

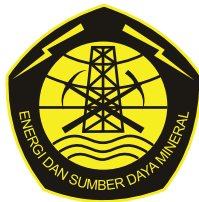
PENJELASAN HBA

INFORMASI HBA (GCV 6322 kcal/kg gar)

	HBA Maret 2011
(US\$/ton)	122,43

HARGA MARKER UNTUK EVALUASI Bulan Maret 2011

NO	MEREK DAGANG/ BRAND	KUALITAS TYPICAL				HARGA MARKER UNTUK EVALUASI HARGA BATUBARA BULAN
		CV (kcal/kg GAR)	TM (% ar)	TS (%)	Ash (%)	JANUARI 2011
	Batubara Utama					
1	Gunung Bayan I	7.000	10,0	1,0	15,0	132.01
2	Prima Coal	6.700	12,0	0,6	5,0	127.71
3	Pinang 6150	6.200	14,5	0,6	5,5	115.03
4	Indominco IM_East	5.700	17,5	1,6	4,8	99.56
5	Melawan Coal	5.400	22,5	0,4	5,0	92.29
6	Envirocoal	5.000	26,0	0,1	1,2	84.12
7	Jorong J-1	4.400	32,0	0,3	4,2	67.89
8	Ecocoal	4.200	35,0	0,2	3,9	61.23



