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**DIRECTORATE GENERAL OF  
MINERALS, COAL & GEOTHERMAL REGULATION  
REGARDING THE FORMULAE FOR COAL  
BENCHMARK PRICE DETERMINATION**

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**SUMMARY AND ANALYSIS  
OF  
KEY ARTICLES**

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## INTRODUCTORY NOTES

This Summary & Analysis is intended as an overview only of the Directorate General of Minerals, Coal & Geothermal (“DGoMCG”) Regulation re **Formulae for Determining the Coal Benchmark Price**, dated 20 March 2011, and issued pursuant to the Minister of Energy & Mineral Resources Regulation re Procedures for Minerals and Coal Benchmark Price Determination (“**Coal Benchmark Price Formulae Regulation**”).

This Summary & Analysis reflects our current understanding only of the Coal Benchmark Price Formulae Regulation and is subject to change as that understanding develops and evolves.

This Summary & Analysis should be read in conjunction with our earlier (i) Summary and Analysis, dated 9 January 2009, of the New Mining Law, (ii) Summary and Analysis, dated 30 November 2009, of the Implementing Regulation on Mining Services, (iii) Summary and Analysis, dated 25 January 2010, of the Regulation on Prioritization of Coal and Mineral Supply for Domestic Interest, (iv) Summary and Analysis, dated 19 February 2010, of the Implementing Regulation on Coal Mining Enterprise Activities, (v) Summary and Analysis, dated 13 September 2010, of the Implementing Regulation on Mining Direction & Supervision, (vi) Summary and Analysis, dated 5 October 2010, of the Implementing Regulation on Benchmark Price Determination and (vii) Summary and Analysis, dated 14 January 2011, of the Implementing Regulation on Reclamation & Post Mining Activities. **Copies of these earlier Summaries & Analyses are available upon request.**

The use of implementing regulations and decrees to augment a law is a very common practice in Indonesia. Laws are passed by the Indonesian Parliament with the intention they will set out the broad parameters only of a new regulatory regime while the details of the new regulatory regime will be provided in one or more implementing regulations and other instruments issued by the Ministry and or officials of the Ministry with primary responsibility for overseeing the application of the new regulatory regime. The use of the Coal Benchmark Price Formulae Regulation to expand on Articles 11(4), 19(3) and 21(4) of the Benchmark Price Regulation is, therefore, entirely consistent with long established Indonesian legislative practice and procedure.

Many of the points made in this Summary & Analysis are necessarily speculative in nature and subject to further clarification and confirmation. Accordingly, it would be prudent not to rely solely on this Summary & Analysis but, rather, to seek specific legal advice with respect to any issue concerning the Coal Benchmark Price Formulae Regulation before making a material business decision regarding the same. **CHRISTIAN TEO PURWONO & Partners** would be pleased to assist you in this regard. Our contact details are set out below.

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## EXECUTIVE SUMMARY

1. DGoMCG determines, each month, the Coal Benchmark Price for (i) steam (thermal) coal and (ii) coking (metallurgical) coal) based upon the applicable formula that refers to the average coal index price as determined in accordance with the international price mechanism and/or at a price that is generally applicable in the international market.
2. The Coal Benchmark Price must be used by holders of Operation Production IUPs, Operation Production IUPKs and PKP2B/CCoWs as a reference in determining the selling price of coal.
3. There are 2 types of Coal Index Prices as follows:
  - (a) Steaming (Thermal) Coal Index Price; and
  - (b) Coking (Metallurgical) Coal Index Price.
4. The formula for determining the Steaming (Thermal) Coal Index Price also applies as the formula for determining the Steam (Thermal) Coal Benchmark Price for Primary Coal and Other Coal.
5. In the case of term sales, the Coal Benchmark Price is determined based on the average Coal Benchmark Price for the 3 months prior to the date of the contract between the buyer and the seller.
6. **The details of each of the formulae for determining the different Coal Index Prices are set out in Appendices I to III of this Summary & Analysis.**

