



2Q20 results

Opportunity Day

24th August 2020



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01

**Highlights
2Q20**

02

Financial
Summary

03

Energy
Resources

04

Energy
Generation

05

Energy
Technology

Banpu: innovating in a time of disruption



Smooth operations

with safety measures in place and no shutdowns



Continuous efficiency improvements

driven by digital transformation



Cost rationalization

with target of 20% cost reductions across all operations



Antifragile* strategy

Weathering global disruptions through our integrated energy solutions portfolio to diversify risks and seize new opportunities



CSR and stakeholder engagement

Embracing change and supporting communities and societies in times of need



Innovating the energy ecosystem of the future

Developing new-era clean energy tech to leverage the '3D' mega-trends



Greener Smarter energy transition

Transition to Greener business, accelerated by Barnett acquisition, restructuring of gas business and continuing investment in renewables

Banpu's ongoing support in the fight against Covid-19

SUPPORT AND RELIEF



More than 380 bags of supplies worth over THB 300,000 given to Pattaya tourism sector workers from the *Mitr Phol-Banpu Solidarity to Aid Thailand on Covid-19 Confrontation Endowment*.

5,700 sets of medical supplies to 19 hospitals, and 500 bags of relief supply to orphans, across 3 Thai Southern border provinces.



THB 2 M donated to Thai Red Cross Society's 'Cloth Face Masks for Self-Protection from Covid-19' project to distribute 10 M cloth face masks and 180,000 sets of daily necessities across the country.

PROTECTION & PREVENTION



THB 10 M donated to Thai Red Cross. The funding aims to alleviate the Covid-19 impact under "Plus One" project, which produces and distribute the "Mask for Blood Hero" to blood donors



More than 40,000 cloth masks worth over THB 720,000 distributed across 151 schools.

ROAD TO RECOVERY



THB 30 M donated to Thammasat University Hospital for a Respiratory Care Unit and other medical equipment

THB 10.5 M given to Thammasat University Hospital for purchasing ventilators and the construction of negative pressure rooms.



THB 8.6 M donated to Golden Jubilee Medical Center and Sanam Chai Khet Hospital to fight Covid-19.

THB 1.8 M given to Buddhasothorn Hospital for positive pressure clinic and negative pressure medical procedure room.



Banpu: sustainability leader

ENVIRONMENT



SOCIAL



GOVERNANCE



MEMBER OF

**Dow Jones
Sustainability Indices**

In Collaboration with RobecoSAM 

The DJSI is managed by RobecoSAM, the world's longest running and most prestigious sustainability rating agency. Thousands of publicly traded companies participate each year.

Banpu has been a Gold Class Industry Leader on the DJSI since 2014. In 2019, Banpu's combined ESG performance scores were 3x the industry average.

MSCI
ESG RATINGS



CCC	B	BB	BBB	A	AA	AAA
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The MSCI ESG Ratings is managed by MSCI, one of the most experienced ESG performance measuring agencies. Its research is used by over 1,400 investors worldwide.

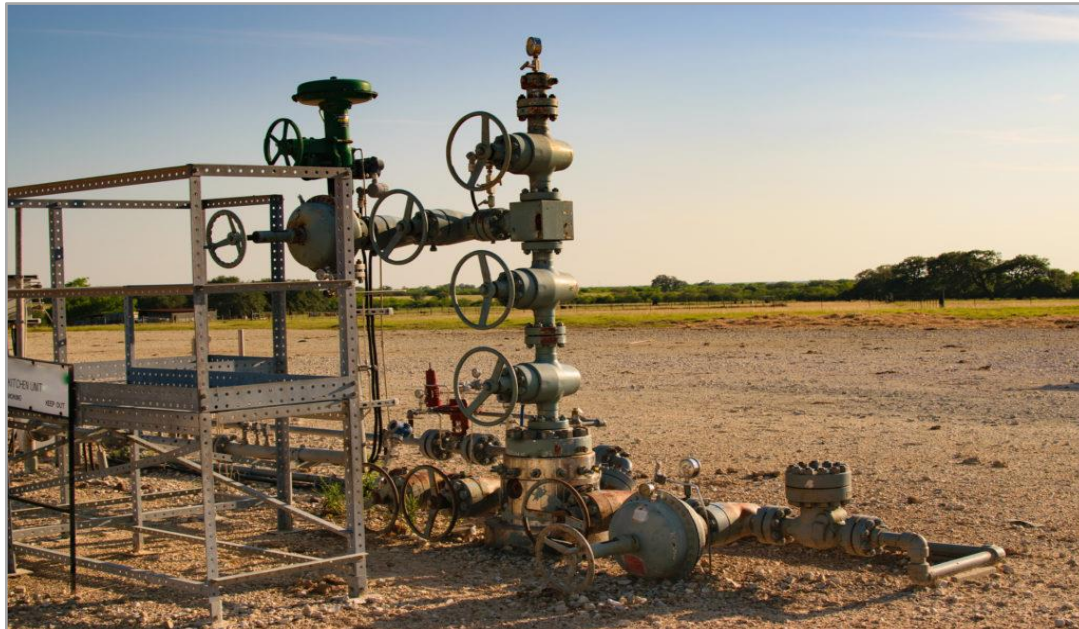
In 2019, Banpu was upgraded to 'A' rating in MSCI ESG Ratings assessment for having a track record of managing the most significant ESG risks and opportunities relative to peers.

Barnett acquisition: accelerated transaction completion

**1st Oct
2020**
New closing date



**31st Dec
2020**
Previous arranged date



TAKING ADVANTAGE OF GAS PRICE RECOVERY

Recent Henry Hub gas price rebound to \$2/MMBtu range supported by resilient domestic US demand



EARLY PROFIT REALIZATION

Additional profit contribution in 4Q20 with access to the largest gas-consuming state in the US and export facilities

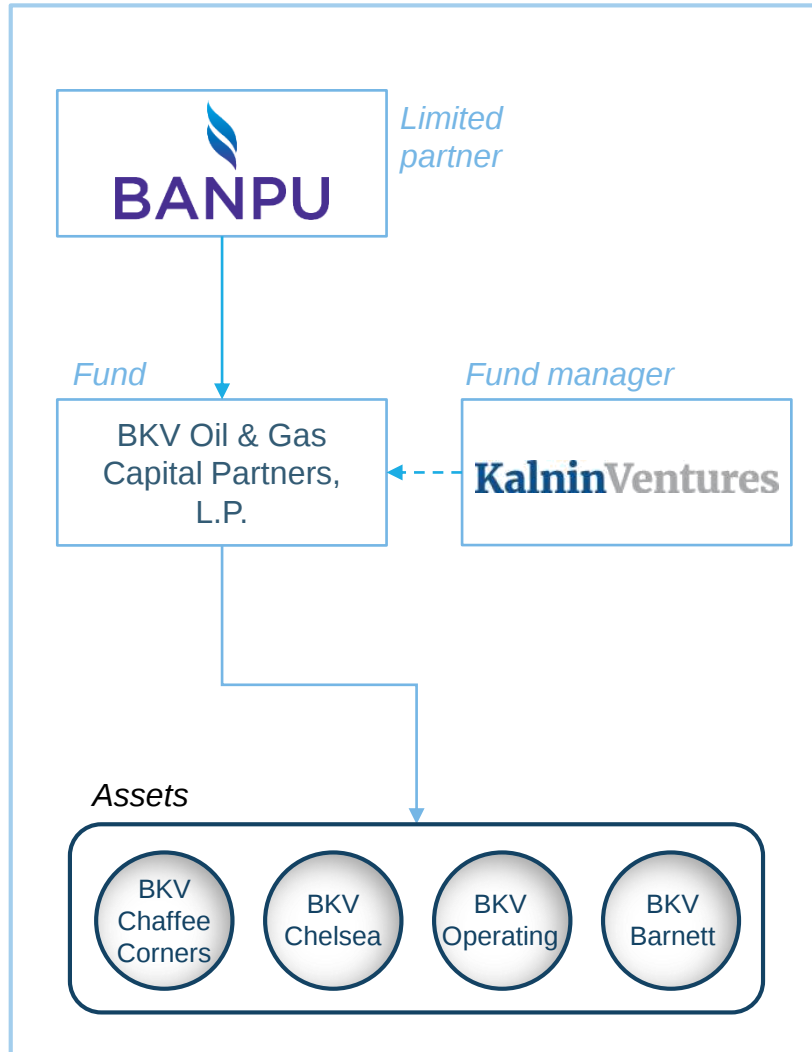


SYNERGIES WITH BANPU'S MARCELLUS SHALE

Technology integration with Marcellus assets to further improve efficiency and cost reduction

Restructuring to capture future upside potential

OLD GAS BUSINESS STRUCTURE



CORPORATIZATION OF BKV

Growth mode

Ability to raise capital for future growth

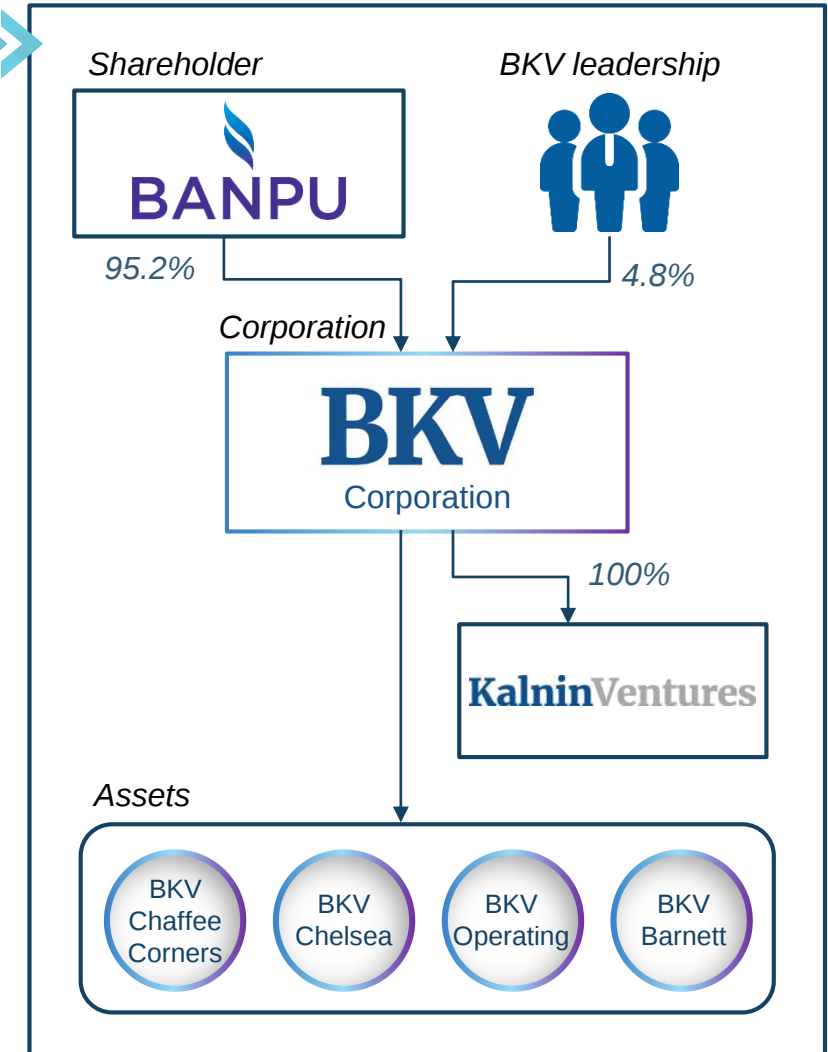
\$30.8 M

One time non-cash transaction offering minority shares to BKV leadership

Increased control

Increases Banpu's long-term control over its US gas business

NEW GAS BUSINESS STRUCTURE (POST-MAY 2020)



Resilient business model: 'integrated energy solutions'

