
(semi-soft)	31-37	0.4	9.0
Queensland	17-22	0.7	9.0
	23-30	0.6	9.0
	31+	0.7	7.0
PCI	14	0.5	8.5
<b>Poland</b>			
(semi-soft)	25-31	0.7	7.0
	32-37	1.0	9.0

Nation/Region	Vol.	Sulfur%	Ash%
<b>Russia</b>			
Pacific Coast	17-19	0.6	9.0
	19-21	0.4	9.0
Baltic	28+	0.6	9.0
<b>China</b>			
	23-30	1.0	8.0
	30+	0.8	8.0
<b>South Africa</b>			
PCI	30-35	0.6	10.0
<b>Indonesia</b>			
PCI	36-40	0.5	4.0
<b>Colombia</b>			
PCI	30-35	0.7	8.0
<b>Venezuela</b>			
PCI	30-35	0.8	7.0