

**HARGA BATUBARA ACUAN (HBA) & HARGA PATOKAN BATUBARA (HPB)  
SEPTEMBER 2021**

**HBA**

HBA (US\$/Ton)	150.03	FOB Vessel
Coal Quality CV = 6,322 kcal/kg GAR; TM = 8 %; TS = 0.8 % ar; Ash = 15% ar		

**HPB COAL MARKER**

No	BRAND	TYPICAL COAL QUALITY				HPB
		CV	TM	TS	Ash	MARKER
		(kcal/kg GAR)	(%)	(%, ar)	(%, ar)	(US\$/ton)
1	Gunung Bayan I	7,000	10.0	1.00	15.0	161.71
2	Prima Coal	6,700	12.0	0.60	5.0	156.89
3	Pinang 6150	6,200	14.5	0.60	5.5	141.34
4	Indominco IM_East	5,700	17.5	1.63	4.8	122.06
5	Melawan Coal	5,400	22.5	0.40	5.0	113.55
6	Envirocoal	5,000	26.0	0.10	1.2	103.76
7	Jorong J-1	4,400	32.0	0.25	4.2	83.72
8	Ecocoal	4,200	35.0	0.18	3.9	75.59

9	Gunung Bayan II	7,000	12.0	2.00	10.0	156.10
10	Marunda Thermal Coal	6,600	11.0	0.50	10.0	154.72
11	Trubaindo HCV_HS	6,553	12.0	1.69	4.2	149.51
12	Medco Bara 6500	6,500	10.0	3.28	9.4	143.23
13	Trubaindo HCV_LS	6,423	11.5	0.71	4.8	151.08
14	AGM Waruba Coal	5,313	23.0	0.24	4.0	112.17
15	Pinang 6000 NAR	6,300	14.0	0.60	5.5	144.36
16	Arutmin Satui 10	6,300	11.0	1.00	10.0	145.83
17	Arutmin Senakin	6,250	11.0	1.00	12.0	143.88
18	Arutmin A6250	6,250	10.0	1.20	12.0	144.70
19	Mandiri 1	5,200	25.0	0.60	7.0	104.60
20	Wahana Coal	6,200	12.0	0.90	10.0	142.34
21	Medco Bara 6200	6,200	10.0	4.00	12.0	132.34
22	Indominco IM_West /6500	6,171	15.5	0.76	5.2	138.58
23	TAJ Coal	6,200	10.0	1.00	14.0	143.54
24	Mandiri 2	5,100	26.0	0.60	7.0	101.35
25	Trubaindo MCV_LS	6,143	14.0	0.76	5.2	140.35
26	SKB Coal	6,130	9.0	2.20	17.0	137.49
27	Baramarta Coal	6,112	9.5	0.95	13.0	142.88
28	Arutmin A6100	6,100	11.5	1.00	12.5	139.45
29	Insani Coal	6,050	19.0	0.15	3.2	133.73
30	BCS Coal	5,915	15.1	0.56	9.4	132.74
31	Indominco IM_West /6350	6,029	15.5	0.71	5.2	135.68
32	Bangun Coal	6,072	10.0	2.20	14.9	135.37
33	Pinang 6000	6,000	16.0	0.60	5.0	134.81
34	Indominco IMM_MCVHS	5,970	15.5	1.65	5.1	130.71
35	Multi Coal Low	5,950	16.0	1.00	7.0	131.32
36	Multi Coal Middle	5,900	16.0	2.00	7.0	126.24
37	Pinang 5900	5,900	19.0	0.90	4.5	127.07
38	Arutmin A5900	5,900	12.0	0.90	13.0	134.33

No	BRAND	TYPICAL COAL QUALITY				HPB
		CV	TM	TS	Ash	MARKER
		(kcal/kg GAR)	(%)	(%, ar)	(%, ar)	(US\$/ton)
39	Multi Coal High	5,765	16.0	3.20	7.0	118.51
40	KCM Coal	5,730	10.5	0.90	20.5	129.69
41	TSA Coal	5,700	18.0	2.00	8.0	118.57
42	Tanito Coal	5,700	17.5	1.00	8.5	123.10
43	Mahakam Coal	5,700	17.5	1.00	8.5	123.10
44	Ebony High Sulphur	5,700	18.0	1.75	4.7	120.89
45	Pinang 5700	5,700	19.0	0.50	5.0	124.30
46	IBP 5500	5,500	20.0	1.00	7.0	115.90
47	Arutmin A5700	5,700	11.0	0.80	14.0	131.26
48	BSS Coal	5,520	10.0	0.45	15.5	129.35
49	Lanna Harita Coal	5,500	22.0	1.00	6.0	113.46
50	Pinang 5500	5,500	21.0	0.40	5.5	117.48
51	Mahoni Medium Sulphur	5,500	20.0	1.30	4.7	115.62
52	Mahoni	5,500	20.0	0.80	4.7	117.62
53	Mahakam Coal B	5,400	23.0	1.50	8.0	107.26
54	Mahoni B	5,300	22.5	0.80	4.6	110.11
55	Kideco Coal	5,125	24.5	0.10	2.0	107.81
56	Agathis	5,100	25.0	0.82	4.5	102.79
57	Lanna Harita Coal	5,000	27.0	1.20	6.0	96.15
58	IBP 5000	5,000	25.0	1.00	7.0	99.13
59	Sungkai Medium Sulphur	5,000	26.0	1.30	4.5	97.64
60	Sungkai	5,000	26.0	0.90	4.5	99.24
61	Sungkai High Sulphur	5,000	26.0	1.70	4.5	96.04
62	Arutmin A5000	5,000	22.4	0.54	8.9	103.56
63	AGM Warute Coal	4,350	33.0	0.40	4.0	81.18
64	IBP 4600	4,600	28.0	0.50	7.0	89.83
65	Bas Gumay Coal	4,400	35.0	0.50	5.0	78.99
66	IBP 4400	4,400	30.0	0.50	7.0	83.85
67	IBP 4200	4,200	32.0	0.50	6.0	76.84
68	PIC Coal	4,200	33.0	1.75	6.0	70.71
69	BIB 4200	4,200	36.0	0.15	3.5	74.75
70	TER 4021	4,021	39.8	0.37	2.2	67.44
71	BIB 4000	4,000	38.0	0.50	6.0	67.01
72	Borneo BIB	3,800	41.0	0.40	5.0	56.08
73	AGM Warutas Coal	3,800	40.0	0.15	5.2	57.09
74	PKN 3500	3,520	43.4	0.15	3.4	49.73
75	BMPclenco32	3,200	48.0	0.50	5.0	41.36
76	LIM 3010	3,010	47.5	0.60	5.3	39.30
77	LIM 3000	2,995	50.1	0.60	5.3	37.08