ENERGY RESOURCES

Shale Gas



0.8 Bcfd*
Net production

ENERGY GENERATION

Renewable Power



642 MW
Committed capacity

ENERGY TECHNOLOGY

Solar Rooftop



172 MW
Committed capacity

Mining



41 Mt**
Coal sales

Thermal Power



2.4 GW
Committed capacity

Clean Energy Tech



0.5 GWh
Li-ion batteries



E-mobility services
E-mobility solutions



4 smart city
projects



280 GWh**
electricity trading

Note: *Includes Barnett production capacity **2020 target

01

Highlights
2Q20

02

**Financial
Summary**

03

Energy
Resources

04

Energy
Generation

05

Energy
Technology

KEY FIGURES

Unit: USD million

EBITDA **\$72 M**

Strong result despite low coal and gas prices

NPAT **-\$79 M**

Impacted by non-recurring expense from US gas restructuring and FX loss

ND/E **1.34 x**

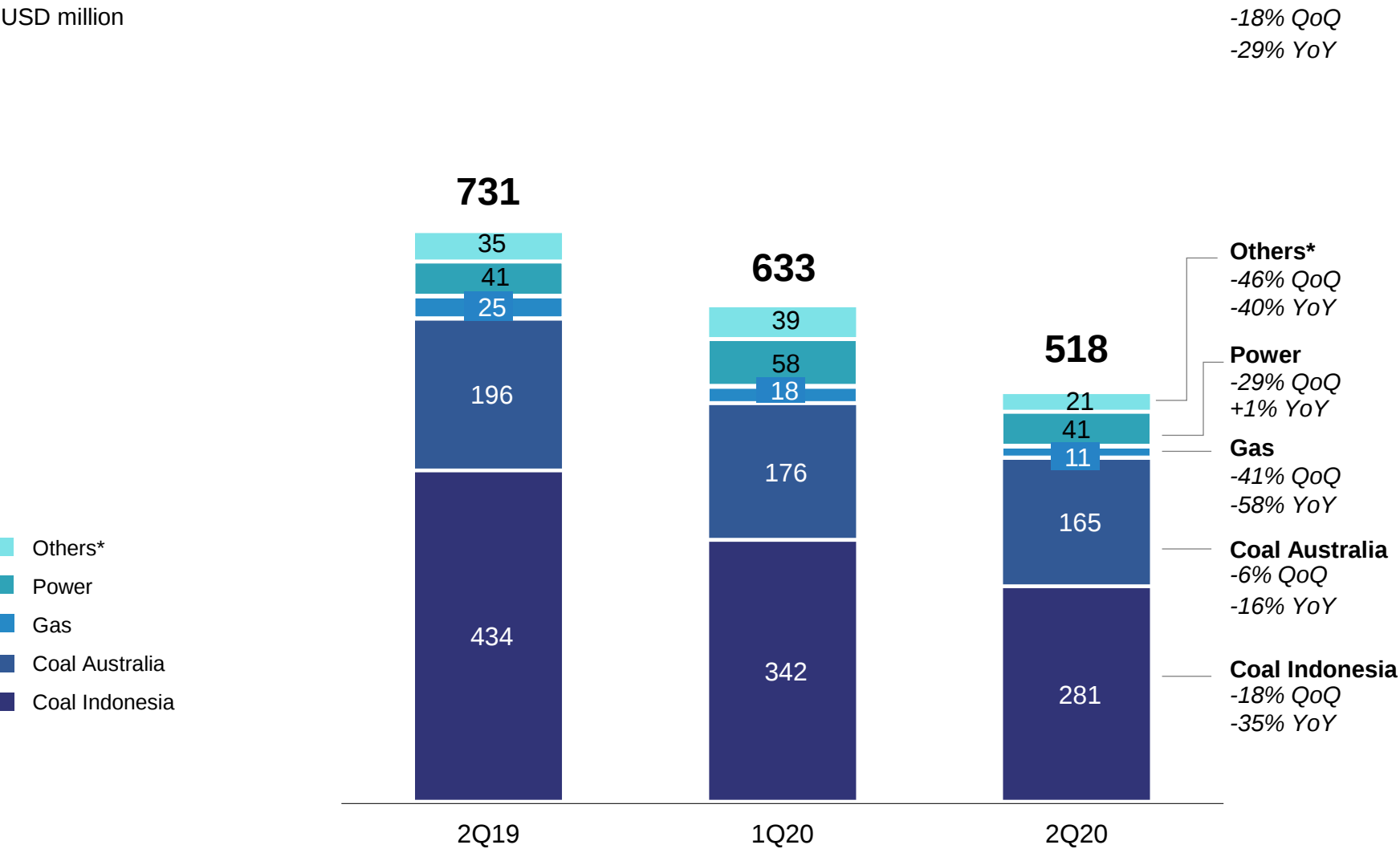
ND/E increased from 1.19x in the previous quarter

KEY TAKEAWAYS

- 1 Strategic positioning:** well-positioned to benefit from improving commodity price environment and growth in demand in clean-tech energy businesses
- 2 Cash flow:** resilient cash flow amid unfavorable conditions during Covid-19 pandemic with improving outlook
- 3 Cost reduction:** continuing implementation of 20% cost reduction program and efficiency improvement across all businesses
- 4 Liquidity:** strong financial position with continued support from financial institutions

Banpu consolidated sales revenues – 2Q20

USD million

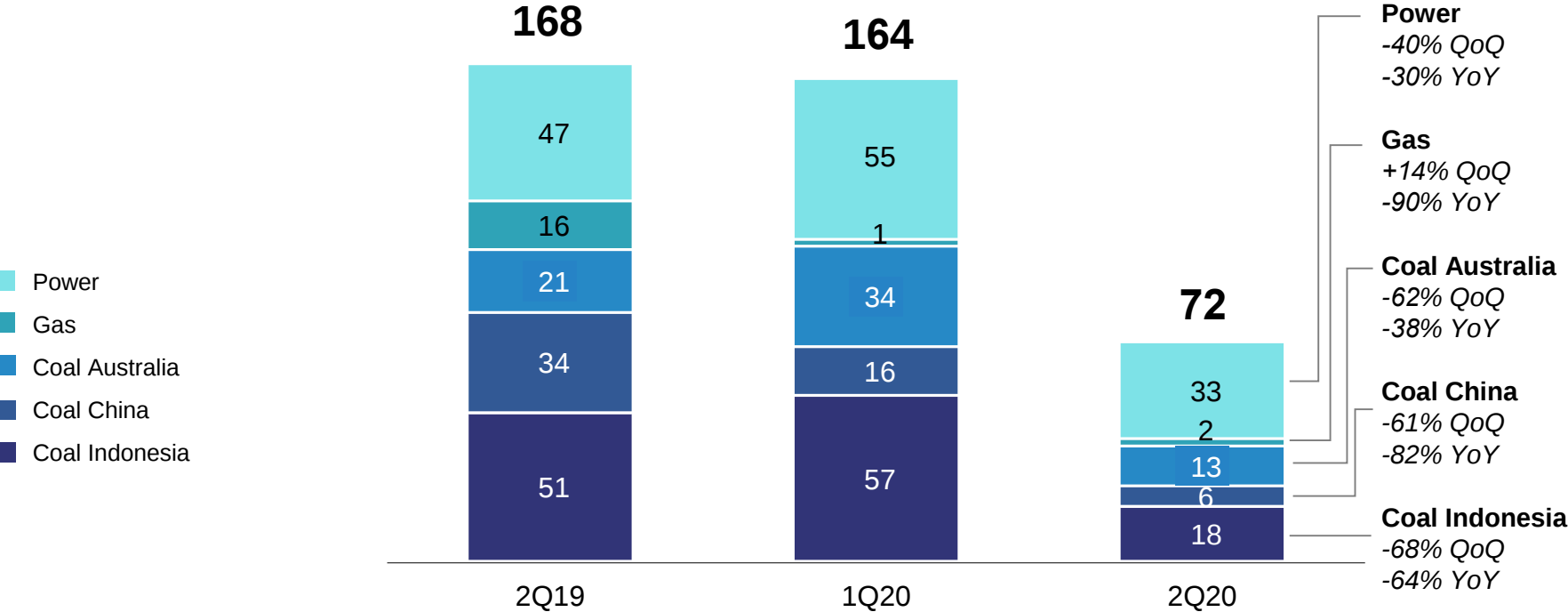


Note: *Revenue from others includes coal trading, fuel business and other businesses

