

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

**BULAN NOVEMBER 2015**

**HBA**

HBA (US\$/Ton)	<b>54,43</b>	FOB Vessel
Kualitas: CV = 6322 kcal/kg GAR; TM = 8 %; TS = 0,8 % ar; Ash = 15% ar		

**HPB BATUBARA MARKER**

NO	MEREK DAGANG/ BRAND	KUALITAS TYPICAL				HPB MARKER (US\$/ton)
		CV (kcal/kg GAR)	TM (%)	TS (%, ar)	Ash (%, ar)	
1	Gunung Bayan I	7.000	10,00	1,00	15,00	58,16
2	Prima Coal	6.700	12,00	0,60	5,00	59,98
3	Pinang 6150	6.200	14,50	0,60	5,50	54,21
4	Indominco IM_East	5.700	17,50	1,63	4,80	44,77
5	Melawan Coal	5.400	22,50	0,40	5,00	44,76
6	Envirocoal	5.000	26,00	0,10	1,20	42,95
7	Jorong J-1	4.400	32,00	0,25	4,15	34,54
8	Ecocoal	4.200	35,00	0,18	3,90	31,83

**CONTOH HARGA PATOKAN BATUBARA LAINNYA YANG TERDAFTAR DI DITJEN MINERBA**

No	MEREK DAGANG/ BRAND	KUALITAS TYPICAL				HPB (US\$/ton)
		CV (kcal/kg, GAR)	TM (%, ar)	TS (%, ar)	Ash (%, ar)	
9	Gunung Bayan II	7.000	12,00	2,00	10,00	54,85
10	Marunda Thermal Coal	6.600	11,00	0,50	10,00	58,17
11	Trubaindo HCV_HS	6.553	12,00	1,69	4,21	54,72
12	Medco Bara 6500	6.500	10,00	3,28	9,38	47,07
13	Trubaindo HCV_LS	6.423	11,50	0,71	4,76	57,65
14	AGM Waruba Coal	5.313	23,00	0,24	4,00	44,92
15	Pinang 6000 NAR	6.300	14,00	0,60	5,50	55,30
16	Arutmin Satui 10	6.300	11,00	1,00	10,00	53,67
17	Arutmin Senakin	6.250	11,00	1,00	12,00	52,46
18	Arutmin A6250	6.250	10,00	1,20	12,00	52,24
19	Mandiri 1	5.200	25,00	0,60	7,00	40,50
20	Wahana Coal	6.200	12,00	0,90	10,00	52,66
21	Medco Bara 6200	6.200	10,00	4,00	12,00	40,62
22	Indominco IM_West / 6500	6.171	15,50	0,76	5,22	52,87
23	TAJ Coal	6.200	10,00	1,00	14,00	51,82
24	Mandiri 2	5.100	26,00	0,60	7,00	39,32
25	Trubaindo MCV_LS	6.143	14,00	0,76	5,20	53,52
26	SKB Coal	6.130	9,00	2,20	17,00	45,80
27	Baramarta Coal	6.112	9,50	0,95	13,00	51,96
28	Arutmin A6100	6.100	11,50	1,00	12,50	50,72
29	Insani Coal	6.050	19,00	0,15	3,20	53,20
30	BCS Coal	5.915	15,10	0,56	9,40	50,20
31	Indominco IM_West / 6350	6.029	15,50	0,71	5,22	51,95
32	Bangun Coal	6.072	10,02	2,20	14,91	45,57
33	Pinang 6000	6.000	16,00	0,60	5,00	51,97
34	Indominco IMM_MCVHS	5.970	15,50	1,65	5,05	47,79
35	Multi Coal Low	5.950	16,00	1,00	7,00	49,17
36	Multi Coal Middle	5.900	16,00	2,00	7,00	44,78
37	Pinang 5900	5.900	19,00	0,90	4,50	48,52
38	Arutmin A5900	5.900	12,00	0,90	13,00	48,99