#### AVERAGE COAL QUALITY

101	Marker 1	6,500	12.0	1.20	8.0	148.75
102	Marker 2	5,800	15.0	1.10	9.0	128.37
103	Marker 3	4,900	26.0	0.80	5.0	97.53
104	Marker 4	4,200	34.0	0.50	5.0	75.00
105	Marker 5	3,300	45.0	0.40	5.0	45.24

## COAL PRICE RECAPITULATION

BULAN	HBA 6322	Gunung Bayan I	Prima Coal	Pinang 6150	Indomin co IM_East	Melaw an Coal	Envirocoal	Jorong J-1	Ecocoal	Mark er 1	Mark er 2	Mark er 3	Mark er 4	Mark er 5
CV	6,322	7,000	6,700	6,200	5,700	5,400	5,000	4,400	4,200	6,500	5,800	4,900	4,200	3,300
TM	8.0	10.0	12.0	14.5	17.5	22.5	26.0	32.0	35.0	12.0	15.0	26.0	34.0	45.0
TS	0.80	1.00	0.60	0.60	1.63	0.40	0.10	0.25	0.18	1.20	1.10	0.80	0.50	0.40
Ash	15.0	15.0	5.0	5.5	4.8	5.0	1.2	4.2	3.9	8.0	9.0	5.0	5.0	5.0
Sep-21	150.03	161.71	156.89	141.34	122.06	113.55	103.76	83.72	75.59	148.75	128.37	97.53	75.00	45.24
Aug-21	130.99	141.08	137.59	123.99	106.67	99.85	91.65	73.92	66.87	130.02	112.23	85.66	66.14	39.50
Jul-21	115.35	124.14	121.73	109.73	94.02	88.60	81.70	65.88	59.72	114.64	98.97	75.91	58.87	34.78
Jun-21	100.33	107.87	106.51	96.04	81.88	77.79	72.14	58.15	52.84	99.87	86.24	66.55	51.88	30.25
May-21	89.74	96.40	95.77	86.39	73.32	70.17	65.41	52.70	47.99	89.46	77.27	59.95	46.95	27.06
Apr-21	86.68	93.09	92.67	83.60	70.84	67.97	63.46	51.13	46.59	86.45	74.67	58.04	45.53	26.14
Mar-21	84.47	90.70	90.43	81.59	69.06	66.38	62.06	49.99	45.58	84.27	72.80	56.66	44.50	25.47
Feb-21	87.79	94.29	93.79	84.61	71.74	68.77	64.17	51.70	47.10	87.54	75.61	58.73	46.05	26.47
Jan-21	75.84	81.35	81.68	73.72	62.08	60.17	56.57	45.55	41.63	75.79	65.48	51.28	40.49	22.87
Dec-20	59.65	63.81	65.27	58.97	48.99	48.52	46.27	37.23	34.22	59.86	51.76	41.19	32.96	17.99
Nov-20	55.71	59.54	61.27	55.37	45.80	45.69	43.76	35.20	32.42	55.99	48.42	38.73	31.12	16.80
Oct-20	51.00	54.44	56.50	51.08	41.99	42.30	40.76	32.78	30.26	51.36	44.43	35.79	28.93	15.38
Sep-20	49.42	52.73	54.90	49.64	40.72	41.16	39.76	31.96	29.54	49.80	43.09	34.81	28.20	14.90
Aug-20	50.34	53.73	55.83	50.48	41.46	41.82	40.34	32.44	29.96	50.71	43.87	35.38	28.63	15.18
Jul-20	52.16	55.70	57.68	52.14	42.93	43.13	41.50	33.37	30.79	52.50	45.41	36.52	29.47	15.73
Jun-20	52.98	56.59	58.51	52.89	43.59	43.72	42.02	33.79	31.17	53.30	46.11	37.03	29.85	15.97
May-20	61.11	65.39	66.75	60.30	50.17	49.57	47.20	37.98	34.89	61.30	53.00	42.10	33.64	18.43
Apr-20	65.77	70.44	71.47	64.54	53.94	52.92	50.16	40.37	37.02	65.88	56.95	45.00	35.80	19.83
Mar-20	67.08	71.86	72.80	65.74	54.99	53.87	50.99	41.05	37.62	67.17	58.06	45.82	36.41	20.23
Feb-20	66.89	71.65	72.61	65.56	54.84	53.73	50.87	40.95	37.54	66.98	57.90	45.70	36.32	20.17