Banpu consolidated EBITDA – 2Q20

USD million

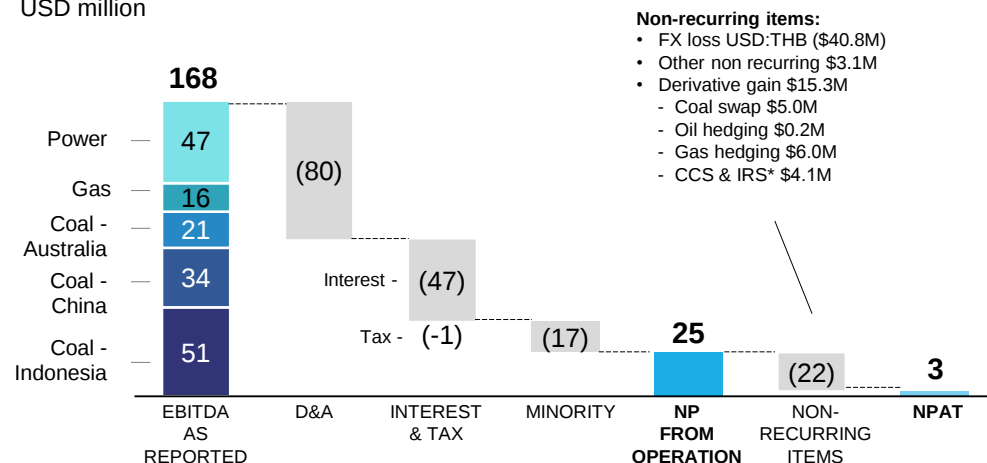
-56% QoQ
-57% YoY



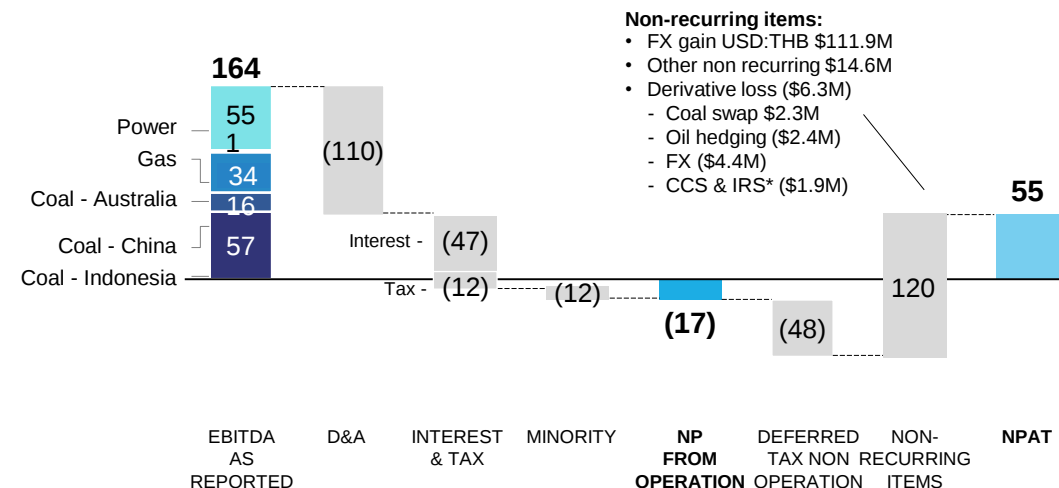
Banpu consolidated NPAT – 2Q20

2Q19 NET PROFIT AFTER TAX

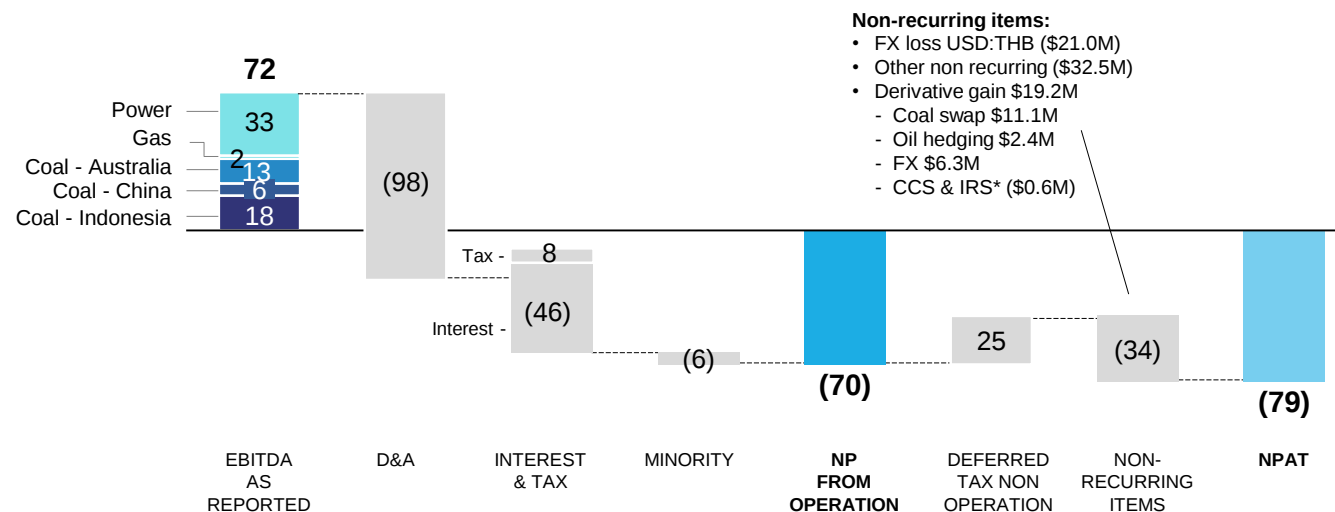
USD million



1Q20 NET PROFIT AFTER TAX



2Q20 NET PROFIT AFTER TAX



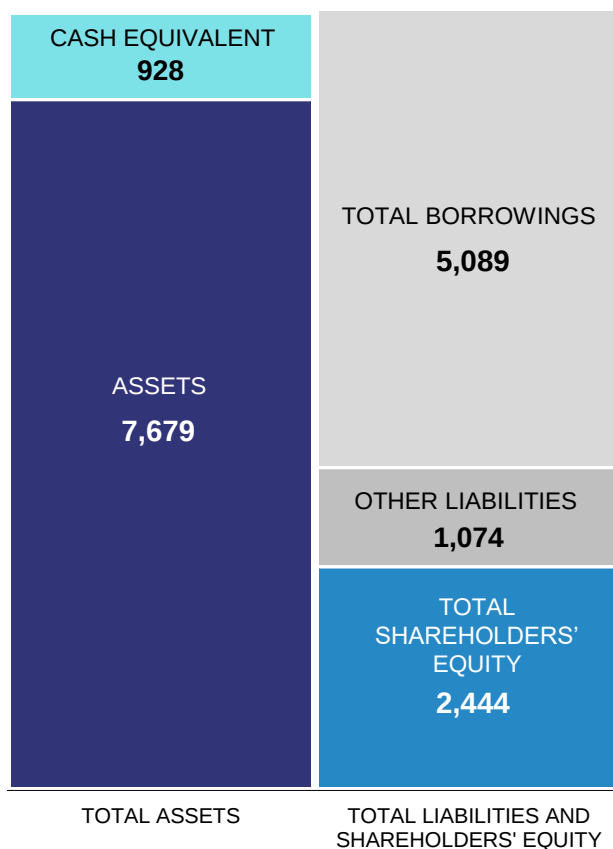
Banpu consolidated balance sheet – 2Q20

2Q20 CONSOLIDATED FINANCIAL POSITION

DEBT FX STRUCTURE

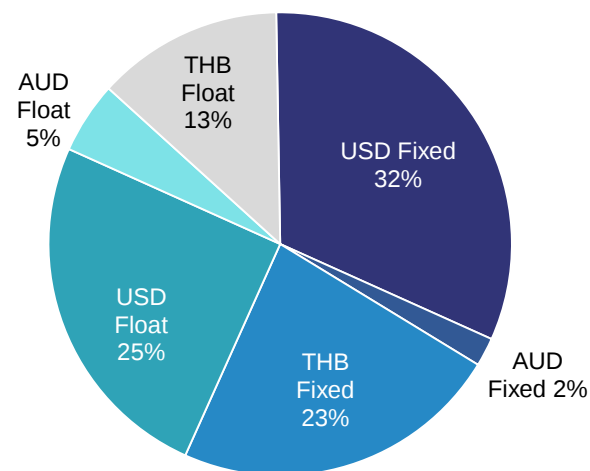
GEARING RATIOS

USD million

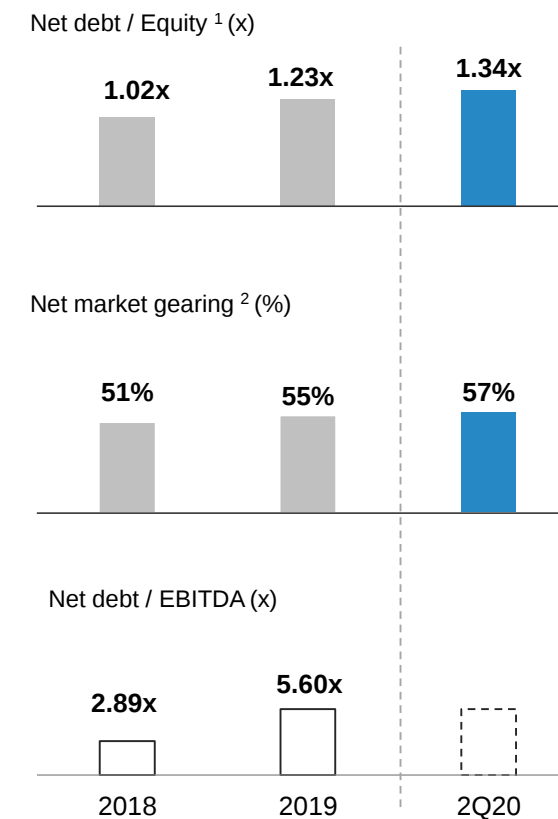


Note:

- 1 Net debt to book value of shareholders' equity
- 2 Net debt to enterprise value (enterprise value = net debt + market capitalization as at 30 June 2020)



Total gross debt: US\$5.09 billion
As of 30 June 2020





01

Highlights
2Q20

02

Financial
Summary

03

**Energy
Resources**

04

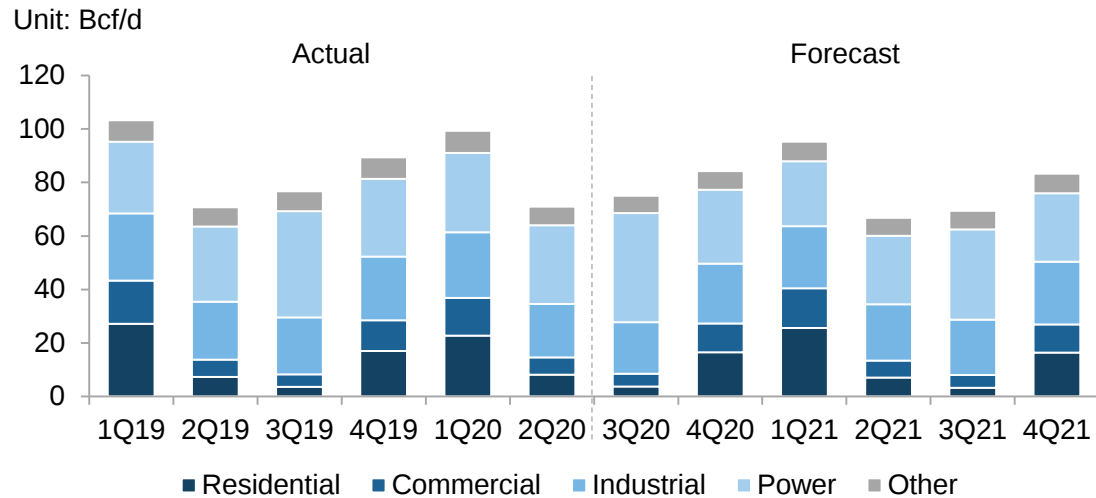
Energy
Generation

05

Energy
Technology

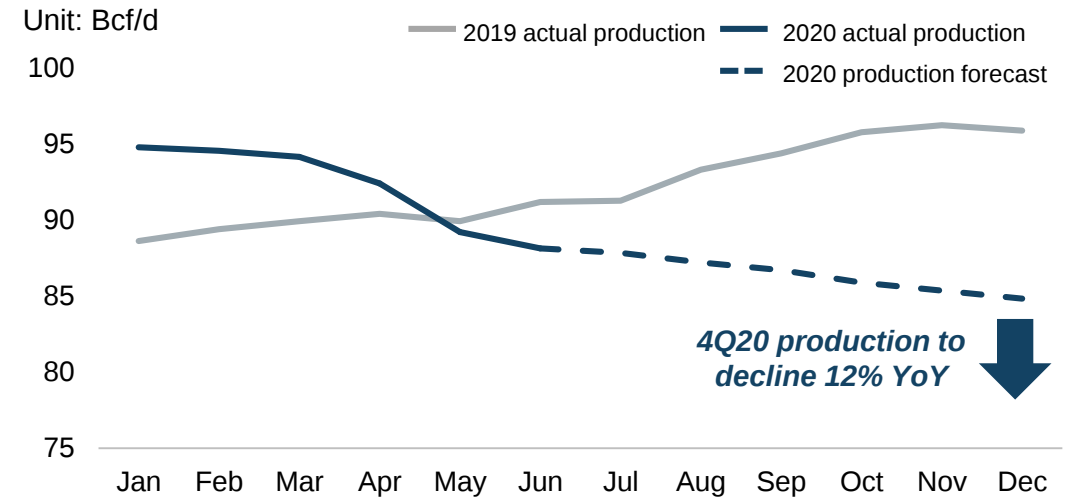
U.S. gas market update

RESILIENT DEMAND PROJECTION

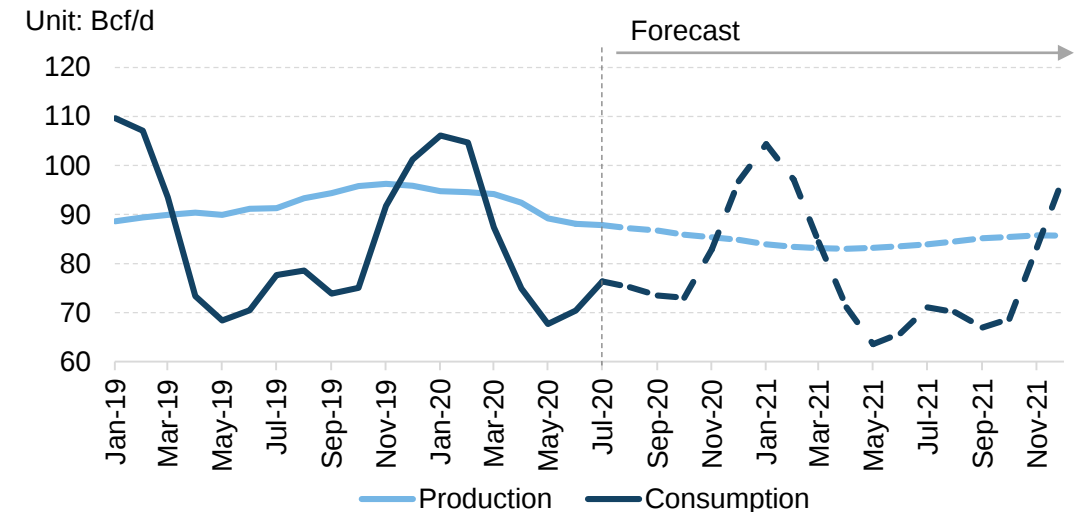


- Majority of US gas demand is domestic consumption. Price determined by local demand and supply with indirect linkage to oil via associated gas production.
- Despite Covid-19 and economic slowdown, demand remains very resilient, with consumption in 2Q20 above 2Q19. Increase driven by residential and power sector consumption, offset by decline in commercial sector.
- Production averages 90 Bcfd in 2Q20 (-6% YoY) amidst sharp drop in drilling activity (rig count decline), production curtailment and bankruptcies.
- Market predicts price recovery in 2H20 and 2021 as supply drops overtake demand stability. Demand resilience along with structural production decline will support price in medium term.