HARGA BATUBARA LAINNYA UNTUK EVALUASI

Bulan Maret 2011

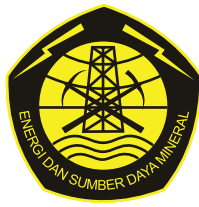
No	MEREK DAGANG/ BRAND	Kualitas Tipikal				Formula	HPB (USD/ton)
		CV (kcal/kg GAR)	TM (ar, %)	TS (%)	Ash (%)		
9	Gunung Bayan II	7,000	12.00	2.00	10.00	(0.9778 * Gunung Bayan I) - 1.513	127.57
10	Marunda Thermal Coal	6,600	11.00	0.50	10.00	(0.9963 * Prima Coal) - 1.187	126.05
11	Trubaindo HCV_HS	6,553	12.00	1.69	4.21	(0.9781 * Prima Coal) - 2.954	121.95
12	Trubaindo HCV_LS	6,423	11.50	0.71	4.76	(0.9641 * Prima Coal) - 0.129	123.00
13	Tanjung Formation Coal	6,420	11.00	0.70	12.50	(0.9691 * Prima Coal) - 2.439	121.32
14	Pinang 6000 NAR	6,300	14.00	0.60	5.50	(0.9189 * Prima Coal) + 0.142	117.50
15	Arutmin Satui 10	6,300	11.00	1.00	10.00	(0.9510 * Prima Coal) - 2.524	118.93
16	Arutmin Senakin	6,250	11.00	1.00	12.00	(0.9434 * Prima Coal) - 3.096	117.39
17	Arutmin A6250	6,250	10.00	1.20	12.00	(0.9540 * Prima Coal) - 3.735	118.10
18	Mandiri A	6,210	10.00	0.70	4.65	(0.9479 * Prima Coal) - 0.008	121.05
19	Wahana Coal	6,200	12.00	0.90	10.00	(0.9254 * Prima Coal) - 2.131	116.05
20	Indominco IM_West / 6500	6,171	15.50	0.76	5.22	(0.8844 * Prima Coal) - 0.130	112.82
21	TAJ Coal	6,200	12.00	1.00	14.00	(1.0292 * Pinang 6150) - 3.851	114.55
22	Mandiri B	6,148	10.00	1.26	4.70	(1.0438 * Pinang 6150) - 1.891	118.18
23	Trubaindo MCV_LS	6,143	14.00	0.76	5.20	(0.9966 * Pinang 6150) - 0.378	114.27
24	SKB Coal	6,130	9.00	2.20	17.00	(1.0523 * Pinang 6150) - 8.430	112.62
25	Baramarta Coal	6,112	9.50	0.95	13.00	(1.0435 * Pinang 6150) + 0.450	116.58
26	Arutmin A6100	6,100	11.50	1.00	12.50	(1.0184 * Pinang 6150) - 3.363	113.79
27	Insani Coal	6,050	19.00	0.15	3.20	(0.9244 * Pinang 6150) + 2.316	108.66
28	BCS Coal	6,050	16.26	0.45	9.32	(0.9557 * Pinang 6150) - 0.543	109.40
29	Indominco IM_West / 6350	6,029	15.50	0.71	5.22	(0.9610 * Pinang 6150) - 0.112	110.44
30	Pinang 6000	6,000	16.00	0.60	5.00	(0.9508 * Pinang 6150) + 0.320	109.69
31	Indominco IMM_MCVHS	5,970	15.50	1.65	5.05	(0.9516 * Pinang 6150) - 2.848	106.62
32	Multi Coal Low	5,950	16.00	1.00	7.00	(0.9428 * Pinang 6150) - 1.453	107.01
33	Bangun Coal	5,929	8.20	1.15	15.23	(1.0268 * Pinang 6150) - 4.661	113.45
34	Multi Coal Middle	5,900	16.00	2.00	7.00	(0.9349 * Pinang 6150) - 4.425	103.12
35	Pinang 5900	5,900	19.00	0.90	4.50	(0.9015 * Pinang 6150) - 0.260	103.45
36	Arutmin A5900	5,900	12.00	0.90	13.00	(0.9794 * Pinang 6150) - 3.079	109.59
37	Multi Coal High	5,765	16.00	3.20	7.00	(0.9135 * Pinang 6150) - 7.952	97.14
38	KCM Coal	5,730	10.50	0.90	20.50	(0.9674 * Pinang 6150) - 5.288	106.00
39	TSA coal	5,700	18.00	2.00	8.00	(0.9939 * Indominco IM_East) - 2.067	96.89
40	Tanito Coal / ISC	5,700	17.50	1.00	8.50	(1.0000 * Indominco IM_East) + 0.780	100.34
41	Tanito Coal	5,700	17.50	1.00	8.50	(1.0000 * Indominco IM_East) + 0.780	100.34
42	Pinang 5700	5,700	19.00	0.50	5.00	(0.9818 * Indominco IM_East) + 3.340	101.09
43	Arutmin A5700	5,700	11.00	0.80	14.00	(1.0788 * Indominco IM_East) - 0.315	107.09
44	BSS Coal	5,520	10.00	0.45	15.50	(1.1613 * Melawan Coal) - 4.086	105.47
45	Lanna Harita Coal	5,500	22.00	1.00	6.00	(1.0065 * Melawan Coal) - 2.205	92.40
46	Pinang 5500	5,500	21.00	0.40	5.50	(1.0194 * Melawan Coal) - 0.311	95.51
47	Berau Mah	5,500	18.00	0.65	4.50	(1.0581 * Melawan Coal) - 0.926	98.20
48	Berau MahB	5,300	22.50	0.80	4.30	(0.9815 * Melawan Coal) - 0.912	89.55
49	Kideco Coal	5,125	24.50	0.10	2.00	(1.0458 * Envirocoal) - 0.526	87.45
50	Berau Agathis	5,100	25.00	0.85	4.40	(1.0338 * Envirocoal) - 3.421	83.46
51	Lanna Harita Coal	5,000	27.00	1.20	6.00	(0.9865 * Envirocoal) - 4.656	78.33
52	Berau Sungkai	5,000	26.00	1.00	5.00	(1.0000 * Envirocoal) - 3.840	80.58
53	Berau Sungkai High S	5,000	26.00	1.40	5.00	(1.0000 * Envirocoal) - 5.040	79.08
54	Arutmin A5000	5,000	22.40	0.54	8.90	(1.0486 * Envirocoal) - 3.934	84.28
55	Warukin Formation Coal	4,760	25.00	0.55	4.50	(0.9649 * Envirocoal) - 2.121	79.05
56	Bas Gumay Coal	4,400	35.00	0.50	4.96	(0.9559 * Jorong J-1) - 0.777	64.11
57	PIC Coal	4,200	33.00	1.75	6.00	(1.0327 * Ecocoal) - 5.510	57.72
58	Borneo BIB 5700	4,100	35.00	0.30	5.00	(0.9762 * Ecocoal) - 5.066	59.20*)
59	Borneo BIB 5500	3,800	39.00	0.30	5.00	(0.8460 * Ecocoal) - 4.391	47.40*)
60	BIB Coal	3,800	39.00	0.30	5.00	(0.8460 * Ecocoal) - 4.391	47.40
61	Intitirta coal	3,749	42.00	0.50	4.00	(0.7914 * Ecocoal) - 4.107	44.35
62	PKN 3500	3,520	43.40	0.15	3.40	(0.7242 * Ecocoal) - 3.758	47.40
63	LIM 3000	2,995	50.10	0.60	5.30	(0.5399 * Ecocoal) - 2.802	30.25