Jan-20	65.93	70.61	71.63	64.69	54.07	53.04	50.26	40.46	37.10	66.04	57.08	45.10	35.88	19.88
Ave.	58.17	62.21	63.77	57.62	47.79	47.46	45.32	36.46	33.54	58.41	50.51	40.26	32.27	17.54
Dec-19	66.30	71.01	72.01	65.03	54.36	53.31	50.50	40.65	37.27	66.40	57.40	45.33	36.05	19.99
Nov-19	66.27	70.98	71.98	65.00	54.34	53.28	50.48	40.63	37.25	66.37	57.37	45.31	36.04	19.98
Oct-19	64.80	69.39	70.49	63.66	53.15	52.23	49.54	39.87	36.58	64.93	56.13	44.40	35.35	19.54
Sep-19	65.79	70.46	71.49	64.56	53.95	52.94	50.17	40.38	37.03	65.90	56.97	45.02	35.81	19.84
Aug-19	72.67	77.91	78.47	70.83	59.51	57.89	54.55	43.92	40.18	72.67	62.80	49.30	39.01	21.91
Jul-19	71.92	77.10	77.71	70.15	58.91	57.35	54.07	43.54	39.84	71.93	62.16	48.84	38.66	21.68
Jun-19	81.48	87.46	87.40	78.86	66.64	64.23	60.15	48.46	44.21	81.33	70.26	54.80	43.11	24.57
May-19	81.86	87.87	87.78	79.21	66.94	64.50	60.40	48.65	44.39	81.71	70.59	55.03	43.29	24.68
Apr-19	88.85	95.44	94.87	85.58	72.60	69.53	64.84	52.25	47.59	88.58	76.51	59.39	46.54	26.79
Mar-19	90.58	97.31	96.62	87.16	74.00	70.78	65.94	53.14	48.38	90.28	77.98	60.47	47.34	27.31
Feb-19	91.80	98.64	97.86	88.27	74.98	71.65	66.72	53.76	48.94	91.48	79.01	61.23	47.91	27.68
Jan-19	92.41	99.30	98.48	88.82	75.47	72.09	67.11	54.08	49.22	92.08	79.53	61.61	48.20	27.86
Ave.	77.89	83.57	83.76	75.59	63.74	61.65	57.87	46.61	42.57	77.81	67.23	52.56	41.44	23.49
Dec-18	92.51	99.40	98.58	88.91	75.56	72.16	67.17	54.13	49.26	92.18	79.61	61.67	48.24	27.89
Nov-18	97.90	105.24	104.04	93.83	79.91	76.04	70.60	56.90	51.73	97.48	84.18	65.03	50.75	29.52
Oct-18	100.89	108.48	107.07	96.55	82.33	78.19	72.50	58.44	53.10	100.42	86.72	66.90	52.14	30.42
Sep-18	104.81	112.73	111.05	100.13	85.50	81.01	74.99	60.46	54.89	104.28	90.04	69.34	53.96	31.60
Aug-18	107.83	116.00	114.11	102.88	87.94	83.19	76.92	62.01	56.27	107.25	92.60	71.22	55.37	32.51
Jul-18	104.65	112.55	110.89	99.98	85.37	80.90	74.89	60.37	54.82	104.12	89.90	69.24	53.89	31.55
Jun-18	96.61	103.85	102.73	92.65	78.87	75.11	69.78	56.24	51.14	96.21	83.09	64.23	50.15	29.13
May-18	89.83	96.50	95.86	86.47	73.39	70.24	65.47	52.75	48.03	89.54	77.34	60.00	47.00	27.08
Apr-18	94.75	101.83	100.85	90.96	77.37	73.78	68.60	55.28	50.29	94.38	81.51	63.07	49.28	28.57
Mar-18	101.86	109.53	108.06	97.44	83.12	78.89	73.12	58.94	53.54	101.37	87.54	67.50	52.59	30.71
Feb-18	100.69	108.26	106.87	96.37	82.17	78.05	72.37	58.34	53.01	100.22	86.55	66.77	52.05	30.36
Jan-18	95.54	102.69	101.65	91.68	78.01	74.34	69.10	55.69	50.65	95.16	82.18	63.56	49.65	28.81
Ave.	98.99	106.42	105.15	94.82	80.79	76.83	71.29	57.46	52.23	98.55	85.11	65.71	51.26	29.85