US NATURAL GAS PRODUCTION



US NATURAL GAS PRODUCTION VS CONSUMPTION



U.S. gas: declining production will support gas price outlook

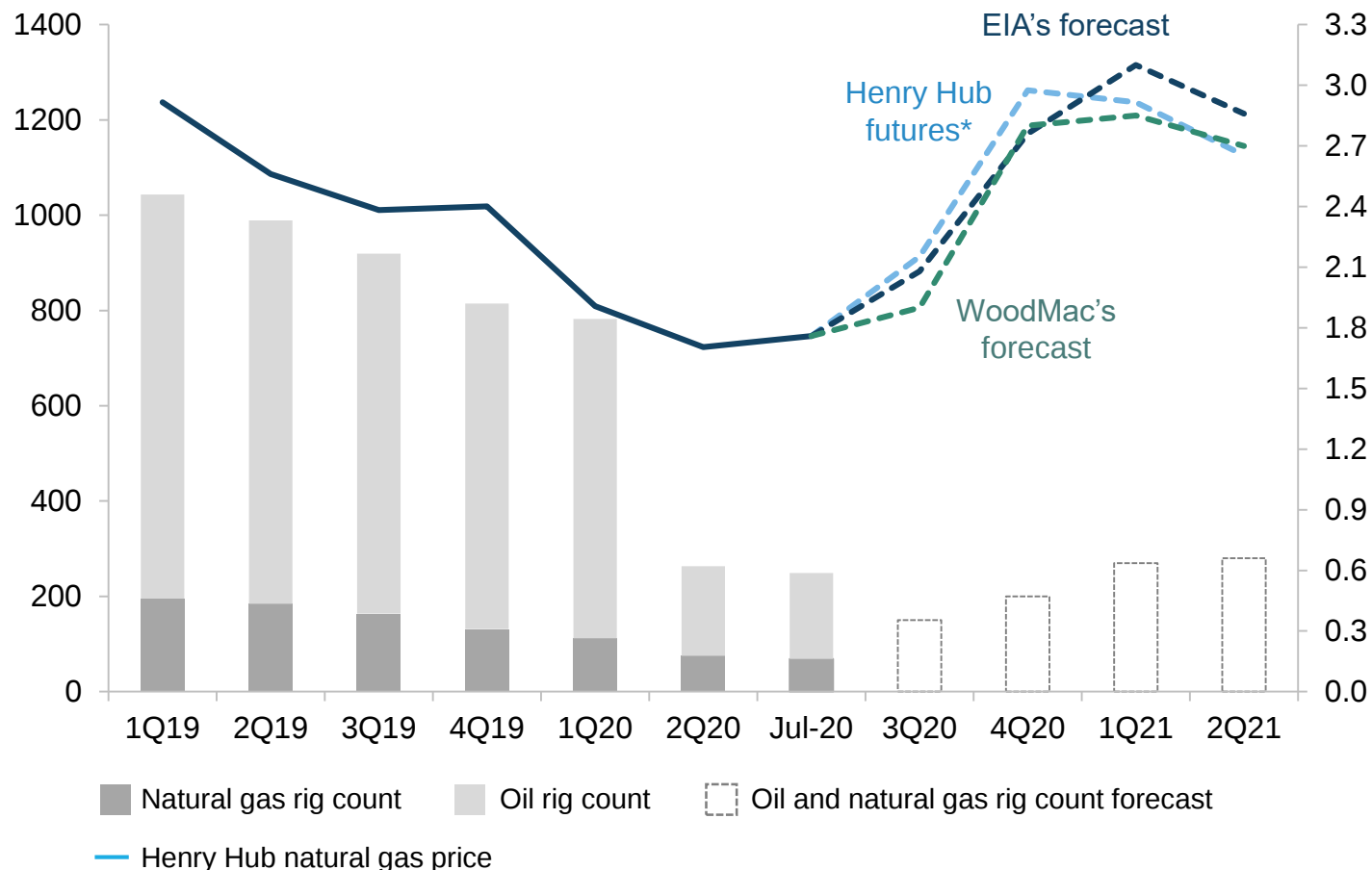
US RIG COUNT VS HENRY HUB PRICE

US OIL AND NATURAL GAS RIG COUNT

Unit: Rigs

HENRY HUB SPOT PRICE

Unit: \$/MMBtu



COMMENT

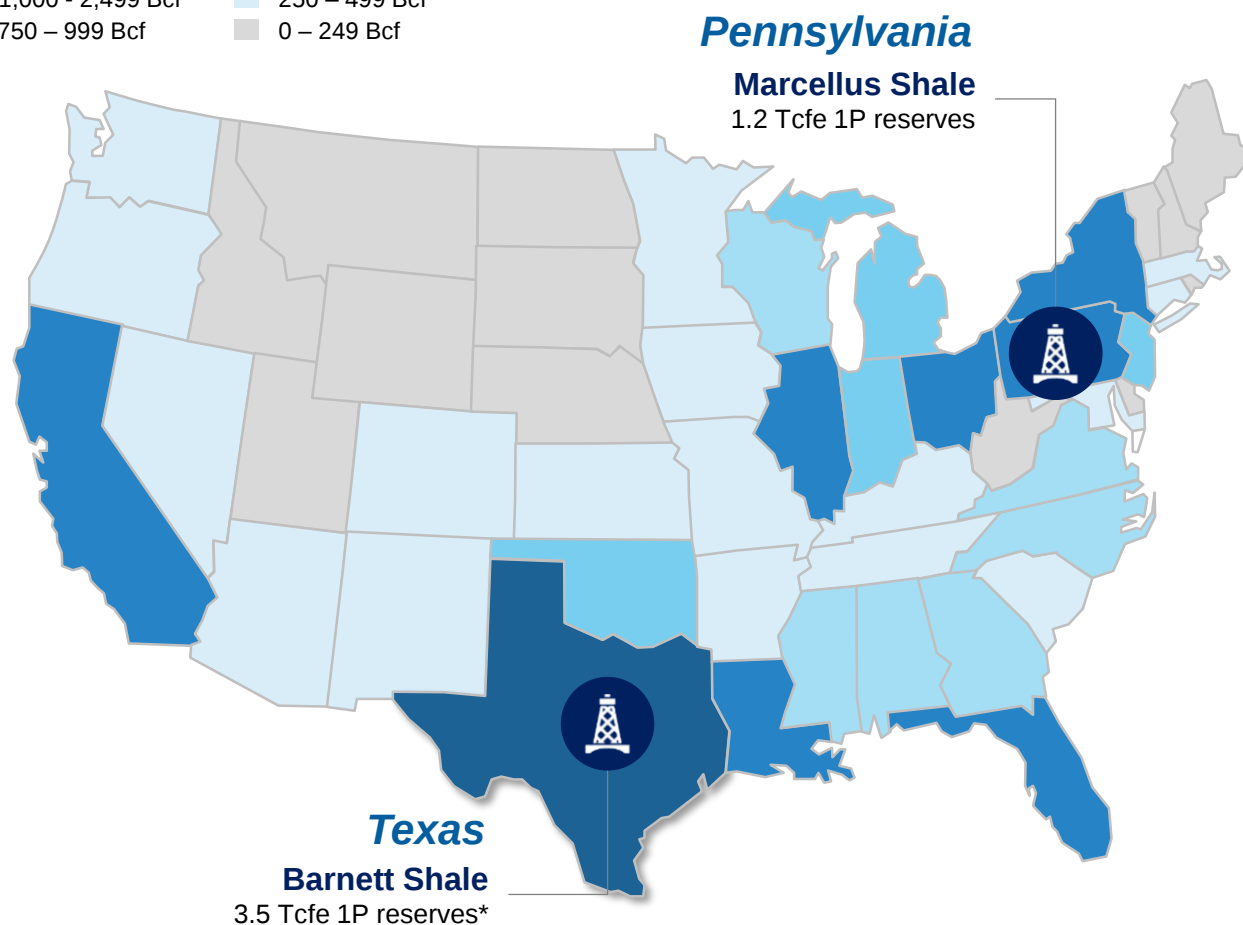
- Major US gas producers have announced capital spending reduction by 15-30% in response to impact from Covid-19.
- Oil rigs down 74% to 180, gas rigs down 47% to 69 YTD; fewest since 2016
- Decline in rig count and reduction in capital spending indicate lower gas production (associated gas from oil wells and from gas wells)
- Henry Hub futures signal an increase as domestic demand remains stable vs. decline in gas supply.

Note: *as of Aug 1st, 2020

Source: IHA Markit report, WoodMac research and Baker Hughes US natural gas rotary rig count (August 2020)

Banpu Gas: 2Q20 highlights

US DRY GAS CONSUMPTION 2018 BY STATE (Bcf)



Banpu shale gas operations

Average netback price**

\$0.52/Mcf

-43% QoQ

Sales volume**

15.9 Bcf

-5% QoQ

EBITDA**

\$1.6 M

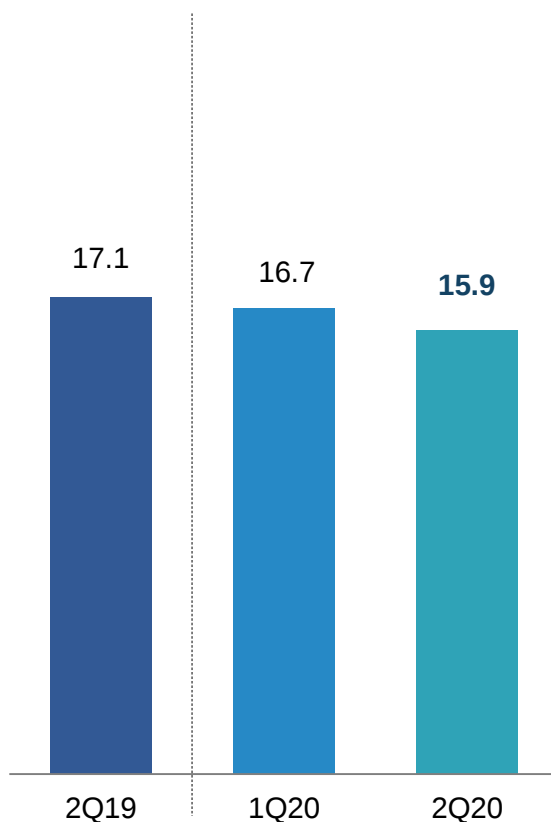
+14% QoQ

Banpu Gas: 2Q20 performance – Marcellus

Despite low pricing environment, 2Q20 EBITDA was partially supported by solid production and saving initiatives in place. Continued spending discipline will help uplift 2H20 performance while market prices recover towards winter.