## SUMMARY & ANALYSIS

Legal Basis	Remarks
Articles 2 - 3	<ol style="list-style-type: none"> <li>1. DGoMCG, on behalf of MoEMR, determines the benchmark prices for steam (thermal) coal and coking (metallurgical) coal, every month, based on formulae which apply the average Coal Index Price in accordance with an international market mechanism (“<b>Coal Benchmark Price</b>”).</li> <li>2. The Coal Benchmark Price must be used by the holders of Operation Production IUPs, Special Operation Production IUPs and Coal Contracts of Work (“<b>PKP2B/CCoWs</b>”) as a reference in determining the coal selling price.</li> <li>3. The Coal Index Prices consist of the following:               <ol style="list-style-type: none"> <li>(a) Steam (Thermal) Coal Index Price, issued by:                   <ol style="list-style-type: none"> <li>(i) Indonesian Coal Index/Argus Coalindo;</li> <li>(ii) Newcastle Export Index;</li> <li>(iii) Platts; and</li> <li>(iv) Global Coal Newcastle Index.; and</li> </ol> </li> <li>(b) Coking (Metallurgical) Coal Index Price, issued by:                   <ol style="list-style-type: none"> <li>(i) Platts; and</li> <li>(ii) Energy Publishing.</li> </ol> </li> </ol> </li> <li>4. The formula for determining the Steam (Thermal) Coal Benchmark Price, as mentioned in 1. above, is also the formula for calculating the Steam (Thermal) Coal Benchmark Price for Primary Coal and Other Coal.</li> <li>5. The Primary Coal Benchmark Price is determined based on a formula which reflects:               <ol style="list-style-type: none"> <li>(a) Steam (Thermal) Coal Benchmark Price (Harga Batubara Acuan or HBA);</li> <li>(b) calorific value;</li> <li>(c) moisture content;</li> <li>(d) sulfur content; and</li> <li>(e) ash content.</li> </ol> </li> <li>6. The Other Coal Benchmark Price is determined based on a formula which reflects:               <ol style="list-style-type: none"> <li>(a) price marker;</li> <li>(b) calorific value;</li> <li>(c) moisture content;</li> </ol> </li> </ol>

Legal Basis	Remarks
	<p>(d) sulfur content; and (e) ash content</p> <p>7. Primary Coal consists of coal produced by:</p> <p>(a) Gunung Bayan I (Kalori 7,000 kkal/kg GAR); (b) Prima Coal (Kalori 6,700 kkal/kg GAR); (c) Pinang 6150 (Kalori 6,200 kkal/kg GAR); (d) Indominco IM_East (Kalori 5,700 kkal/kg GAR); (e) Melawan Coal (Kalori 5,400 kkal/kg GAR); (f) Envirocoal (Kalori 5,000 kkal/kg GAR); (g) Jorong J-1 (Kalori 4,400 kkal/kg GAR); and (h) Ecocoal (Kalori 4,200 kkal/kg GAR).</p> <p>8. Other Coal consists of coal produced by:</p> <p>(a) Gunung Bayan II; (b) Marunda Thermal / Steaming Coal; (c) Trubaindo HCV_HS; (d) Trubaindo HCV_LS; (e) Tanjung Formation Coal; (f) Pinang 6000 NAR; (g) Arutmin Satui 10; (h) Arutmin Senakin; (i) Arutmin A6250; (j) Mandiri A; (k) Wahana Coal; (l) Indominco IM_West / 6500; (m) TAJ Coal; (n) Mandiri B; (o) Trubaindo MCV_LS; (p) SKB Coal; (q) Baramarta Coal; (r) Arutmin A6100; (s) Insani Coal; (t) BCS Coal; (u) Indominco IM_West / 6350; (v) Pinang 6000; (w) Indominco IMM_MCVHS; (x) Multi Coal Low; (y) Bangun Coal; (z) Multi Coal Middle; (aa) Pinang 5900; (bb) Arutmin A5900; (cc) Multi Coal High; (dd) KCM Coal; (ee) TSA Coal; (ff) Tanito Coal; (gg) Mahakam Coal; (hh) Pinang 5700;</p>