BULAN	HBA 6322	Gunung Bayan I	Prima Coal	Pinang 6150	Indominco IM_East	Melawan Coal	Envirocoal	Jorong J-1	Ecocoal	Mark er 1	Mark er 2	Mark er 3	Mark er 4	Mark er 5
CV	6,322	7,000	6,700	6,200	5,700	5,400	5,000	4,400	4,200	6,500	5,800	4,900	4,200	3,300
TM	8.0	10.0	12.0	14.5	17.5	22.5	26.0	32.0	35.0	12.0	15.0	26.0	34.0	45.0
TS	0.80	1.00	0.60	0.60	1.63	0.40	0.10	0.25	0.18	1.20	1.10	0.80	0.50	0.40
Ash	15.0	15.0	5.0	5.5	4.8	5.0	1.2	4.2	3.9	8.0	9.0	5.0	5.0	5.0
Dec-17	94.04	101.06	100.13	90.31	76.79	73.27	68.14	54.92	49.96	93.68	80.91	62.63	48.95	28.35
Nov-17	94.80	101.88	100.90	91.00	77.41	73.81	68.63	55.31	50.31	94.43	81.56	63.10	49.31	28.58
Oct-17	93.99	101.01	100.08	90.26	76.75	73.23	68.11	54.89	49.94	93.63	80.87	62.60	48.93	28.34
Sep-17	92.03	98.88	98.09	88.48	75.17	71.82	66.86	53.88	49.04	91.71	79.21	61.37	48.02	27.75
Aug-17	83.97	90.15	89.92	81.13	68.65	66.02	61.74	49.74	45.35	83.78	72.38	56.35	44.27	25.32
Jul-17	78.95	84.72	84.83	76.56	64.59	62.41	58.54	47.15	43.06	78.84	68.12	53.22	41.93	23.80
Jun-17	75.46	80.94	81.29	73.38	61.77	59.90	56.32	45.36	41.46	75.41	65.16	51.04	40.31	22.75
May-17	83.81	89.98	89.76	80.99	68.52	65.90	61.64	49.65	45.28	83.62	72.24	56.25	44.20	25.27
Apr-17	82.51	88.57	88.44	79.80	67.47	64.97	60.81	48.98	44.68	82.34	71.14	55.44	43.59	24.88
Mar-17	81.90	87.91	87.82	79.24	66.98	64.53	60.42	48.67	44.41	81.74	70.62	55.06	43.31	24.69
Feb-17	83.32	89.45	89.26	80.54	68.13	65.55	61.32	49.40	45.06	83.14	71.82	55.94	43.97	25.12
Jan-17	86.23	92.60	92.21	83.19	70.48	67.65	63.18	50.90	46.39	86.00	74.29	57.76	45.32	26.00
Ave.	85.92	92.26	91.89	82.91	70.23	67.42	62.98	50.74	46.24	85.70	74.03	57.56	45.18	25.91
Dec-16	101.69	109.35	107.88	97.28	82.98	78.77	73.01	58.85	53.46	101.21	87.40	67.40	52.51	30.66
Nov-16	84.89	91.15	90.85	81.97	69.39	66.68	62.32	50.21	45.77	84.69	73.16	56.92	44.70	25.60
Oct-16	69.07	74.01	74.82	67.55	56.60	55.30	52.26	42.07	38.53	69.13	59.75	47.06	37.34	20.83
Sep-16	63.93	68.45	69.61	62.87	52.45	51.60	48.99	39.43	36.18	64.07	55.39	43.86	34.95	19.28
Aug-16	58.37	62.42	63.97	57.80	47.95	47.60	45.45	36.57	33.64	58.60	50.68	40.39	32.36	17.60
Jul-16	53.00	56.61	58.53	52.90	43.61	43.74	42.04	33.80	31.18	53.32	46.12	37.04	29.86	15.98
Jun-16	51.81	55.32	57.32	51.82	42.65	42.88	41.28	33.19	30.63	52.15	45.12	36.30	29.31	15.62
May-16	51.20	54.66	56.70	51.26	42.16	42.44	40.89	32.88	30.35	51.55	44.60	35.92	29.03	15.44
Apr-16	52.32	55.87	57.84	52.29	43.06	43.25	41.60	33.45	30.87	52.65	45.55	36.62	29.55	15.78
Mar-16	51.62	55.11	57.13	51.65	42.50	42.74	41.16	33.09	30.55	51.97	44.95	36.18	29.22	15.56
Feb-16	50.92	54.36	56.42	51.01	41.93	42.24	40.71	32.73	30.23	51.28	44.36	35.74	28.90	15.35
Jan-16	53.20	56.82	58.73	53.09	43.77	43.88	42.16	33.91	31.27	53.52	46.29	37.17	29.96	16.04
Ave.	61.84	66.18	67.48	60.96	50.75	50.09	47.66	38.35	35.22	62.01	53.61	42.55	33.97	18.64
Dec-15	53.51	57.16	59.04	53.37	44.02	44.10	42.36	34.07	31.41	53.82	46.56	37.36	30.10	16.13
Nov-15	54.43	58.16	59.98	54.21	44.77	44.76	42.95	34.54	31.83	54.73	47.34	37.93	30.53	16.41
Oct-15	57.39	61.36	62.98	56.91	47.16	46.89	44.83	36.06	33.19	57.64	49.85	39.78	31.91	17.30
Sep-15	58.21	62.25	63.81	57.65	47.82	47.48	45.35	36.48	33.56	58.45	50.54	40.29	32.29	17.55
Aug-15	59.14	63.26	64.75	58.50	48.58	48.15	45.94	36.96	33.99	59.36	51.33	40.87	32.72	17.83
Jul-15	59.16	63.28	64.77	58.52	48.59	48.17	45.95	36.97	34.00	59.38	51.35	40.88	32.73	17.84
Jun-15	59.59	63.75	65.21	58.91	48.94	48.48	46.23	37.19	34.19	59.80	51.71	41.15	32.93	17.97
May-15	61.08	65.36	66.72	60.27	50.14	49.55	47.18	37.96	34.88	61.27	52.97	42.08	33.62	18.42
Apr-15	64.48	69.04	70.16	63.37	52.89	52.00	49.34	39.71	36.43	64.61	55.85	44.20	35.20	19.44
Mar-15	67.76	72.60	73.49	66.36	55.54	54.36	51.43	41.40	37.93	67.84	58.64	46.24	36.73	20.43
Feb-15	62.92	67.35	68.58	61.95	51.63	50.87	48.35	38.91	35.72	63.08	54.53	43.23	34.48	18.97
Jan-15	63.84	68.35	69.52	62.78	52.38	51.54	48.93	39.38	36.14	63.98	55.31	43.80	34.91	19.25
Ave.	60.13	64.33	65.75	59.40	49.37	48.86	46.57	37.47	34.44	60.33	52.16	41.48	33.18	18.13