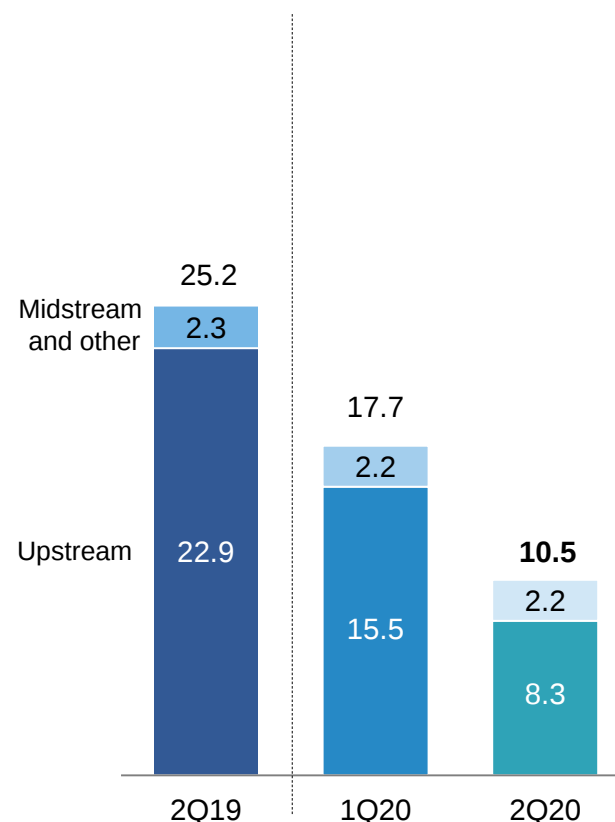
SALES VOLUMES

Unit: Bcf ¹



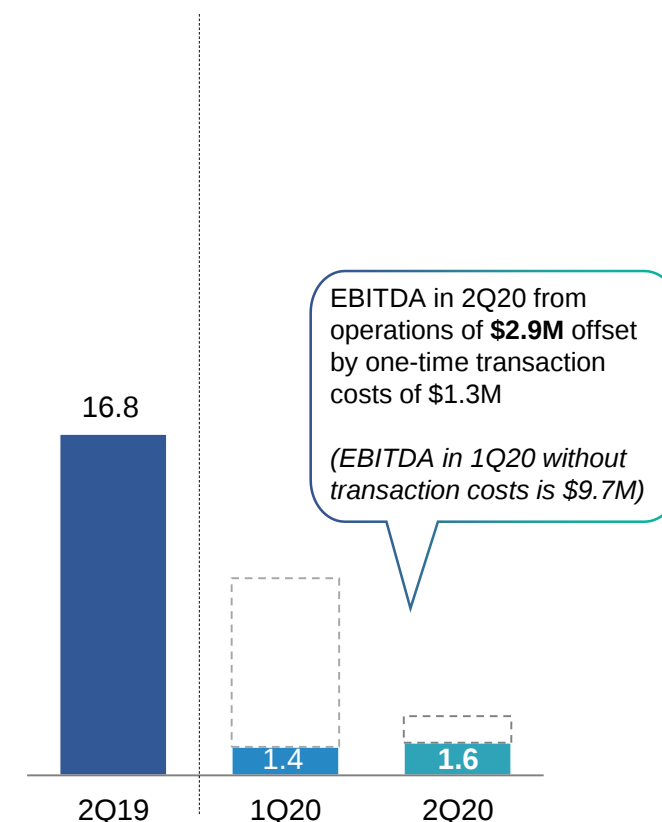
TOTAL REALIZED REVENUE

Unit: US\$M



EBITDA

Unit: US\$M

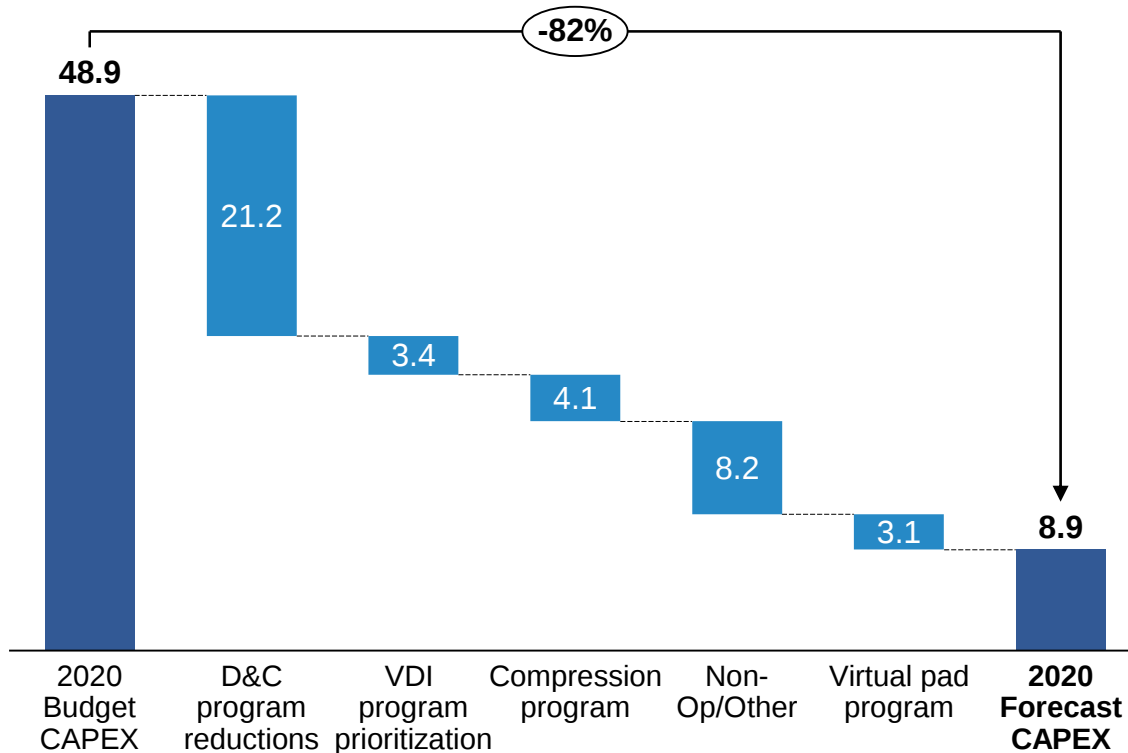


Note: 1 Bcf = Billion cubic feet

Banpu Gas: capital reduction and continued opex discipline

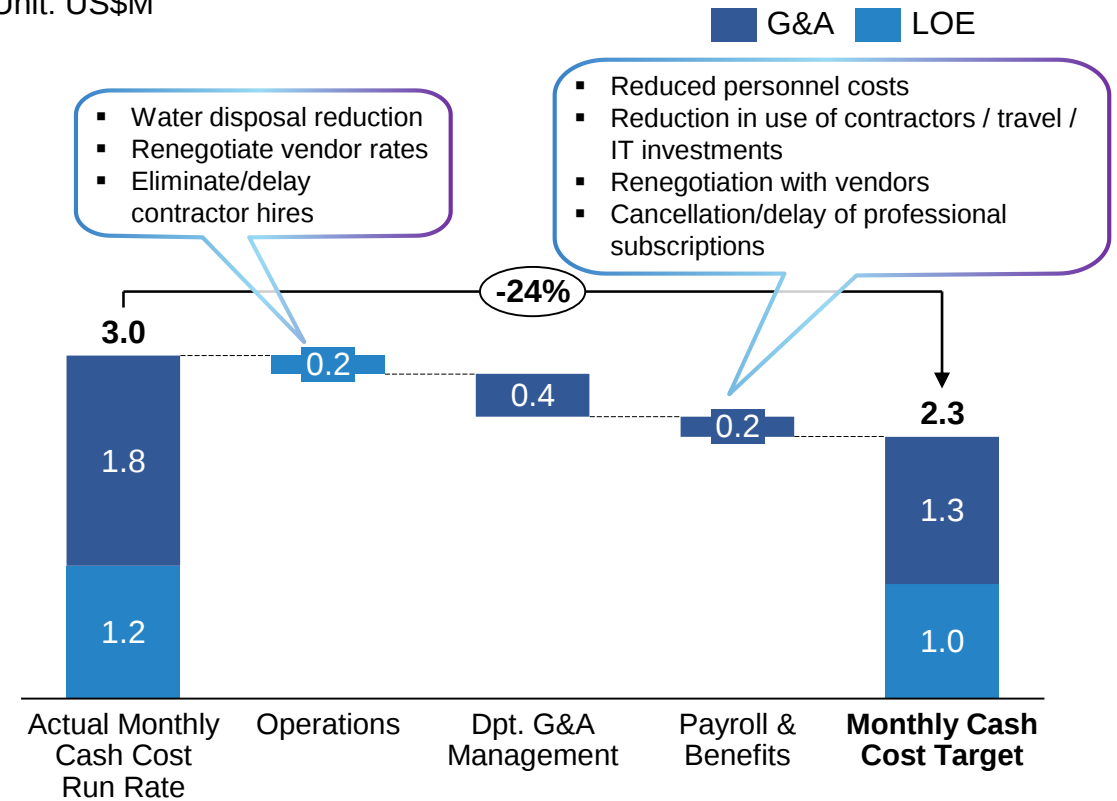
CAPEX SAVINGS

Unit: US\$M



OPEX SAVINGS

Unit: US\$M

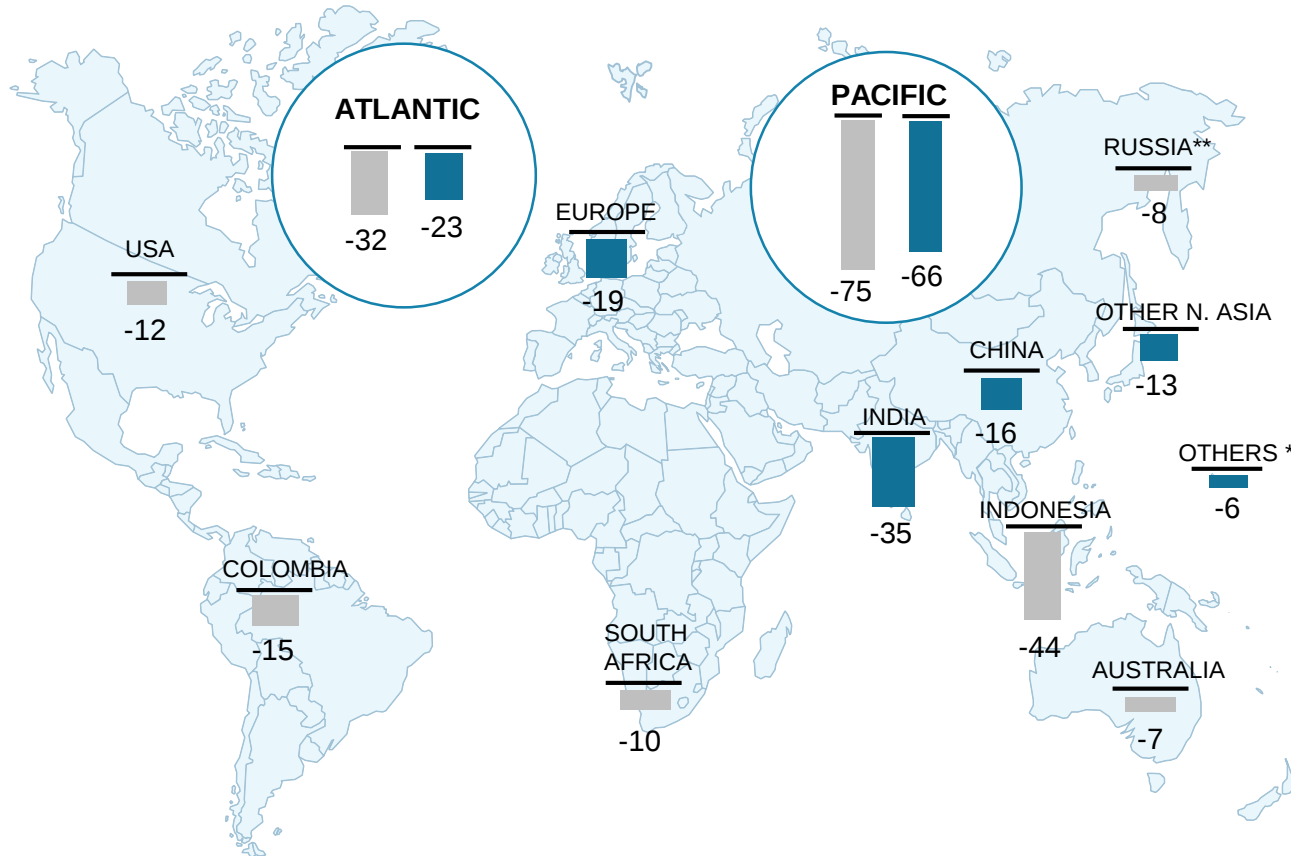


- In response to the pricing challenge and macro environment, several initiatives were implemented to boost operational efficiency, cut down capex, and drive opex savings in the short-term.
- Through opex savings, potential increase of \$4M to bottom line. Implemented measures have started to pay off.
- Barnett acquisition will increase scale of operations in the U.S. and lead to increased operational efficiencies.

Global thermal coal market

COAL DEMAND AND SUPPLY CHANGE – 2020E VS 2019

Unit: Mt ■ SUPPLY ■ DEMAND



TRENDS

DEMAND

Lockdowns around the globe gradually eases and global power demand continues to improve. Recovery has been tepid and spotty.