Legal Basis	Remarks
	<ul style="list-style-type: none"> <li>(ii) Arutmin A5700;</li> <li>(jj) BSS Coal;</li> <li>(kk) Lanna Harita Coal;</li> <li>(ll) Pinang 5500;</li> <li>(mm) Berau Mah;</li> <li>(nn) Berau MahB;</li> <li>(oo) Kideco Coal;</li> <li>(pp) Berau Agathis;</li> <li>(qq) Lanna Harita Coal;</li> <li>(rr) Berau Sungkai;</li> <li>(ss) Arutmin A5000;</li> <li>(tt) Warukin Formation Coal;</li> <li>(uu) Bas Gumay Coal;</li> <li>(vv) PIC Coal;</li> <li>(ww) BIB Coal;</li> <li>(xx) Intitirta coal;</li> <li>(yy) PKN 3500; and</li> <li>(zz) LIM 3000.</li> </ul>
Articles 4 - 6	<ol style="list-style-type: none"> <li>1. The Coking (Metallurgical) Coal Benchmark Price consists of: <ul style="list-style-type: none"> <li>(a) Hard Coking Coal Benchmark Price;</li> <li>(b) Semi-Soft Coking Coal Benchmark Price; and</li> <li>(c) Pulverized Injection Coal Benchmark Price.</li> </ul> </li> <li>2. In the case of term sales, the coal selling price is determined by reference to the average Coal Benchmark Price for 3 months prior to the date of the contract between the buyer and seller.</li> <li>3. The formulae for determining the Steam (Thermal) Coal Benchmark Price and the Coking (Metallurgical) Coal Benchmark Price may be reviewed from time to time as necessary.</li> </ol>

**APPENDIX I  
FORMULA FOR STEAMING COAL BENCHMARK PRICE**

**1. Coal Benchmark Price Reference (based on calorific value of 6322 kkal/kg GAR)**

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

Notes:

(a)	HBA	= Coal Benchmark Price	[USD/ton]
(b)	ICI	= Indonesia Coal Index	[USD/ton]
(c)	Platts	= Platts Benchmark Price	[USD/ton]
(d)	NEX	= Newcastle Export Index	[USD/ton]
(e)	GC	= Newcastle Global Coal Index	[USD/ton]

Conversion of coal calorific value from ADB condition to GAR:

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

$K_{\text{GAR}}$  = Coal calorific value in GAR condition (gross as received)

$K_{\text{ADB}}$  = Coal calorific value in ADB condition (as dried basis)

TM = Total moisture

M = Moisture

**2. Coal Benchmark Price Marker No. 1 – 7**

$$\text{HPB Marker}_{(i)} = (\text{HBA} * K_{(i)} * A_{(i)}) - (\text{B}_{(i)} + \text{U}_{(i)}) \quad [\text{USD/ton}]$$

(a)	HPB Marker <sub>(i)</sub>	= HPB of 7 coal Price Marker	[USD/ton]
(b)	$K_{(i)}$	= Coal Calorific Value <sub>(i)</sub> / 6322	[fraction]
(c)	$A_{(i)}$	= (100 – Moisture Content <sub>(i)</sub> ) / (100 – 8)	[fraction]
(d)	$B_{(i)}$	= (Sulphur Content <sub>(i)</sub> – 0.8) * 4	[USD/ton]
(e)	$U_{(i)}$	= (Ash Content <sub>(i)</sub> – 15) * 0.4	[USD/ton]
(f)	(i)	= Price Marker 1 – 7	

**3. Coal Benchmark Price Marker No. 8**

$$\text{HPB Marker}_{(i)} = (\text{HBA} * K_{(i)} * A_{(i)}) - (\text{B}_{(i)} + \text{U}_{(i)}) \quad [\text{USD/ton}]$$

