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LAMPIRAN 1
Harga Historis Bulanan Batubara ICI 3 2012 – 2021

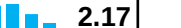
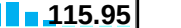
Bulan	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Januari	74,87	58,14	57,54	48,38	37,79	57,76	68,86	49,01	49,68	71,11
Februari	74,61	59,80	57,12	48,76	37,61	60,82	72,38	54,09	51,28	65,57
Maret	72,02	60,38	56,30	48,43	38,00	62,33	68,82	56,08	47,25	60,71
April	72,20	59,88	55,63	47,45	38,07	62,33	62,35	52,98	42,41	70,19
Mei	71,13	60,22	56,04	45,69	38,46	56,75	64,07	52,61	38,62	77,94
Juni	63,24	59,72	54,91	43,33	39,25	55,80	66,80	49,62	38,30	84,48
Juli	58,41	58,75	52,97	41,81	41,34	57,72	65,75	49,00	36,54	93,80
Agustus	56,79	58,57	51,13	41,20	45,41	61,09	57,95	47,09	36,57	104,94
September	56,23	57,53	50,55	40,92	50,84	64,66	53,82	46,97	36,40	117,22
Oktober	55,83	56,20	49,52	39,32	59,41	67,52	52,84	48,53	40,29	180,84
November	56,26	56,45	48,92	38,33	72,62	66,08	48,62	49,30	42,54	116,09
Desember	57,40	57,56	48,25	38,34	58,91	66,20	46,70	49,41	57,51	104,45



LAMPIRAN 2

Perhitungan *Dynamic Stochastic Price Model*

	Coal
Current spot price	128.32 \$/ton
Current long-term median	50.84 \$/ton
Coal median trend (%)	2.8%
Short-term price uncertainty (%)	23.0%
Price reversion half-life (years)	3.00
Reversion factor	0.23
Price correlation	0.80
Market price of risk	0.26
Commodity price of risk	0.21

Coal price model		2023	2024	2025	2026	2027
<i>Dynamic stochastic price model</i>						
Weiner increment Monte Carlo draws		 0.79	 0.07	 -0.50	 0.33	 2.17
1-Period associated price variance (%)		0.04	0.04	0.04	0.04	0.04
1-Period expected median price	0	106.57	93.31	76.30	74.23	98.01
Price outcome	0.00	 127.17	 108.20	 84.27	 81.59	 115.95
Risk-adjusted price outcome	0	121.77	100.09	75.85	71.86	100.39
<i>Price forecast or outcome</i>						
Expected price	0	127.17	108.20	84.27	81.59	115.95
Prediksi Harga Batubara	0	121.77	100.09	75.85	71.86	100.39
Seed		1	2	3	4	5
		DCF_CP01	DCF_CP02	DCF_CP03	DCF_CP04	DCF_CP05
DCF calc		 127.17	 108.20	 84.27	 81.59	 115.95
Price		129.57	112.00	88.40	86.53	124.10
	10%	P10	123.12	102.09	77.90	74.22
	90%	P90	136.28	122.49	99.65	99.88
			104.13	145.90		