- **China:** Economic recovery, strong hydro, improving domestic production and stock levels means no rush to relax import quota.
- **India:** Lockdowns have impacted power demand and industrial activities. Emphasis on consumption of domestic coal.
- **Others:** Power recovery slowdown in Japan and South Korea amid resurgence of new Covid-19 cases. Vietnam imports grow with added capacity.

SUPPLY

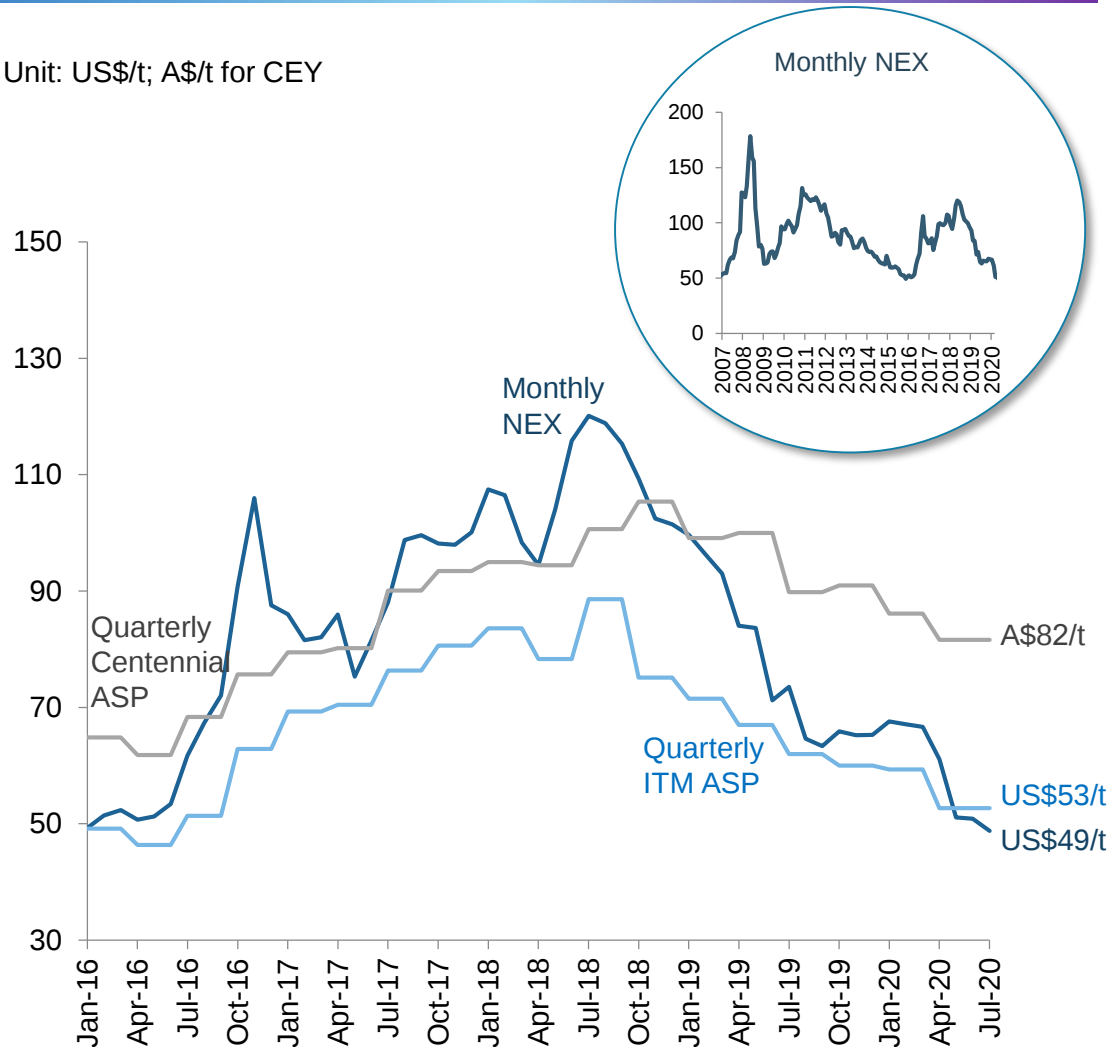
Producers start to cut production, but no large-scale formal cutbacks announced. Oversupplied market continues.

- **Indonesia:** Production decline sharply due to weak demand and likely to continue in 2H20. Most of the production cuts come from small miners.
- **Australia:** Thermal coal exports steady but likely to be cut in near term; Stronger Australian dollar and rising diesel costs put significant pressure on high-cost mining operations.
- **Others:** Weak European demand and collapsed rail bridge reduce Russian export to Europe; Expect more supply cuts from Colombia and US amid weak European demand and low prices; Weak Indian demand and low prices will continue to hit South African exports.

Banpu ASPs vs thermal coal benchmark prices

BANPU ASP VS BENCHMARK PRICES

Unit: US\$/t; A\$/t for CEY



COMMENTS

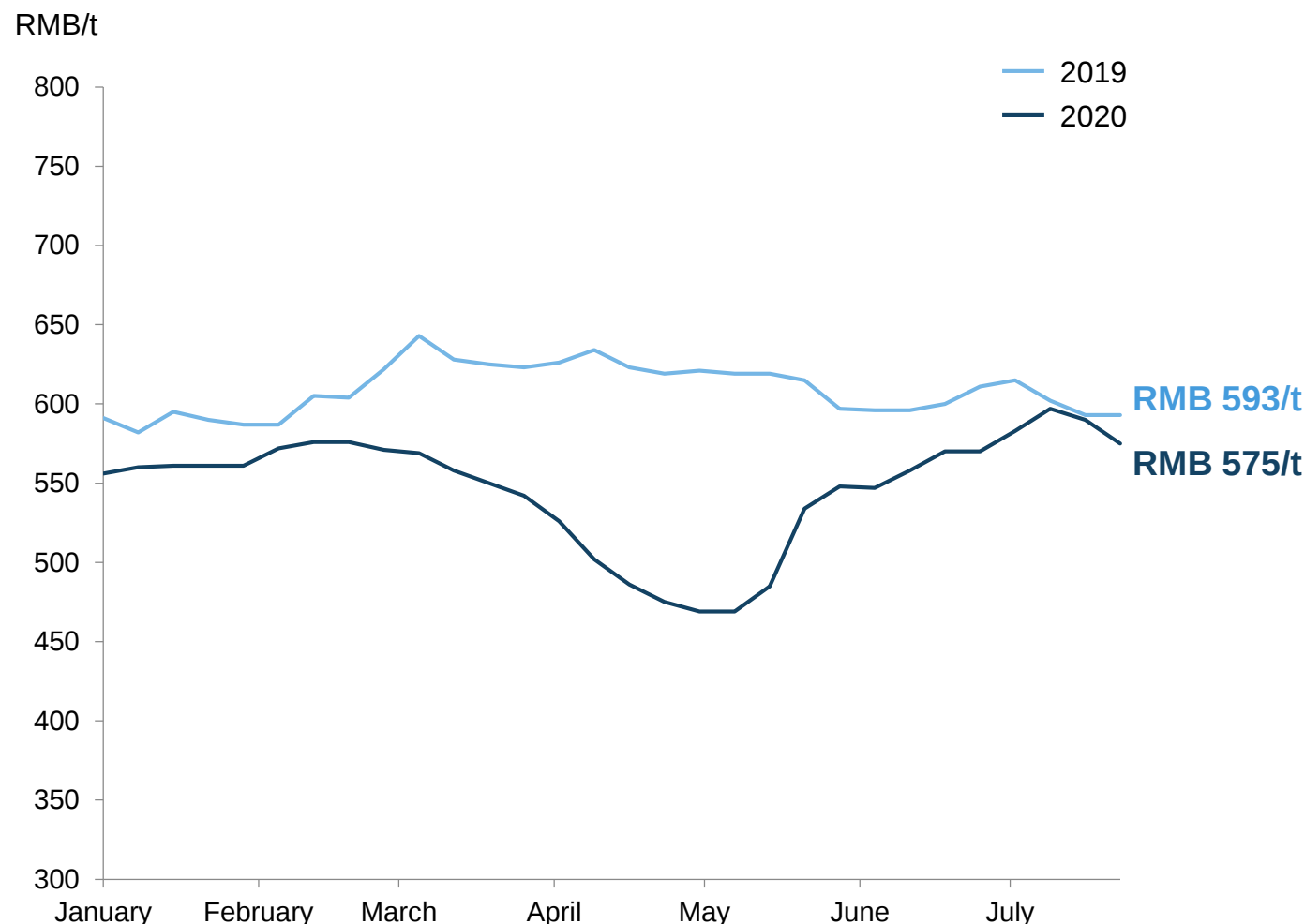
- NEX has been trading at mid US\$50s through most of the 2Q20, dropping from mid US\$60s in 1Q20.
- Covid-19 spread through China caused interruption in domestic coal production, hence increased demand for import coal, which helped support Indonesian coal prices during the first 2 months.
- Since March, electricity demand continued to weaken globally with extended lockdowns, China production capacity recovered its strength.
- Global recession saw price drop as demand quickly evaporated. Coal price took a major drop through April touching lowest level seen since early 2016.
- Key price metrics:
 - ITM ASP: US\$53/t* (-11% QoQ)
 - CEY ASP: A\$82/t* (-5% QoQ)
 - NEX (August 7th, 2020)**: US\$48/t

Note: * Includes post shipment price adjustments as well as traded coal

** The Newcastle Export Index (previously known as the Barlow Jonker Index – BJI)

Chinese domestic coal price bounce back: increased demand

CHINA COAL INDEX (5,500 KCAL) – FOB PRICE 1H20 VS. 1H19

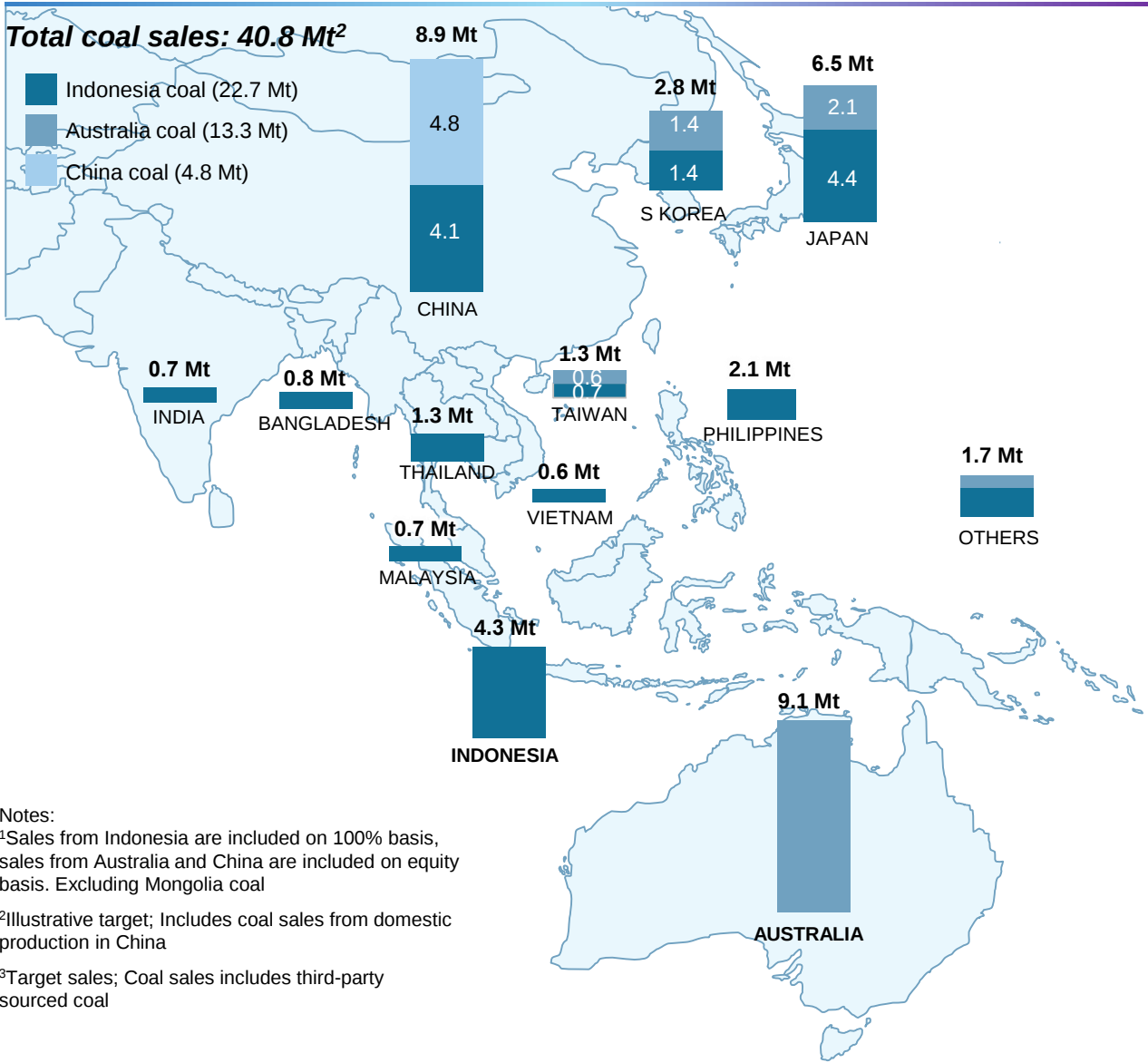


COMMENTS

- Thermal coal price in China has rebounded to pre-Covid-19 levels in 2019.
- Coal import control measures which have been implemented since January 2020 pushed up the domestic price but subdued imported coal prices, resulting in about RMB 200/t gap in July.
- China domestic coal price declined in July due to the flood caused by heavy rainfall in Southern China resulting in lower coal demand in the region.
- Coal prices are expected to rise following the report from China Meteorological Administration that the rainfall is nearing the end.