Catatan:

- Terdapat brand baru batubara:
1. TAJ Coal;
2. Berau Sungkai High S

3. BIB Coal

- *): brand BIB 5700 dan BIB 5500 tidak dipergunakan lagi



FORMULA HARGA PATOKAN BATUBARA

1. Harga Batubara Acuan (HBA) dalam kesetaraan nilai kalor:

$$\text{HBA} = 25\% \text{ ICI-1} + 25\% \text{ Platts-1} + 25\% \text{ NEX} + 25\% \text{ GC} \quad [\text{US\$/ton}]$$

Di mana:

- HBA = Harga Batubara Acuan [US\$/ton]
- ICI = Indonesia Coal Index [US\$/ton]
- NEX = New Castle Export Index [US\$/ton]
- GC = New Castle Global Coal Index [US\$/ton]

2. Menghitung HPB marker

a. Harga Patokan Batubara Marker No. 1 – 7

$$\text{HPB Marker (i)} = (\text{HBA} * \text{K (i)} * \text{A (i)}) - (\text{B (i)} + \text{U (i)}) \quad [\text{US\$/ton}]$$

Di mana:

- HBP Marker (i) = HPB dari 7 batubara price marker [US\$/ton]
- K (i) = Nilai Kalor Batubara (i) / 6322 [fraksi]
- A (i) = $(100 - \text{Kandungan Air Batubara (i)}) / (100 - 8)$ [fraksi]
- B (i) = $(\text{Kandungan Belerang Batubara (i)} - 0.8) * 3$ [US\$/ton]
- U (i) = $(\text{Kandungan Abu Batubara (i)} - 15) * 0.3$ [US\$/ton]
- (i) = price marker 1 – 7

b. Harga Patokan Batubara Marker No. 8

$$\text{HPB Marker (i)} = (\text{HBA} * \text{K (i)} * \text{A (i)}) - (\text{B (i)} + \text{U (i)}) \quad [\text{US\$/ton}]$$

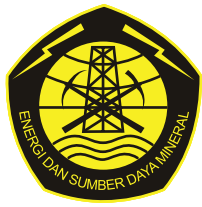
Di mana:

- HBP Marker (i) = HPB batubara price marker 8 [US\$/ton]
- K (i) = Nilai Kalor Batubara (i) / 6322 [fraksi]
- A (i) = $(100 - \text{Kandungan Air Batubara (i)}) / (100 - 8/\text{FKA(i)})$ [fraksi]
- FKA(i) = $\frac{(((100-8)/(100 - \text{Kandungan Air Batubara(i)})) * \text{Kandungan Air Batubara(i)} + (100 - 8))}{100}$ [persen]
- B (i) = $(\text{Kandungan Belerang Batubara (i)} - 0.8) * 3$ [US\$/ton]
- U (i) = $(\text{Kandungan Abu Batubara (i)} - 15) * 0.3$ [US\$/ton]
- (i) = price marker 8

3. Harga Patokan Batubara Lain

a. Harga Patokan Batubara Lain No. 9 – 54

$$\text{HPB (j)} = \frac{\{(\text{HBA Price Marker (i)} + (\text{B (i)} + \text{U (i)})) * (\text{K(j)} / \text{K(i)}) * [(\text{100} - \text{Kandungan Air (j)}) / (\text{100} - \text{Kandungan Air (i)}) * [(\text{100} - 8) / (\text{100} - 8)]] - (\text{B (j)} + \text{U (j)})\}}{\quad} \quad [\text{USD/ton}]$$