(a)	HBP Marker <sub>(i)</sub>	= HPB coal Price Marker 8	[USD/ton]
(b)	$K_{(i)}$	= Coal Calorific Value <sub>(i)</sub> / 6322	[fraction]
(c)	$A_{(i)}$	= (100 – Moisture Content <sub>(i)</sub> ) / (100 – 8/FKA <sub>(i)</sub> )	[fraction]
(d)	FKA <sub>(i)</sub>	= (((100-8)/(100 – Moisture Content <sub>(i)</sub> ))* Moisture Content <sub>(i)</sub> )+(100 – 8)/100	[percent]
(e)	$B_{(i)}$	= (Sulphur Content <sub>(i)</sub> – 0.8) * 4	[USD/ton]
(f)	$U_{(i)}$	= (Ash Content <sub>(i)</sub> – 15) * 0.4	[USD/ton]
(g)	(i)	= Price Marker 8	

4. **Other Coal Benchmark Price No. 9 – 54**

$$\text{HPB}_{(j)} = \{(\text{HBA Price Marker}_{(i)} + (\text{B}_{(i)} + \text{U}_{(i)})) * (\text{K}_{(j)} / \text{K}_{(i)}) * [(100 - \text{Moisture Content}_{(j)}) / (100 - \text{Moisture Content}_{(i)})]^* - (\text{B}_{(j)} + \text{U}_{(j)})\} \quad [\text{USD/ton}]$$

- (a)  $\text{HPB}_{(j)}$  = HPB other Coal Price Marker [USD/ton]
- (b)  $\text{B}_{(i)}$  = (Sulphur Content (i) – 0.8) \* 4 [USD/ton]
- (c)  $\text{U}_{(i)}$  = (Ash Content (i) – 15) \* 0.4 [USD/ton]
- (d)  $\text{B}_{(j)}$  = (Sulphur Content (j) – 0.8) \* 4 [USD/ton]
- (e)  $\text{U}_{(j)}$  = (Ash Content (j) – 15) \* 0.4 [USD/ton]
- (f)  $\text{K}_{(j)} / \text{K}_{(i)}$  = Coal Calorific Value (j) / Coal Calorific Value (i) [fraction]
- (g) (i) = Price Marker 1 – 7
- (h) (j) = Other Coal 9 – 54

5. **Other Coal Benchmark Price No. 55 – 60 (Low Grade Coal)**

(a) **TM < 40%**

$$\text{HPB}_{(j)} = \{(\text{HBA Price Marker}_{(i)} + (\text{B}_{(i)} + \text{U}_{(i)})) * (\text{K}_{(j)} / \text{K}_{(i)}) * [(100 - \text{Moisture Content}_{(j)}) / (100 - \text{Moisture Content}_{(i)})]^* - (\text{B}_{(j)} + \text{U}_{(j)})\} \quad [\text{USD/ton}]$$

Where:

- (i)  $\text{HPB}_{(j)}$  = HPB Other Coal Price Marker [USD/ton]
- (j)  $\text{B}_{(i)}$  = (Sulphur Content (i) – 0.8) \* 4 [USD/ton]
- (k)  $\text{U}_{(i)}$  = (Ash Content (i) – 15) \* 0.4 [USD/ton]
- (l)  $\text{B}_{(j)}$  = (Sulphur Content (j) – 0.8) \* 4 [USD/ton]
- (m)  $\text{U}_{(j)}$  = (Ash Content (j) – 15) \* 0.4 [USD/ton]
- (n)  $\text{FKA}_{(j)}$  = (((100- Moisture Content<sub>(i)</sub>) / (100 – Moisture Content<sub>(j)))\* Moisture Content<sub>(j)</sub>) + (100 – Moisture Content<sub>(i)</sub>) / 100 [percent]</sub>
- (o)  $\text{K}_{(j)} / \text{K}_{(i)}$  = Coal Calorific Value (j) / Coal Calorific Value (i) [fraction]
- (i) = Price Marker 8
- (j) = Other Coal 55

