

BP. 0162/042

27<sup>th</sup> February 2019

**-Translation-**

Re: Notification of BANPU's Coal Resources and Reserves at 31 December 2018

To: President of the Stock Exchange of Thailand

Banpu Public Company Limited ("BANPU") would like to notify the Stock Exchange of Thailand ("SET") of its Coal Resources and Reserves Statement ("Statement") as of 31<sup>st</sup> December 2018. The following Statement represents the result of studies recently completed. The Statement covers all BANPU's coal mining operations and projects in Indonesia, Australia and China.

BANPU has prepared the Statement consistent with International Coal Reporting Standards (i.e. the Australasian Code for Reporting Mineral Resources and Ore Reserves – the "JORC CODE 2012"). The Statement is based on estimates prepared by internal Competent Persons (considered suitably experienced under the JORC Code), & external technical studies and audits as follows:

1. Indonesia: Coal Resource and Reserve Audit for ITM Coal Mines Report (PT. DMT Exploration Engineering Consulting (IND) February 2019)
2. Australia: Updated internal Competent Persons estimates
3. China: Internal update of previous Independent Coal Resources & Reserves Audit Report (Marshall Miller & Associates (USA) February 2010) due to little change in previous mining methods and life of mine plans

The Coal Resources represent the potentially economic coal identified by exploration programs, and are inclusive of Coal Reserves. Coal Resources have generally been estimated based on minimum workable seam thickness and maximum economic working depth cut-offs. The Coal Reserves represent the part of the Coal Resources for which engineering studies & mine plans have been completed, with detailed production costs, revenues & financial viability estimated. Marketable Coal Reserves are the saleable portion of the Coal Reserves taking account of coal processing and handling losses.

The change in BANPU's total Marketable Coal Reserves (100% equity basis) was mainly the result of:

1. Indonesia increased by 122.5 Mt from the revision of mine plan with revised economic parameters; coal prices and production cost at Jorong +6.9Mt, Indominco +2.0 Mt, Kitadin-Embalut +2.3 Mt, Trubaindo +15.2 Mt, Bharinto +18.7 Mt, and acquisition of NPR +77.4 Mt
2. Australia decreased by 12.0 Mt from the revision of mine plan.
3. Depletion of Marketable Coal Reserves 45.9 Mt from coal sales (100% equity basis) in Indonesia (-21.5 Mt), Australia (-13.3 Mt) and China (-11.1 Mt) during 2018.

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Table 1 shows detail of Coal Resources and Reserves on 100% basis with total Marketable Coal Reserves of 815.1 Mt as of 31 December 2018.

Table 2 shows detail of coal sales on 100% basis with BANPU's shareholding interest in each mine or project.

Sincerely yours,

- signature -

(Mrs. Somruedee Chaimongkol)