BULAN	HBA 6322	Gunung Bayan I	Prima Coal	Pinang 6150	Indominco IM_East	Melawan Coal	Envirocoal	Jorong J-1	Ecocoal	Mark er 1	Mark er 2	Mark er 3	Mark er 4	Mark er 5
CV	6,322	7,000	6,700	6,200	5,700	5,400	5,000	4,400	4,200	6,500	5,800	4,900	4,200	3,300
TM	8.0	10.0	12.0	14.5	17.5	22.5	26.0	32.0	35.0	12.0	15.0	26.0	34.0	45.0
TS	0.80	1.00	0.60	0.60	1.63	0.40	0.10	0.25	0.18	1.20	1.10	0.80	0.50	0.40
Ash	15.0	15.0	5.0	5.5	4.8	5.0	1.2	4.2	3.9	8.0	9.0	5.0	5.0	5.0
Dec-14	64.65	69.23	70.34	63.52	53.03	52.12	49.45	39.80	36.51	64.78	56.00	44.30	35.28	19.49
Nov-14	65.70	70.36	71.40	64.48	53.88	52.87	50.12	40.34	36.99	65.81	56.89	44.96	35.77	19.81
Oct-14	67.26	72.05	72.98	65.90	55.14	54.00	51.11	41.14	37.70	67.35	58.21	45.93	36.50	20.28
Sep-14	69.69	74.69	75.45	68.12	57.11	55.74	52.65	42.39	38.82	69.74	60.27	47.45	37.63	21.01
Aug-14	70.29	75.34	76.05	68.66	57.59	56.18	53.03	42.70	39.09	70.33	60.78	47.82	37.91	21.19
Jul-14	72.45	77.68	78.24	70.63	59.34	57.73	54.41	43.81	40.08	72.45	62.61	49.17	38.91	21.84
Jun-14	73.64	78.96	79.45	71.72	60.30	58.59	55.17	44.42	40.62	73.62	63.62	49.91	39.46	22.20
May-14	73.60	78.92	79.41	71.68	60.27	58.56	55.14	44.40	40.61	73.58	63.59	49.88	39.45	22.19
Apr-14	74.81	80.23	80.64	72.78	61.24	59.43	55.91	45.02	41.16	74.77	64.61	50.64	40.01	22.56
Mar-14	77.01	82.62	82.87	74.79	63.02	61.01	57.31	46.16	42.17	76.94	66.48	52.01	41.03	23.22
Feb-14	80.44	86.33	86.34	77.91	65.80	63.48	59.49	47.92	43.74	80.31	69.38	54.15	42.63	24.25
Jan-14	81.90	87.91	87.82	79.24	66.98	64.53	60.42	48.67	44.41	81.74	70.62	55.06	43.31	24.69
Ave.	72.62	77.86	78.42	70.79	59.48	57.85	54.52	43.90	40.16	72.62	62.75	49.27	38.99	21.90
Dec-13	80.31	86.19	86.21	77.80	65.69	63.39	59.41	47.85	43.68	80.18	69.27	54.07	42.57	24.21
Nov-13	78.13	83.83	84.00	75.81	63.93	61.82	58.02	46.73	42.68	78.04	67.43	52.71	41.55	23.56
Oct-13	76.61	82.18	82.46	74.42	62.70	60.72	57.06	45.95	41.98	76.54	66.14	51.76	40.85	23.10
Sep-13	76.89	82.49	82.74	74.68	62.93	60.93	57.23	46.09	42.11	76.82	66.37	51.94	40.98	23.18
Aug-13	76.70	82.28	82.55	74.51	62.77	60.79	57.11	46.00	42.03	76.63	66.21	51.82	40.89	23.13
Jul-13	81.69	87.68	87.61	79.05	66.81	64.38	60.29	48.56	44.31	81.54	70.44	54.93	43.21	24.63
Jun-13	84.87	91.13	90.83	81.95	69.38	66.67	62.31	50.20	45.76	84.67	73.14	56.91	44.69	25.59
May-13	85.33	91.63	91.30	82.37	69.75	67.00	62.60	50.44	45.98	85.12	73.53	57.20	44.90	25.73
Apr-13	88.56	95.13	94.57	85.31	72.36	69.32	64.66	52.10	47.45	88.29	76.27	59.21	46.40	26.70
Mar-13	90.09	96.78	96.13	86.71	73.60	70.42	65.63	52.88	48.15	89.80	77.56	60.16	47.12	27.16
Feb-13	88.35	94.90	94.36	85.12	72.19	69.17	64.52	51.99	47.36	88.09	76.09	59.08	46.31	26.64
Jan-13	87.55	94.03	93.55	84.40	71.55	68.60	64.02	51.58	46.99	87.30	75.41	58.58	45.93	26.40
Ave.	82.92	89.02	88.86	80.18	67.81	65.27	61.07	49.20	44.87	82.75	71.49	55.70	43.78	25.00
Dec-12	81.75	87.75	87.67	79.11	66.86	64.42	60.33	48.59	44.34	81.60	70.49	54.97	43.24	24.65
Nov-12	81.44	87.41	87.36	78.83	66.61	64.20	60.13	48.43	44.19	81.29	70.23	54.77	43.09	24.56
Oct-12	86.04	92.40	92.02	83.02	70.32	67.51	63.05	50.80	46.30	85.82	74.13	57.64	45.23	25.94
Sep-12	86.21	92.58	92.19	83.17	70.46	67.63	63.16	50.89	46.38	85.98	74.27	57.75	45.31	25.99
Aug-12	84.65	90.89	90.61	81.75	69.20	66.51	62.17	50.09	45.66	84.45	72.95	56.77	44.59	25.52
Jul-12	87.56	94.04	93.56	84.40	71.55	68.60	64.02	51.58	47.00	87.31	75.42	58.59	45.94	26.40
Jun-12	96.65	103.89	102.78	92.69	78.90	75.14	69.80	56.26	51.16	96.25	83.12	64.25	50.17	29.14
May-12	102.12	109.81	108.32	97.67	83.33	79.08	73.28	59.07	53.66	101.63	87.76	67.66	52.71	30.79
Apr-12	105.61	113.59	111.86	100.85	86.15	81.59	75.50	60.87	55.26	105.06	90.72	69.84	54.34	31.84
Mar-12	112.87	121.46	119.22	107.47	92.02	86.81	80.12	64.60	58.58	112.20	96.87	74.37	57.71	34.03
Feb-12	111.58	120.06	117.91	106.30	90.97	85.89	79.30	63.94	57.99	110.93	95.78	73.56	57.11	33.64
Jan-12	109.29	117.58	115.59	104.21	89.12	84.24	77.84	62.76	56.94	108.68	93.84	72.13	56.05	32.95
Ave.	95.48	102.62	101.59	91.62	77.96	74.30	69.06	55.66	50.62	95.10	82.13	63.53	49.62	28.79