(b) **TM ≥ 40%**

$$\text{HPB}_{(j)} = \{(\text{HBA Price Marker}_{(i)} + (\text{B}_{(i)} + \text{U}_{(i)})) * (\text{K}_{(j)} / \text{K}_{(i)}) * [(100 - \text{Moisture Content}_{(j)}) / (100 - \text{Moisture Content}_{(i)})]^* - (\text{B}_{(j)} + \text{U}_{(j)})\} \quad [\text{USD/ton}]$$

- $\text{HPB}_{(j)}$  = HPB Other Coal Price Marker [USD/ton]
- $\text{FKA}_{(j)}$  = (((100- Moisture Content<sub>(i)</sub>) / (100 – Moisture Content<sub>(j)))\* Moisture Content<sub>(j)</sub>) + (100 – Moisture Content<sub>(i)</sub>) / 100 [percent]</sub>
- $\text{K}_{(j)} / \text{K}_{(i)}$  = Coal Calorific Value (j) / Coal Calorific Value (i) [fraction]

- (i) = Price Marker 8
- (j) = Other Coal 56 – 60

**APPENDIX II**  
**COAL BENCHMARK PRICE REFERENCE FORMULA**  
**FOR STEAMING COAL**  
**BASED ON BRAND NAME**

No	Company	Brand Name	Formula
<b>Primary Coal</b>			
1	PT. Gunung Bayan Pratama Coal	Gunung Bayan I	$(HBA * K * A) - (B + U)$
2	PT. Kaltim Prima Coal	Prima Coal	$(HBA * K * A) - (B + U)$
3	PT. Kaltim Prima Coal	Pinang 6150	$(HBA * K * A) - (B + U)$
4	PT. Indominco Mandiri	Indominco IM_East	$(HBA * K * A) - (B + U)$
5	PT. Kaltim Prima Coal	Melawan Coal	$(HBA * K * A) - (B + U)$
6	PT. Adaro Indonesia	Envirocoal	$(HBA * K * A) - (B + U)$
7	PT. Jorong Barutama Greston	Jorong J-1	$(HBA * K * A) - (B + U)$
8	PT. Arutmin Indonesia	Ecocoal	$(HBA * K * A) - (B + U)$
<b>Other Coal</b>			
9	PT. Gunung Bayan Pratama Coal	Gunung Bayan II	$(0.9778 * \text{Gunung Bayan I}) - 2.0181$
10	PT. Marunda Graha Mineral	Marunda Thermal Coal	$(0.9963 * \text{Prima Coal}) - 1.582$
11	PT. Trubaindo Coal Mining	Trubaindo HCV_HS	$(0.9781 * \text{Prima Coal}) - 3.939$
12	PT. Trubaindo Coal Mining	Trubaindo HCV_LS	$(0.9641 * \text{Prima Coal}) - 0.172$
13	PT. Antang Gunung Meratus	Tanjung Formation Coal	$(0.9691 * \text{Prima Coal}) - 3.252$
14	PT. Kaltim Prima Coal	Pinang 6000 NAR	$(1.0221 * \text{Pinang 6150}) - 0.102$
15	PT. Arutmin Indonesia	Arutmin Satui 10	$(1.0577 * \text{Pinang 6150}) - 3.666$
16	PT. Arutmin Indonesia	Arutmin Senakin	$(1.0493 * \text{Pinang 6150}) - 4.427$
17	PT. Arutmin Indonesia	Arutmin A6250	$(1.0611 * \text{Pinang 6150}) - 5.281$