No	MEREK DAGANG/ BRAND	Kualitas Tipikal				HPB (US\$/ton)
		CV (kcal/kg GAR)	TM (%, ar)	TS (%, ar)	Ash (%, ar)	
39	Multi Coal High	5.765	16,00	3,20	7,00	38,92
40	KCM Coal	5.730	10,50	0,90	20,50	45,39
41	TSA Coal	5.700	18,00	2,00	8,00	41,74
42	Tanito Coal	5.700	17,50	1,00	8,50	45,81
43	Mahakam Coal	5.700	17,50	1,00	8,50	45,81
44	Ebony High Sulphur	5.700	18,00	1,75	4,70	44,06
45	Pinang 5700	5.700	19,00	0,50	5,00	48,41
46	IBP 5500	5.500	20,00	1,00	7,00	43,58
47	Arutmin A5700	5.700	11,00	0,80	14,00	47,87
48	BSS Coal	5.520	10,00	0,45	15,50	47,69
49	Lanna Harita Coal	5.500	22,00	1,00	6,00	42,95
50	Pinang 5500	5.500	21,00	0,40	5,50	46,06
51	Mahoni Medium Sulphur	5.500	20,00	1,30	4,70	43,30
52	Mahoni	5.500	20,00	0,80	4,70	45,30
53	Mahakam Coal B	5.400	23,00	1,50	8,00	38,91
54	Mahoni B	5.300	22,50	0,80	4,60	42,60
55	Kideco Coal	5.125	24,50	0,10	2,00	44,21
56	Agathis	5.100	25,00	0,82	4,50	39,92
57	Lanna Harita Coal	5.000	27,00	1,20	6,00	36,16
58	IBP 5000	5.000	25,00	1,00	7,00	37,49
59	Sungkai Medium Sulphur	5.000	26,00	1,30	4,50	36,83
60	Sungkai	5.000	26,00	0,90	4,50	38,43
61	Sungkai High Sulphur	5.000	26,00	1,70	4,50	35,23
62	Arutmin A5000	5.000	22,40	0,54	8,90	39,79
63	AGM Warute Coal	4.350	33,00	0,40	4,00	33,27
64	IBP 4600	4.600	28,00	0,50	7,00	35,39
65	Bas Gumay Coal	4.400	35,00	0,50	4,96	31,98
66	IBP 4400	4.400	30,00	0,50	7,00	33,22
67	IBP 4200	4.200	32,00	0,50	6,00	30,93
68	PIC Coal	4.200	33,00	1,75	6,00	25,53
69	BIB 4000	4.000	38,00	0,50	6,00	27,37
70	Borneo BIB	3.800	41,00	0,40	5,00	20,35
71	AGM Warutas Coal	3.800	40,00	0,15	5,23	20,71
72	PKN 3500	3.520	43,40	0,15	3,40	18,04
73	BMPclenco33	3.300	48,00	0,70	7,00	15,47
74	LIM 3010	3.010	47,50	0,60	5,30	14,26
75	LIM 3000	2.995	50,10	0,60	5,30	13,45

## FORMULA HARGA PATOKAN BATUBARA STEAM (THERMAL)

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

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

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

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

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

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

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

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

Di mana:

- HPB<sub>(j)</sub> = 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%

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

Di mana:

- $HPB_{(j)}$  = 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]
- $FKA_{(j)}$  =  $\left( \frac{(100 - \text{Kandungan Air Batubara}_{(j)}) * \text{Kandungan Air Batubara}_{(j)}}{(100 - \text{Kandungan Air Batubara}_{(j)}) + (100 - \text{Kandungan Air Batubara}_{(i)})} \right) / 100$  [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%

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

Di mana:

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

Ketentuan:

1. Harga Batubara Acuan dan Harga Patokan Batubara diatas merupakan harga batubara untuk penjualan *spot* dalam periode 1 November 2015 sampai dengan 30 November 2015;
2. Dalam hal penjualan batubara dilakukan secara jangka tertentu (*term*), harga batubara mengacu pada rata-rata 3 (tiga) Harga Patokan Batubara terakhir pada bulan dimana dilakukan kesepakatan harga batubara, dengan faktor pengali 50% untuk Harga Patokan Batubara bulan terakhir, 30% untuk Harga Patokan Batubara satu bulan sebelumnya dan 20% untuk Harga Patokan Batubara dua bulan sebelumnya.