BULAN	HBA 6322	Gunung Bayan I	Prima Coal	Pinang 6150	Indominco IM_East	Melawan Coal	Envirocoal	Jorong J-1	Ecocoal	Mark er 1	Mark er 2	Mark er 3	Mark er 4	Mark er 5
CV	6,322	7,000	6,700	6,200	5,700	5,400	5,000	4,400	4,200	6,500	5,800	4,900	4,200	3,300
TM	8.0	10.0	12.0	14.5	17.5	22.5	26.0	32.0	35.0	12.0	15.0	26.0	34.0	45.0
TS	0.80	1.00	0.60	0.60	1.63	0.40	0.10	0.25	0.18	1.20	1.10	0.80	0.50	0.40
Ash	15.0	15.0	5.0	5.5	4.8	5.0	1.2	4.2	3.9	8.0	9.0	5.0	5.0	5.0
Dec-11	112.67	121.24	119.02	107.29	91.86	86.67	79.99	64.50	58.49	112.01	96.70	74.24	57.62	33.97
Nov-11	116.65	125.55	123.05	110.92	95.07	89.53	82.53	66.55	60.31	115.92	100.08	76.72	59.47	35.17
Oct-11	119.24	128.36	125.68	113.28	97.17	91.40	84.17	67.88	61.50	118.47	102.27	78.34	60.68	35.95
Sep-11	116.26	125.13	122.65	110.56	94.76	89.25	82.28	66.35	60.13	115.54	99.75	76.48	59.29	35.05
Aug-11	117.21	126.16	123.62	111.43	95.53	89.94	82.88	66.84	60.57	116.47	100.55	77.07	59.73	35.34
Jul-11	118.24	127.27	124.66	112.37	96.36	90.68	83.54	67.37	61.04	117.48	101.42	77.71	60.21	35.65
Jun-11	119.03	128.13	125.46	113.09	97.00	91.25	84.04	67.77	61.40	118.26	102.09	78.21	60.58	35.89
May-11	117.61	126.59	124.02	111.79	95.85	90.22	83.14	67.04	60.75	116.86	100.89	77.32	59.92	35.46
Apr-11	122.02	131.37	128.49	115.81	99.41	93.40	85.94	69.31	62.77	121.20	104.63	80.07	61.97	36.79
Mar-11	122.43	132.01	127.71	115.03	99.56	92.29	84.12	67.89	61.23	121.60	104.97	80.33	62.16	36.91
Feb-11	127.05	137.02	132.39	119.25	103.29	95.62	87.06	70.26	63.34	126.15	108.89	83.21	64.31	38.31
Jan-11	112.40	121,15	117,54	105,89	91,45	85,08	77,74	62,73	56,64	111,74	96,47	74,07	57,49	33,89
Ave.	118.40	128.08	125.16	112.80	96.90	90.93	83.12	67.04	60.68	117.64	101.56	77.81	60.29	35.70
Dec-10	103.41	111.41	108.43	97.70	84.18	78.61	72.02	58.10	52.52	102.90	88.85	68.47	53.31	31.18
Nov-10	95.51	102.85	100.42	90.50	77.79	72.92	67.00	54.04	48.90	95.13	82.16	63.54	49.64	28.80
Oct-10	92.68	99.79	97.55	87.92	75.50	70.89	65.20	52.58	47.61	92.35	79.76	61.78	48.32	27.94
Sep-10	90.05	96.94	94.88	85.52	73.38	68.99	63.53	51.23	46.41	89.76	77.53	60.14	47.10	27.15
Aug-10	94.86	102.15	99.76	89.91	77.27	72.46	66.59	53.70	48.61	94.49	81.61	63.14	49.34	28.60
Jul-10	96.65	104.09	101.58	91.54	78.71	73.74	67.72	54.62	49.43	96.25	83.12	64.25	50.17	29.14
Jun-10	97.22	104.71	102.16	92.06	79.18	74.16	68.09	54.92	50.82	96.81	83.61	64.61	50.43	29.31
May-10	92.07	99.13	96.93	87.36	75.01	70.45	64.81	52.27	48.41	91.75	79.24	61.40	48.04	27.76
Apr-10	86.58	93.18	91.37	82.36	70.57	66.50	61.32	49.44	45.83	86.35	74.59	57.98	45.48	26.10
Mar-10	86.64	93.25	91.43	82.41	70.62	66.54	61.36	49.47	45.86	86.41	74.64	58.01	45.51	26.12
Feb-10	87.81	94.61	92.70	83.56	71.63	67.44	62.15	50.12	46.45	87.56	75.63	58.74	46.06	26.48
Jan-10	77.39	83.22	82.05	73.98	63.14	59.88	55.47	44.71	41.51	77.31	66.80	52.25	41.21	23.33
Ave.	91.74	98.78	96.61	87.07	74.75	70.22	64.61	52.10	47.70	91.42	78.96	61.19	47.88	27.66
Dec-09	74.51	80.11	79.14	71.36	60.82	57.82	53.64	43.24	40.17	74.48	64.36	50.45	39.87	22.47
Nov-09	68.99	74.13	73.54	66.33	56.35	53.84	50.13	40.40	37.57	69.05	59.68	47.01	37.30	20.80
Oct-09	66.71	71.66	71.23	64.25	54.51	52.20	48.68	39.22	36.50	66.81	57.75	45.59	36.24	20.11
Sep-09	70.44	75.70	75.01	67.65	57.52	54.89	51.05	41.14	38.25	70.47	60.91	47.91	37.98	21.24
Aug-09	71.47	76.82	76.05	68.59	58.36	55.63	51.71	41.67	38.74	71.49	61.78	48.56	38.45	21.55
Jul-09	71.29	76.62	75.86	68.42	58.21	55.49	51.59	41.58	38.65	71.31	61.63	48.44	38.37	21.49
Jun-09	63.87	68.58	68.34	61.66	52.21	50.15	46.87	37.76	35.17	64.01	55.34	43.82	34.92	19.26
May-09	62.83	67.45	67.29	60.71	51.37	49.41	46.21	37.22	34.68	62.99	54.46	43.17	34.44	18.94
Apr-09	63.08	67.72	67.54	60.94	51.57	49.59	46.37	37.35	34.80	63.24	54.67	43.33	34.55	19.02
Mar-09	75.11	80.75	79.74	71.90	61.29	58.24	54.02	43.54	40.44	75.07	64.87	50.83	40.15	22.65
Feb-09	81.35	87.51	86.06	77.59	66.34	62.73	57.99	46.75	43.37	81.20	70.15	54.72	43.05	24.53
Jan-09	78.70	84.65	83.38	75.18	64.20	60.83	56.30	45.39	41.21	78.60	67.91	53.06	41.82	23.73
Ave.	70.70	75.98	75.27	67.88	57.73	55.07	51.21	41.27	38.30	70.73	61.12	48.07	38.09	21.32