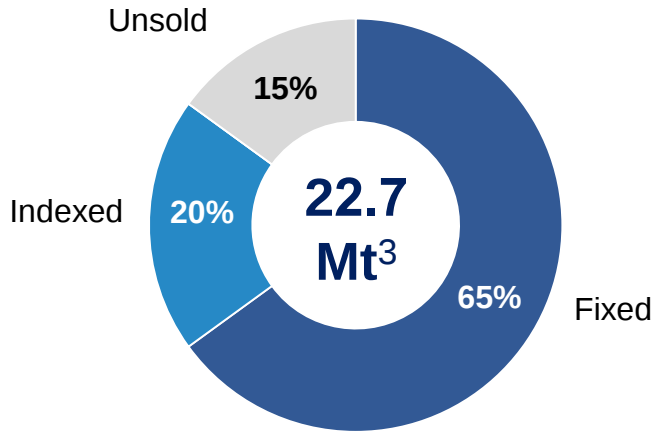
Banpu Mining: group coal sales and pricing status 2020e

COAL SALES¹ SOURCE – DESTINATION ANALYSIS

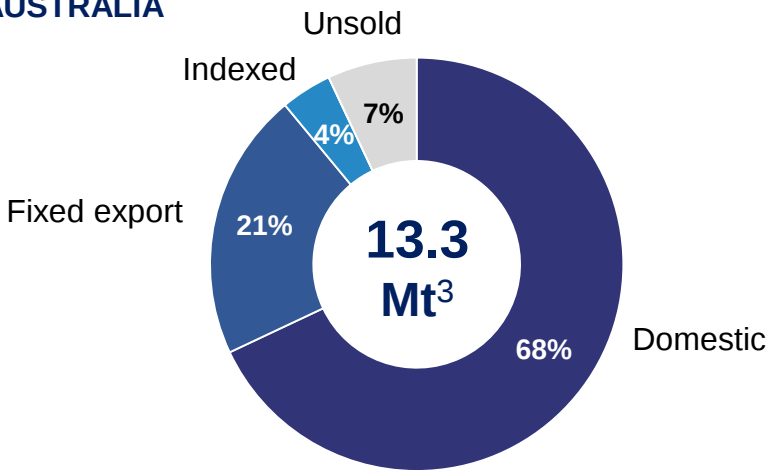


COAL SALES PRICING STATUS

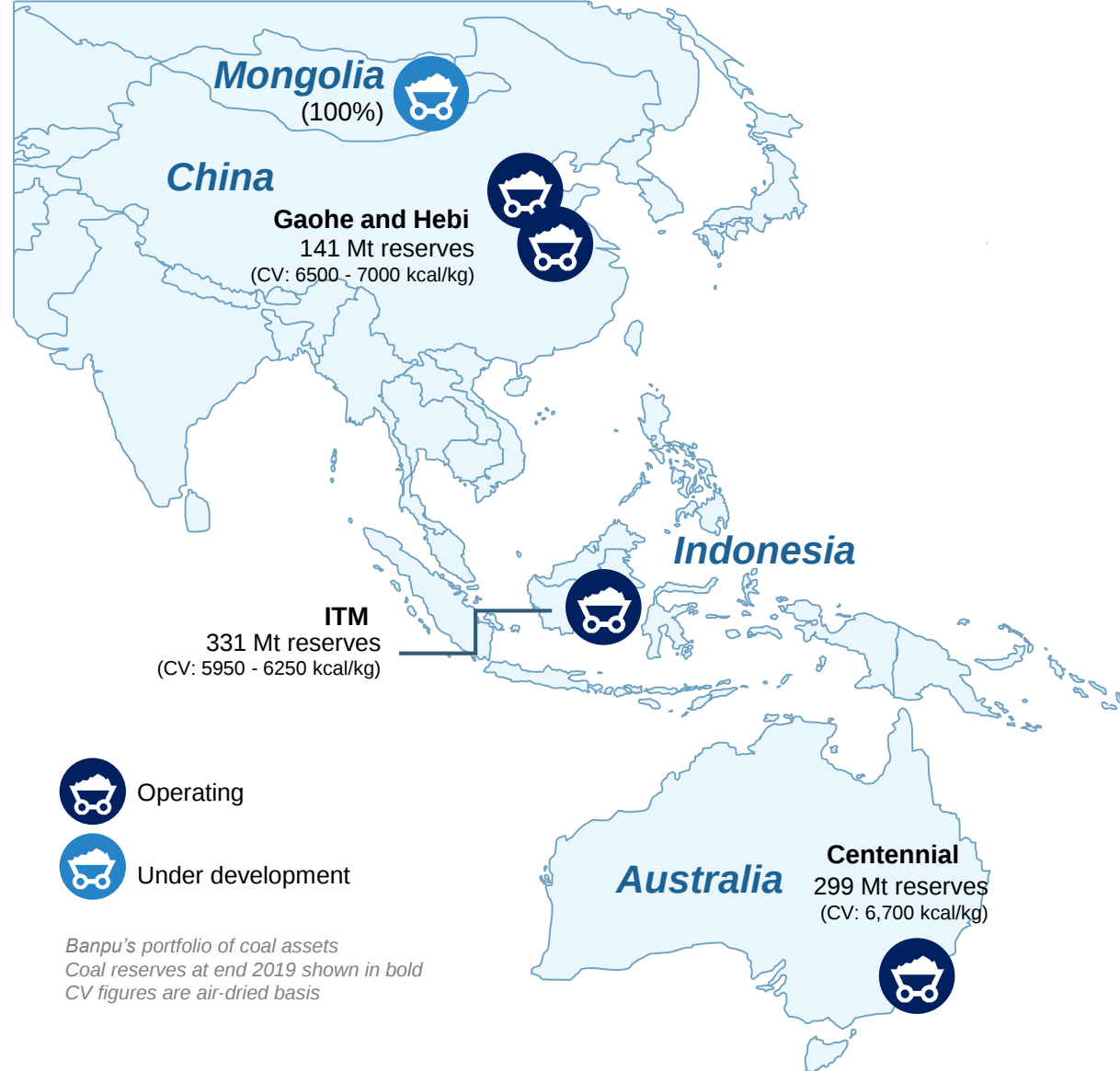
INDONESIA



AUSTRALIA



Banpu Mining: 2Q20 highlights



Production volume*

10.6 Mt

+6% QoQ

Sales volume*

11.1 Mt

+3% QoQ

EBITDA

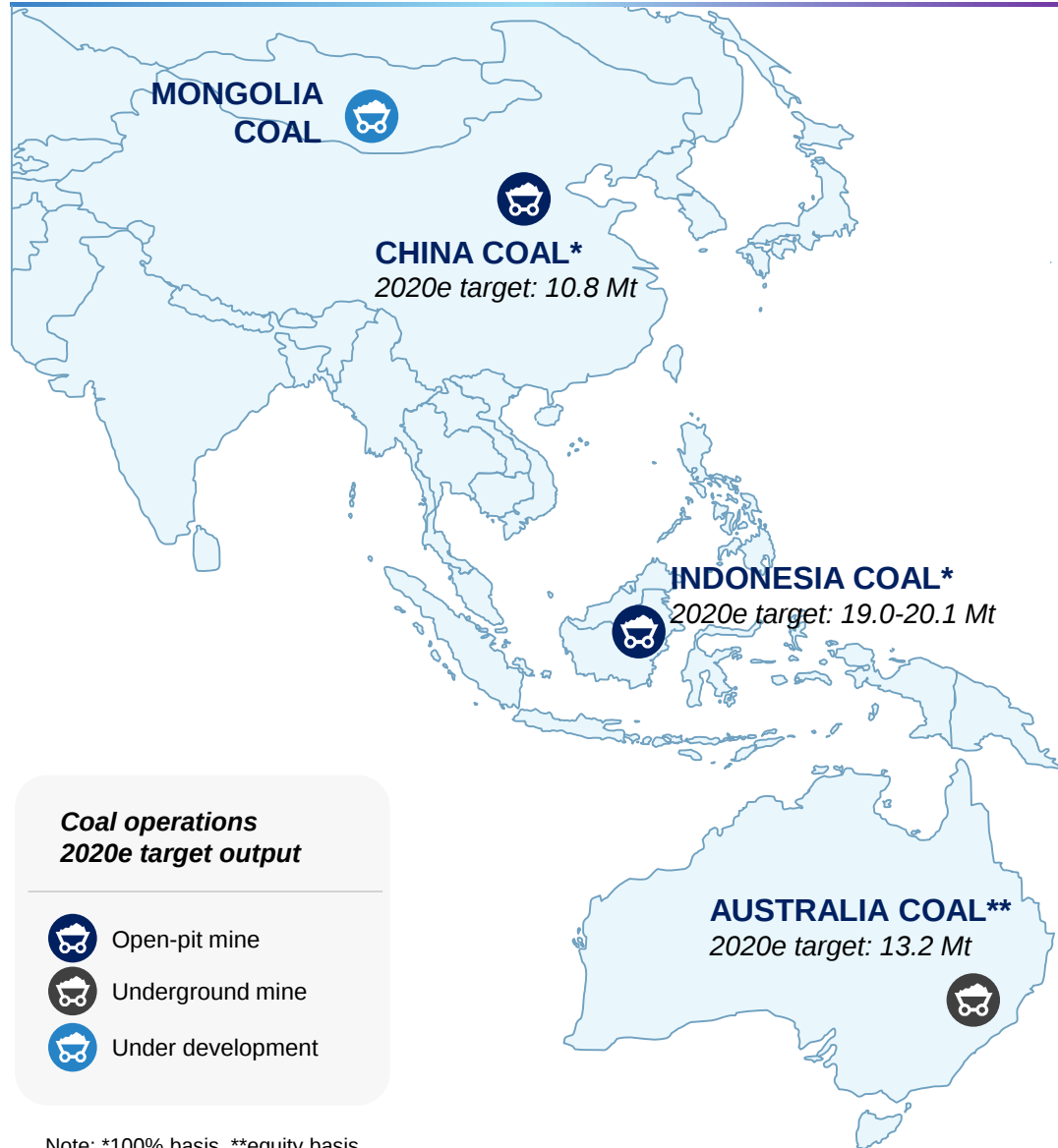
\$37 M

-65% QoQ

Note: *Based on 100% basis

Banpu Mining: operational summary

2020E COAL OUTPUT



ROM PRODUCTION AND KEY UPDATES

TOTAL COAL OUTPUT (Mt)