Di mana:

• HPB (j)	= HPB batubara selain batubara Price Marker	[US\$/ton]
• B (i)	= (Kandungan Belerang Batubara (i) – 0.8) * 3	[US\$/ton]
• U (i)	= (Kandungan Abu Batubara (i) – 15) * 0.3	[US\$/ton]
• B (j)	= (Kandungan Belerang Batubara (j) – 0.8) * 3	[US\$/ton]
• U (j)	= (Kandungan Abu Batubara (j) – 15) * 0.3	[US\$/ton]
• K (j) / K (i)	= Nilai Kalor Batubara (j) / Nilai Kalor Batubara (i)	[fraksi]
• (i)	= price marker 1 – 8	
• (j)	= batubara lain 9 – 54	

b. Harga Patokan Batubara Lain No. 55 – 60 (Batubara Kalori Rendah)

- Bila $TM \leq 35\%$

$$HPB (j) = \frac{\{(HBA \text{ Price Marker } (i) + (B (i) + U (i))) * (K(j) / K(i)) * [(100 - \text{Kandungan Air } (j))/(100 - \text{Kandungan Air } (i))] * [(100 - 8/FKA(i))/(100 - 8/FKA(j))] - (B (j) + U (j))\}}{[USD/ton]}$$

Di mana:

• HPB (j)	= HPB batubara selain batubara Price Marker	[US\$/ton]
• B (i)	= (Kandungan Belerang Batubara (i) – 0.8) * 3	[US\$/ton]
• U (i)	= (Kandungan Abu Batubara (i) – 15) * 0.3	[US\$/ton]
• B (j)	= (Kandungan Belerang Batubara (j) – 0.8) * 3	[US\$/ton]
• U (j)	= (Kandungan Abu Batubara (j) – 15) * 0.3	[US\$/ton]
• FKA(j)	= (((100-8)/(100 – Kandungan Air Batubara(j))) * Kandungan Air Batubara(j)) + (100 – 8)/100	[persen]
• K (j) / K (i)	= Nilai Kalor Batubara (j) / Nilai Kalor Batubara (i)	[fraksi]
• (i)	= price marker 1 – 8	
• (j)	= batubara lain 55 – 60	

- Bila $TM > 35\%$

$$HPB (j) = \frac{\{(HBA \text{ Price Marker } (i) + (B (i) + U (i))) * (K(j) / K(i)) * [(100 - \text{Kandungan Air } (j))/(100 - \text{Kandungan Air } (i))] * [(100 - 8/FKA(i))/(100 - 8/FKA(j))]\}}{[USD/ton]}$$

Di mana:

• HPB (j)	= HPB batubara selain batubara Price Marker	[US\$/ton]
• FKA(j)	= (((100-8)/(100 – Kandungan Air Batubara(j))) * Kandungan Air Batubara(j)) + (100 – 8)/100	[persen]
• K (j) / K (i)	= Nilai Kalor Batubara (j) / Nilai Kalor Batubara (i)	[fraksi]
• (i)	= price marker 1 – 8	
• (j)	= batubara lain 57 – 60	

Catatan :

1. HBA dan HPB di atas berlaku untuk harga spot (kontrak penjualan di bawah 12 bulan)
2. Untuk harga term (kontrak penjualan lebih dari 12 bulan), harga acuan menggunakan rata-rata HBA 3 bulan terakhir dan harga berlaku untuk penjualan batubara selama 12 bulan.
3. Untuk penjualan di atas tongkang (FOB Barge) dilakukan penyesuaian (dikurangi biaya barging dan biaya transhipment dari FOB Vessel ke FOB Barge).
4. Untuk penjualan CIF/CNF dilakukan penyesuaian ditambah barge atau tongkang dari lokasi transhipment ke tujuan akhir.
5. Rumus konversi ADB ke GAR; $CV \text{ GAR} = CV \text{ ADB} \times ((100-TM)/(100-IM))$
 GAR : Gross As Received
 ADB : Air Dried Bases
 TM : Total Moisture
 IM : Inherent Moisture