18	PT. Mandiri Inti Perkasa	Mandiri A	$(1.0543 * \text{Pinang 6150}) - 0.310$
19	PT. Wahana Baratama Mining	Wahana Coal	$(1.0292 * \text{Pinang 6150}) - 3.135$
20	PT. Indominco Mandiri	Indominco IM_West/6500	$(0.9837 * \text{Pinang 6150}) - 0.453$
21	PT. Tanjung Alam Jaya	TAJ Coal	$(1.0292 * \text{Pinang 6150}) - 3.851$
22	PT. Mandiri Inti Perkasa	Mandiri B	$(1.0438 * \text{Pinang 6150}) - 2.521$
23	PT. Trubaindo Coal Mining	Trubaindo MCV_LS	$(0.9966 * \text{Pinang 6150}) - 0.504$
24	PT. Sumber Kurnia Buana	SKB Coal	$(1.0523 * \text{Pinang 6150}) - 11.241$
25	PD. Baramarta	Baramarta Coal	$(1.0435 * \text{Pinang 6150}) - 4.600$
26	PT. Arutmin Indonesia	Arutmin A6100	$(1.0184 * \text{Pinang 6150}) - 4.485$
27	PT. Insani Bara Perkasa	Insani Coal	$(0.9244 * \text{Pinang 6150}) + 3.088$
28	PT. Bahari Cakrawala Sebuku	BCS Coal	$(0.9557 * \text{Pinang 6150}) - 0.724$
29	PT. Indominco Mandiri	Indominco IM_West/6350	$(0.9610 * \text{Pinang 6150}) - 0.149$
30	PT. Kaltim Prima Coal	Pinang 6000	$(0.9508 * \text{Pinang 6150}) + 0.426$
31	PT. Indominco Mandiri	Indominco IMM_MCVHS	$(0.9516 * \text{Pinang 6150}) - 3.798$
32	PT. Multi Harapan Utama	Multi Coal Low	$(0.9428 * \text{Pinang 6150}) - 1.937$
32	PT. Bangun Benua	Bangun Coal	$(1.0268 * \text{Pinang 6150}) - 6.215$
34	PT. Multi Harapan Utama	Multi Coal Middle	$(0.9349 * \text{Pinang 6150}) - 5.901$
35	PT. Kaltim Prima Coal	Pinang 5900	$(0.9015 * \text{Pinang 6150}) - 0.347$
36	PT. Arutmin Indonesia	Arutmin A5900	$(0.9794 * \text{Pinang 6150}) - 4.105$
37	PT. Multi Harapan Utama	Multi Coal High	$(1.0298 * \text{Indominco IM_East}) - 7.183$
38	PT. Kadya Caraka Mulia	KCM Coal	$(1.0906 * \text{Indominco IM_East}) - 3.429$
39	PT. Teguh Sinar Abadi	TSA coal	$(0.9939 * \text{Indominco IM_East}) - 2.755$
40	PT. Tanito Harum	Tanito Coal	$(1.0000 * \text{Indominco IM_East}) + 1.040$
41	PT. Mahakam Sumber Jaya	Mahakam Coal	$(1.0000 * \text{Indominco IM_East}) + 1.040$
42	PT. Kaltim Prima Coal	Pinang 5700	$(0.9818 * \text{Indominco IM_East}) + 4.454$
43	PT. Arutmin Indonesia	Arutmin A5700	$(1.0788 * \text{Indominco IM_East}) - 0.420$
44	PT. Baramulti Suksessarana	BSS Coal	$(1.0565 * \text{Indominco IM_East}) + 0.397$