## FORMULA HARGA PATOKAN BATUBARA STEAM (THERMAL)

1. Harga Batubara Acuan (dalam kesetaraan nilai kalor 6322 kkal/kg GAR)

$$\text{HBA} = 25\% \text{ ICI1} + 25\% \text{ Platts59} + 25\% \text{ NEX} + 25\% \text{ GC} \quad [\text{US\$/ton}]$$

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]

Konversi nilai kalor batubara dari kondisi ADB ke GAR:

$$K_{\text{GAR}} = K_{\text{ADB}} * (100 - \text{TM}) / (100 - \text{IM})$$

Di mana:

K GAR = Nilai kalor batubara kondisi GAR (*gross as received*)

K ADB = Nilai kalor batubara kondisi ADB (*as dried basis*)

TM = *Total moisture*

IM = *Inherent Moisture*

Untuk :

Kandungan Belerang Batubara dalam *as received* (ar)

Kandungan Abu Batubara dalam *as received* (ar)

2. Menghitung HPB marker No, 1 - 7

$$\text{HPB Marker}_{(i)} = (\text{HBA} * K_{(i)} * A_{(i)}) - (B_{(i)} + U_{(i)}) \quad [\text{US\$/ton}]$$

Di mana:

- HBP Marker<sub>(i)</sub> = HPB dari 7 batubara price marker [US\$/ton]
- K<sub>(i)</sub> = Nilai Kalor Batubara<sub>(i)</sub> / 6322 [fraksi]
- A<sub>(i)</sub> = (100 - Kandungan Air Batubara<sub>(i)</sub>) / (100 - 8) [fraksi]
- B<sub>(i)</sub> = (Kandungan Belerang Batubara<sub>(i)</sub> - 0,8) \* 4 [US\$/ton]
- U<sub>(i)</sub> = (Kandungan Abu Batubara<sub>(i)</sub> - 15) \* 0,4 [US\$/ton]
- (i) = price marker 1 - 7

3. Harga Patokan Batubara Marker No. 8

$$\text{HPB Marker}_{(i)} = (\text{HBA} * K_{(i)} * A_{(i)}) - (B_{(i)} + U_{(i)}) \quad [\text{US\$/ton}]$$

Di mana:

- HBP Marker<sub>(i)</sub> = HPB batubara price marker 8 [US\$/ton]
- K<sub>(i)</sub> = Nilai Kalor Batubara<sub>(i)</sub> / 6322 [fraksi]
- A<sub>(i)</sub> = (100 - Kandungan Air Batubara<sub>(i)</sub>) / (100 - 8/FKA<sub>(i)</sub>) [fraksi]
- FKA<sub>(i)</sub> = (((100-8)/(100 - Kandungan Air Batubara<sub>(i)</sub>))\*  
Kandungan Air Batubara<sub>(i)</sub>)+(100 - 8)/100 [persen]
- B<sub>(i)</sub> = (Kandungan Belerang Batubara<sub>(i)</sub> - 0,8) \* 4 [US\$/ton]
- U<sub>(i)</sub> = (Kandungan Abu Batubara<sub>(i)</sub> - 15) \* 0,4 [US\$/ton]
- (i) = price marker 8

4. Harga Patokan Batubara Lain No. 9 - 66

$$\text{HPB}_{(i)} = \{(\text{HPB Price Marker}_{(i)} + (B_{(i)} + U_{(i)})) * (K_{(i)} / K_{(i)}) * [(100 - \text{Kandungan Air}_{(i)}) / (100 - \text{Kandungan Air}_{(i)})] * [(100 - 8) / (100 - 8)]\} - (B_{(i)} + U_{(i)}) \quad [\text{US\$/ton}]$$

Di mana:

- $HPB_{(i)}$  = HPB batubara selain batubara Price Marker [US\$/ton]
- $B_{(i)}$  = (Kandungan Belerang Batubara (i) - 0,8) \* 4 [US\$/ton]
- $U_{(i)}$  = (Kandungan Abu Batubara (i) - 15) \* 0,4 [US\$/ton]
- $B_{(j)}$  = (Kandungan Belerang Batubara (j) - 0,8) \* 4 [US\$/ton]
- $U_{(j)}$  = (Kandungan Abu Batubara (j) - 15) \* 0,4 [US\$/ton]
- $K_{(j)} / K_{(i)}$  = Nilai Kalor Batubara (j) / Nilai Kalor Batubara (i) [fraksi]
- (i) = price marker 1 - 7
- (j) = batubara lain 9 - 66

5. Harga Patokan Batubara Lain No. 67 - 75 (Batubara Kalori Rendah)

- Bila TM < 40%

$$HPB_{(i)} = \left\{ (HPB \text{ Price Marker}_{(i)} + (B_{(i)} + U_{(i)})) * (K_{(j)} / K_{(i)}) * \left[ \frac{(100 - \text{Kandungan Air}_{(i)})}{(100 - \text{Kandungan Air}_{(j)})} * \left[ \frac{(100 - 8/FKA_{(j)})}{(100 - 8/FKA_{(i)})} - (B_{(i)} + U_{(i)}) \right] \right] \right\} \quad [US\$/ton]$$

Di mana:

- $HPB_{(i)}$  = HPB batubara selain batubara Price Marker [US\$/ton]
- $HPB \text{ Marker}_{(i)}$  = HPB batubara price marker (i) [US\$/ton]
- $B_{(i)}$  = (Kandungan Belerang Batubara (i) - 0,8) \* 4 [US\$/ton]
- $U_{(i)}$  = (Kandungan Abu Batubara (i) - 15) \* 0,4 [US\$/ton]
- $B_{(j)}$  = (Kandungan Belerang Batubara (j) - 0,8) \* 4 [US\$/ton]
- $U_{(j)}$  = (Kandungan Abu Batubara (j) - 15) \* 0,4 [US\$/ton]
- $FKA_{(j)}$  =  $\left\{ \left( \frac{(100 - \text{Kandungan Air Batubara}_{(j)})}{(100 - \text{Kandungan Air Batubara}_{(i)})} * \text{Kandungan Air Batubara}_{(j)} \right) + \left( \frac{(100 - \text{Kandungan Air Batubara}_{(i)})}{100} \right) \right\}$  [persen]
- $K_{(j)} / K_{(i)}$  = Nilai Kalor Batubara (j) / Nilai Kalor Batubara (i) [fraksi]
- (i) = price marker 8
- (j) = batubara lain 67 - 69

- Bila TM ≥ 40%

$$HPB_{(i)} = \left\{ (HPB \text{ Price Marker}_{(i)} + (B_{(i)} + U_{(i)})) * (K_{(j)} / K_{(i)}) * \left[ \frac{(100 - \text{Kandungan Air}_{(i)})}{(100 - \text{Kandungan Air}_{(j)})} * \left[ \frac{(100 - 8/FKA_{(j)})}{(100 - 8/FKA_{(i)})} \right] \right] \right\} \quad [US\$/ton]$$

Di mana:

- $HPB_{(i)}$  = HPB batubara selain batubara Price Marker [US\$/ton]
- $HPB \text{ Marker}_{(i)}$  = HPB batubara price marker (i) [US\$/ton]
- $FKA_{(j)}$  =  $\left\{ \left( \frac{(100 - \text{Kandungan Air Batubara}_{(j)})}{(100 - \text{Kandungan Air Batubara}_{(i)})} * \text{Kandungan Air Batubara}_{(j)} \right) + \left( \frac{(100 - \text{Kandungan Air Batubara}_{(i)})}{100} \right) \right\}$  [persen]
- $K_{(j)} / K_{(i)}$  = Nilai Kalor Batubara (j) / Nilai Kalor Batubara (i) [fraksi]
- (i) = price marker 8
- (j) = batubara lain 70 - 75