## REKAPITULASI INFORMASI HARGA BATUBARA

BULAN	HBA 6322 (USD/ton)	HPB MARKER (kcal/kg Gar)							
		Gunung Bayan I 7000	Prima Coal 6700	Pinang Coal 6150	Indominco IM East 5700	Melawan Coal 5400	Envirocoal 5000	Jorong J-1 4400	Ecocoal 4200
<b>2015</b>									
Nov 2015	54.43	58.16	59.98	54.21	44.77	44.76	42.95	34.54	31.83
Okt 2015	57.39	61.36	62.98	56.91	47.16	46.89	44.83	36.06	33.19
Sept 2015	58.21	62.25	63.81	57.65	47.82	47.48	45.35	36.48	33.56
Ags 2015	59.14	63.26	64.75	58.50	48.58	48.15	45.94	36.96	33.99
Juli 2015	59.16	63.28	64.77	58.52	48.59	48.17	45.95	36.97	34.00
Jun 2015	59.59	63.75	65.21	58.91	48.94	48.48	46.23	37.19	34.19
Mei 2015	61.08	65.36	66.72	60.27	50.14	49.55	47.18	37.96	34.88
Apr 2015	64.48	69.04	70.16	63.37	52.89	52.00	49.34	39.71	36.43
Mar 2015	67.76	72.60	73.49	66.36	55.54	54.36	51.43	41.40	37.93
Feb 2015	62.92	67.35	68.58	61.95	51.63	50.87	48.35	38.91	35.72
Jan 2015	63.84	68.35	69.52	62.78	52.38	51.54	48.93	39.38	36.14
Rata2	60.73	64.98	66.36	59.95	49.86	49.30	46.95	37.78	34.71
<b>2014</b>									
Des 2014	64.65	69.23	70.34	63.52	53.03	52.12	49.45	39.80	36.51
Nov 2014	65.70	70.36	71.40	64.48	53.88	52.87	50.12	40.34	36.99
Okt 2014	67.26	72.05	72.98	65.90	55.14	54.00	51.11	41.14	37.70
Sept 2014	69.69	74.69	75.45	68.12	57.11	55.74	52.65	42.39	38.82
Ags 2014	70.29	75.34	76.05	68.66	57.59	56.18	53.03	42.70	39.09
Juli 2014	72.45	77.68	78.24	70.63	59.34	57.73	54.41	43.81	40.08
Juni 2014	73.64	78.96	79.45	71.72	60.30	58.59	55.17	44.42	40.62
Mei 2014	73.60	78.92	79.41	71.68	60.27	58.56	55.14	44.40	40.61
Apr 2014	74.81	80.23	80.64	72.78	61.24	59.43	55.91	45.02	41.16
Mar 2014	77.01	82.62	82.87	74.79	63.02	61.01	57.31	46.16	42.17
Feb 2014	80.44	86.33	86.34	77.91	65.80	63.48	59.49	47.92	43.74
Jan 2014	81.90	87.91	87.82	79.24	66.98	64.53	60.42	48.67	44.41
Rata2	72.62	77.86	78.42	70.79	59.47	57.85	54.52	43.90	40.16
<b>2013</b>									
Des 2013	80.31	86.19	86.21	77.80	65.69	63.39	59.41	47.85	43.68
Nov 2013	78.13	83.83	84.00	75.81	63.93	61.82	58.02	46.73	42.68
Okt 2013	76.61	82.18	82.46	74.42	62.70	60.72	57.06	45.95	41.98
Sep 2013	76.89	82.49	82.74	74.68	62.93	60.93	57.23	46.09	42.11
Ags 2013	76.70	82.28	82.55	74.51	62.77	60.79	57.11	46.00	42.03
Juli 2013	81.69	87.68	87.61	79.05	66.81	64.38	60.29	48.56	44.31
Juni 2013	84.87	91.13	90.83	81.95	69.38	66.67	62.31	50.20	45.76
Mei 2013	85.33	91.63	91.30	82.37	69.75	67.00	62.60	50.44	45.98
Apr 2013	88.56	95.13	94.57	85.31	72.36	69.32	64.66	52.10	47.45
Mar 2013	90.09	96.78	96.13	86.71	73.60	70.42	65.63	52.88	48.15
Feb 2013	88.35	94.90	94.36	85.12	72.19	69.17	64.52	51.99	47.36
Jan 2013	87.55	94.03	93.55	84.40	71.55	68.60	64.02	51.58	46.99
Rata2	82.92	89.02	88.86	80.18	67.80	65.27	61.07	49.20	44.87
<b>2012</b>									
Des 2012	81.75	87.75	87.67	79.11	66.86	64.42	60.33	48.59	44.34
Nov 2012	81.44	87.41	87.36	78.83	66.61	64.20	60.13	48.43	44.19
Okt 2012	86.04	92.40	92.02	83.02	70.32	67.51	63.05	50.80	46.30
Sep 2012	86.21	92.58	92.19	83.17	70.46	67.63	63.16	50.89	46.38
Ags 2012	84.65	90.89	90.61	81.75	69.20	66.51	62.17	50.09	45.66
Juli 2012	87.56	94.04	93.56	84.40	71.55	68.60	64.02	51.58	47.00
Juni 2012	96.65	103.89	102.78	92.69	78.90	75.14	69.80	56.26	51.16
Mei 2012	102.12	109.81	108.32	97.67	83.33	79.08	73.28	59.07	53.66
Apr 2012	105.61	113.59	111.86	100.85	86.15	81.59	75.50	60.87	55.26
Mar 2012	112.87	121.46	119.22	107.47	92.02	86.81	80.12	64.60	58.58
Feb 2012	111.58	120.06	117.91	106.30	90.97	85.89	79.30	63.94	57.99
Jan 2012	109.29	117.58	115.59	104.21	89.12	84.24	77.84	62.76	56.94
Rata2	95.48	102.62	101.59	91.62	77.96	74.30	69.06	55.66	50.62
<b>2011</b>									
Des 2011	112.67	121.24	119.02	107.29	91.86	86.67	79.99	64.50	58.49
Nov 2011	116.65	125.55	123.05	110.92	95.07	89.53	82.53	66.55	60.31
Okt 2011	119.24	128.36	125.68	113.28	97.17	91.40	84.17	67.88	61.50
Sept 2011	116.26	125.13	122.65	110.56	94.76	89.25	82.28	66.35	60.13
Ags 2011	117.21	126.16	123.62	111.43	95.53	89.94	82.88	66.84	60.57
Juli 2011	118.24	127.27	124.66	112.37	96.36	90.68	83.54	67.37	61.04
Juni 2011	119.03	128.13	125.46	113.09	97.00	91.25	84.04	67.77	61.40
Mei 2011	117.61	126.59	124.02	111.79	95.85	90.22	83.14	67.04	60.75
Apr 2011	122.02	131.37	128.49	115.81	99.41	93.40	85.94	69.31	62.77
Mar 2011	122.43	132.01	127.71	115.03	99.56	92.29	84.12	67.89	61.23
Feb 2011	127.05	137.02	132.39	119.25	103.29	95.62	87.06	70.26	63.34
Jan 2011	112.40	121.15	117.54	105.89	91.45	85.08	77.74	62.73	56.64
Rata2	118.40	128.08	125.16	112.80	96.89	90.93	83.12	67.04	60.68