No	Company	Brand Name	Formula
45	PT. Lanna Harita Indonesia	Lanna Harita Coal	$(0.9123 * \text{Indominco IM\_East}) + 2.107$
46	PT. Kaltim Prima Coal	Pinang 5500	$(0.9240 * \text{Indominco IM\_East}) + 4.698$
47	PT. Berau Coal	Berau Mah	$(0.9591 * \text{Indominco IM\_East}) + 4.071$
48	PT. Berau Coal	Berau MahB	$(0.9815 * \text{Melawan Coal}) - 1.216$
49	PT. Kideco Jaya Agung	Kideco Coal	$(0.9246 * \text{Melawan Coal}) + 2.822$
50	PT. Berau Coal	Berau Agathis	$(1.0338 * \text{Envirocoal}) - 4.561$
51	PT. Lanna Harita Indonesia	Lanna Harita Coal	$(0.9865 * \text{Envirocoal}) - 6.208$
52	PT. Berau Coal	Berau Sungkai	$(1.0000 * \text{Envirocoal}) - 5.120$
53	PT. Arutmin Indonesia	Arutmin A5000	$(1.0486 * \text{Envirocoal}) - 5.245$
54	PT. Antang Gunung Meratus	Warukin Formation Coal	$(0.9649 * \text{Envirocoal}) - 2.828$
55	PT. Batu Alam Selaras	Bas Gumay Coal	$(0.9559 * \text{Jorong J-1}) - 6.096$
56	PT. Perkasa Inakakerta	PIC Coal	$(1.0327 * \text{Ecocoal}) - 7.515$
57	PT. Borneo Indobara	BIB COAL	$(0.8460 * \text{Ecocoal}) - 5.854$
58	PT. Intitirta Prima Sakti	Intitirta coal	$(0.7914 * \text{Ecocoal}) - 5.476$
59	PT. Pesona Khatulistiwa Nusantara	PKN 3500	$(0.7242 * \text{Ecocoal}) - 5.011$
60	PT. Lamindo Inter Multikon	LIM 3000	$(0.5399 * \text{Ecocoal}) - 3.736$

**APPENDIX III  
FORMULA FOR COKING COAL BENCHMARK PRICE**

**1. Hard Coking Coal Benchmark Price**

$$\text{HPB}_{\text{HC}} = (\text{CCQ} + \text{CCH-LOW} + \text{CCH-HIGH} + \text{HR} + \text{EC} + \text{WC} + \text{QL} + \text{PC})/8 \quad [\text{USD/ton}]$$

(a)  $\text{HPB}_{\text{HC}}$  = Hard Coking Coal Benchmark Price [USD/ton]

(b) CCQ = Coking Coal Queensland Index – Energy Publishing [USD/ton]

(c) CCH-LOW = Coking Coal Hampton Roads Index Low – Energy Publishing [USD/ton]

(d) CCH-HIGH = Coking Coal Hampton Roads Index High – Energy Publishing [USD/ton]

(e) HR = Coking Coal Hampton Roads – Platts [USD/ton]

(f) EC = Coking Coal East Coast – Platts [USD/ton]

(g) WC = Coking Coal West Coast – Platts [USD/ton]

(h) QL = Coking Coal Queensland – Platts [USD/ton]

(i) PC = Coking Coal Pacific Coast – Platts [USD/ton]

**2. Semi-Soft Coking Coal Benchmark Price**

$$\text{HPB}_{\text{SSC}} = (\text{NSW} + \text{PO})/2 \quad [\text{USD/ton}]$$

(a)  $\text{HPB}_{\text{SSC}}$  = Semi-Soft Coking Coal Benchmark Price [USD/ton]

(b) NSW = Semi-Soft Coking Coal New South Wales – Platts [USD/ton]

(c) PO = Semi-Soft Coking Coal Poland – Platts [USD/ton]

**3. Pulverised Coal Injection Benchmark Price**

$$\text{HPB}_{\text{PCI}} = (\text{QL} + \text{SA} + \text{IN} + \text{CO} + \text{VE})/5 \quad [\text{USD/ton}]$$

(a)  $\text{HPB}_{\text{PCI}}$  = Pulverised Coal Injection Benchmark Price [USD/ton]

(b) QL = Pulverised Coal Injection Queensland – Platts [USD/ton]

(c) SA = Pulverised Coal Injection South Africa – Platts [USD/ton]

(d) IN = Pulverised Coal Injection Indonesia – Platts [USD/ton]

(e) CO = Pulverised Coal Injection Colombia – Platts [USD/ton]

(f) VE = Pulverised Coal Injection Venezuela – Platts [USD/ton]