Chief Executive Officer



**Table 1: Banpu's Statement of Coal Resources and Reserves (Million tonnes on a 100% equity basis)**

Mine Operation/Project	As of 31 December 2018						As of 31 Dec 2017	
	Measured Resources	Indicated Resources	Measured and Indicated Resources	Marketable Proved Reserves	Marketable Probable Reserves	Marketable Proved and Probable Reserves	Measured and Indicated Resources	Marketable Proved and Probable Reserves
<b>Mine Operation</b>								
<b>INDONESIA :</b>								
Jorong	20.9	47.0	67.9	7.3	4.5	11.8	39.9	6.0
Indominco	269.3	51.8	321.1	57.7	1.7	59.5	684.1	70.1
- West Block	60.3	15.8	76.1	8.6	1.1	9.7	289.4	15.3
- East Block	209.0	36.1	245.0	49.1	0.7	49.7	394.7	54.8
Kitadin-Embalut	16.2	85.3	101.5	1.5	2.9	4.4	100.6	3.2
Kitadin-Tandung Mayang <sup>(6)</sup>	-	-	-	-	-	-	4.9	-
Trubaindo	268.4	145.0	413.3	20.9	27.7	48.6	384.4	38.1
Bharinto	301.8	137.7	439.6	9.5	142.7	152.2	417.0	136.1
<b>AUSTRALIA :</b>								
Airly	6.4	89.4	95.8	-	33.0	33.0	102.6	36.6
Angus Place	49.5	131.2	180.7	-	53.0	53.0	180.7	55.8
Clarence	41.3	115.9	157.2	2.8	30.3	33.1	160.1	35.9
Ivanhoe	2.5	5.2	7.7	-	-	-	6.7	-
Mandalong	40.5	116.8	157.3	16.8	55.3	72.0	154.3	81.6
Manning <sup>(7)</sup>	-	114.0	114.0	-	-	-	114.0	-
Myuna	0.4	269.8	270.2	-	42.7	42.7	255.2	42.0
Springvale	3.6	82.1	85.7	1.6	23.0	24.6	90.9	31.6
<b>CHINA :</b>								
HebiZhongtai	49.0	-	49.0	17.1	-	17.1	50.4	18.5
Gaohe	193.6	107.2	300.8	25.3	109.4	134.7	310.5	144.4
<b>Projects :</b>								
NPR	37.2	105.7	142.9	23.0	54.4	77.4	-	-
Inglenook	-	79.8	79.8	0.0	0.0	0.0	79.8	-
Neubeck	10.4	1.6	12.0	-	7.5	7.5	12.2	7.5
Newstan <sup>(8)</sup>	61.0	207.6	268.6	-	43.3	43.3	262.4	43.5
<b>Total</b>	<b>1,372.0</b>	<b>1,893.2</b>	<b>3,265.1</b>	<b>183.5</b>	<b>631.5</b>	<b>815.1</b>	<b>3,410.7</b>	<b>750.9</b>

Note:

- Both Proved & Probable Coal Reserves are used by BANPU for life of mine production and cash flow estimation.
- The Measured and Indicated Coal Resources are inclusive of those resources modified to produce the Proved and Probable Coal Reserves.
- Coal Resources are stated on an "in-situ" moisture basis, except for Airly, Angus Place, Clarence, Inglenook, Ivanhoe, Mandalong, Neubeck project, Newstan, and Springvale where the Resources are stated on an "air-dried" moisture basis.
- Coal Reserves are stated on an "as-received" moisture basis.
- Coal Reserves are all stated on a "Marketable" basis, with coal preparation yields allowed for at Gaohe (93%), Hebi Zhongtai (83%), Angus place (96%), Clarence (92%), Mandalong (98%), Newstan (83%), and Springvale (90%). All other mines/projects sell coal on a 100% yield basis.
- Kitadin-Tandung Mayang mine is under mine closure
- No Coal Reserves are reported for Manning in this statement as Centennial Coal has entered into a sublease agreement with a third party and has no plans to resume production.
- Newstan was put on "Care and Maintenance" on 29 August 2014.

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9. In December 2011 BANPU has completed 100% acquisition of HUNNU Coal Limited which controls 15 concessions. Two projects, TsantUul and UnstKhudag, are under exploration with measured and indicated resources of 93.8Mt and 600.8Mt respectively. Verification of the reported Coal Resources is in progress.

**Table 2 : 2018 BANPU coal sale (Million tonnes, 100% basis)**

Mine Operation/Project	Banpu shareholding (%)	Coal Sale 2018 (Mt)
<b>1. Indonesia :</b>		
1.1 Jorong	68.09%	1.03
1.2 Indominco		
- West Block	68.09%	0.59
- East Block	68.09%	11.89
1.3 Kitadin-Embalut	68.09%	1.13
1.4 Kitadin-Tandung Mayang	68.09%	-
1.5 Trubaindo	68.09%	4.50
1.6 Bharinto	68.08%	2.36
<b>2. Australia :</b>		
2.1 Airly	100.00%	0.74
2.2 Angus Place	50.00%	-
2.3 Charbon	95.00%	-
2.4 Clarence	85.00%	1.79
2.5 Ivanhoe	100.00%	-
2.6 Mandalong	100.00%	5.29
2.7 Mannering	100.00%	-
2.8 Myuna	100.00%	2.17
2.9 Springvale	50.00%	3.33
2.10 Newstan	100.00%	-
2.11 Neubeck (Project)	50.00%	-
2.12 Inglenook (Project)	95.00%	-
<b>3. China :</b>		
3.1 HebiZhongtai	40.00%	1.39
3.2 Gaohe	45.00%	9.66
<b>Total</b>		<b>45.86</b>