## REKAPITULASI INFORMASI HARGA BATUBARA

2010									
Des 2010	103.41	111.41	108.43	97.70	84.18	78.61	72.02	58.10	52.52
Nov 2010	95.51	102.85	100.42	90.50	77.79	72.92	67.00	54.04	48.90
Okt 2010	92.68	99.79	97.55	87.92	75.50	70.89	65.20	52.58	47.61
Sept 2010	90.05	96.94	94.88	85.52	73.38	68.99	63.53	51.23	46.41
Ags 2010	94.86	102.15	99.76	89.91	77.27	72.46	66.59	53.70	48.61
Juli 2010	96.65	104.09	101.58	91.54	78.71	73.74	67.72	54.62	49.43
Juni 2010	97.22	104.71	102.16	92.06	79.18	74.16	68.09	54.92	50.82
Mei 2010	92.07	99.13	96.93	87.36	75.01	70.45	64.81	52.27	48.41
Apr 2010	86.58	93.18	91.37	82.36	70.57	66.50	61.32	49.44	45.83
Mar 2010	86.64	93.25	91.43	82.41	70.62	66.54	61.36	49.47	45.86
Feb 2010	87.81	94.61	92.70	83.56	71.63	67.44	62.15	50.12	46.45
Jan 2010	77.39	83.22	82.05	73.98	63.14	59.88	55.47	44.71	41.51
Rata2	91.74	98.78	96.61	87.07	74.75	70.21	64.60	52.10	47.70
2009									
Des 2009	74.51	80.11	79.14	71.36	60.82	57.82	53.64	43.24	40.17
Nov 2009	68.99	74.13	73.54	66.33	56.35	53.84	50.13	40.40	37.57
Okt 2009	66.71	71.66	71.23	64.25	54.51	52.20	48.68	39.22	36.50
Sept 2009	70.44	75.70	75.01	67.65	57.52	54.89	51.05	41.14	38.25
Ags 2009	71.47	76.82	76.05	68.59	58.36	55.63	51.71	41.67	38.74
Juli 2009	71.29	76.62	75.86	68.42	58.21	55.49	51.59	41.58	38.65
Juni 2009	63.87	68.58	68.34	61.66	52.21	50.15	46.87	37.76	35.17
Mei 2009	62.83	67.45	67.29	60.71	51.37	49.41	46.21	37.22	34.68
Apr 2009	63.08	67.72	67.54	60.94	51.57	49.59	46.37	37.35	34.80
Mar 2009	75.11	80.75	79.74	71.90	61.29	58.24	54.02	43.54	40.44
Feb 2009	81.35	87.51	86.06	77.59	66.34	62.73	57.99	46.75	43.37
Jan 2009	78.70	84.65	83.38	75.18	64.20	60.83	56.30	45.39	41.21
Rata2	70.70	75.97	75.26	67.88	57.73	55.07	51.21	41.27	38.30