10.6 | 10.0 | 10.6 | 11.0
+6% QoQ
+0% YoY

AUSTRALIA COAL**

2.2 | 3.2 | 3.3 | 3.0
+3% QoQ
+50% YoY

INDONESIA COAL*

5.6 | 4.5 | 4.4 | 5.1
-2% QoQ
-22% YoY

CHINA & MONGOLIA COAL*

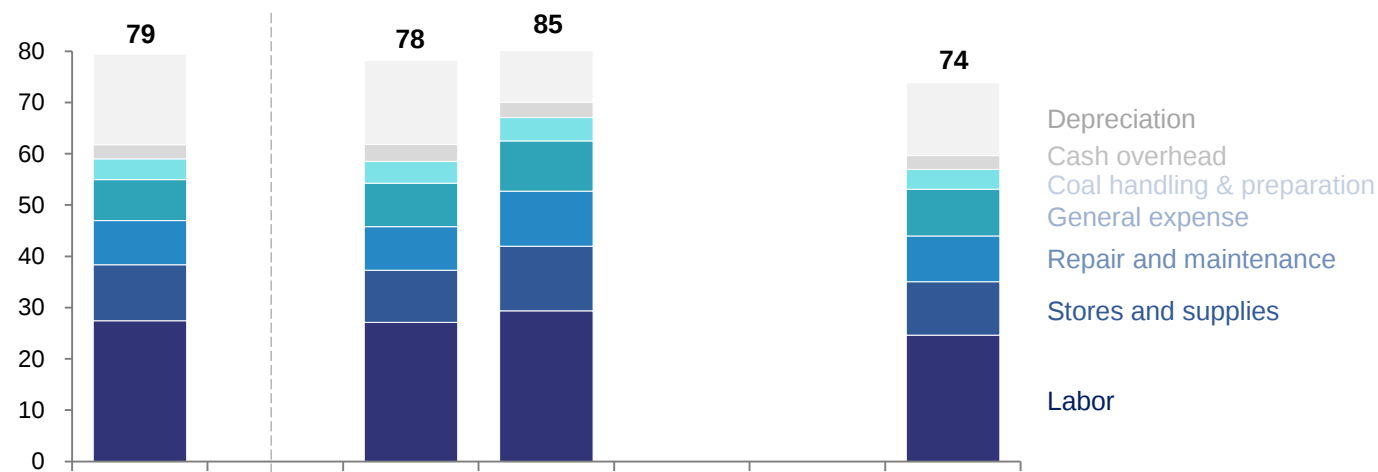
2.8 | 2.3 | 2.9 | 2.9
+26% QoQ
+4% YoY

- Western operations continued to show major improvement in output, compared to last quarter
- Northern operations production down, due to poor mining conditions and LW changeover
- All mines achieved target production with exception of Jorong mine, slightly below target output due to heavy rainfall
- Gaohe: Higher production and sales in Q2 as Covid-19 mitigated and production gradually return to normal in Q2.
- Hebi: Stable production in Q2 as the longwall panel 2315 returns to normal production.

Banpu Mining: average production cost breakdown

AUSTRALIAN COAL – AVERAGE PRODUCTION COST¹

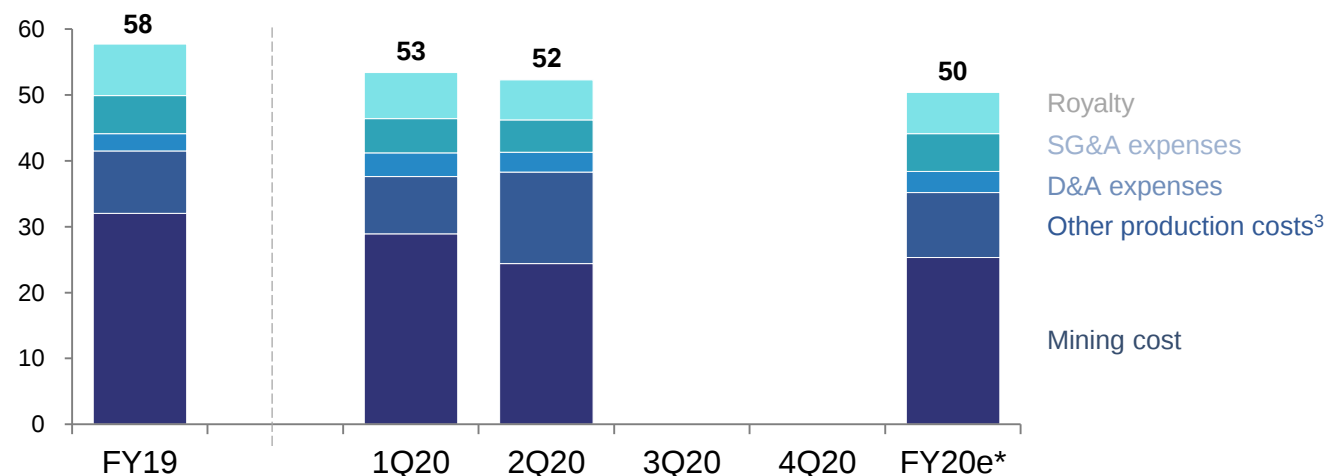
Unit: A\$/t



- Costs impacted by mining conditions and more frequent longwall relocations.
- Higher amortisation as a result of Springvale decision to relocate LW earlier to improve production certainty.
- Continued cost reduction in contractor labour and overheads is expected to further drive costs down

INDONESIAN COAL – AVERAGE TOTAL COST²

Unit: US\$/t



- Average total cost reduced further due to lower mining cost from lower fuel price and lower royalty in 2Q20.
- Progressing on to reduce average total cost for the whole year to target \$50/t



COST REDUCTION

- CEY: target to lower labour, supplier and corporate overhead costs
 - ITM: aim to reduce overall cost by \$8/t from 2019 level through mine plan optimization, lower fuel and overhead costs
 - China: continue implementation of 20% cost reduction
-



CAPEX RATIONALIZATION

- Deferment and cancellation of non-core activities
 - CEY: reduce exploration costs through deferment of non-critical exploration expenditure
 - ITM: capex rationalization target to lower capex by 30% from initially planned budget
-



EFFICIENCY IMPROVEMENT

- Implement digital transformation across mining sites to improve productivity
 - China: launched Intelligent Mine project implementing automation, safety monitoring and ERP systems to improve operation safety and stability
-

01

Highlights
2Q20

02

Financial
Summary

03

Energy
Resources

04

**Energy
Generation**

05

Energy
Technology

Banpu Energy Generation: 3.2 GW committed capacity



11 countries
operations across Asia



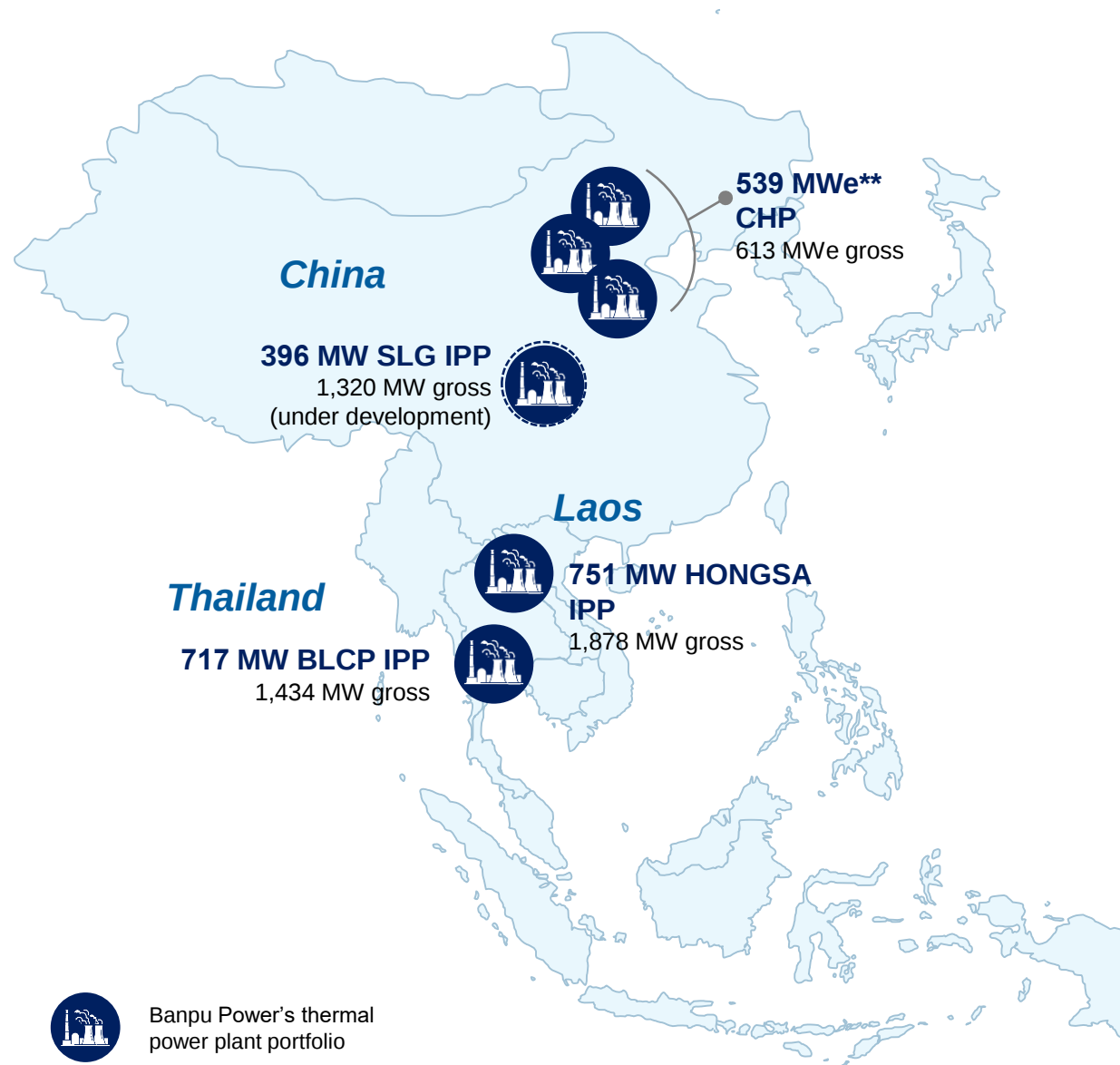
2.4 GW
committed thermal
equity capacity*



0.8 GW
committed renewables
equity capacity**

*Based on Banpu Power's equity capacity, **Banpu Renewable Power businesses are owned by Banpu Next (50% Banpu PLC, 50% Banpu Power)

Banpu Thermal Power: 2Q20 highlights



EBITDA

\$33 M

-40% QoQ

Achieved EAF

100%

at BLCP

63%

at Hongsa

Project update

83%

completed for SLG project

*Based on Banpu Power's equity capacity, ** MW equivalent

Banpu Thermal Power: 2Q20 updates



BLCP

Smooth operation with strong dispatch and consistent high availability & reliability

- Continue its high plant efficiency and high plant reliability with EAF* at 99.5%
- EBITDA of THB 1.0 bn, significant improvement with 8% QoQ and 4% YoY
- Profit contribution of THB 0.5 bn, +41% YoY

Hongsa

Extended planned maintenance with intense inspection at unit 3 ensuring sustainable long-term performance

- Operational performance result with EAF of 63% resulted from maintenance of unit 3
- EBITDA of THB 2.2 bn, -38% QoQ and -41% YoY
- Profit contribution of THB 0.4 bn, impacted by major overhaul at unit 3 and FX loss

China CHP

Competitive coal price with higher power & steam demand as extended heating period and higher demand from business recovery

- Reported revenue of RMB 235 M, improved +3% YoY

SLG

- Construction progress achieved 83%
- Expect synchronize by the end of 2020 after transmission line construction completion

Banpu Thermal Power: business near term growth, SLG project



1,320 MW
CAPACITY

396 MW on equity basis



83%

COMPLETION

with expected COD in 4Q20



**Ultra-supercritical
technology**

turbine generator and
pipelines installed

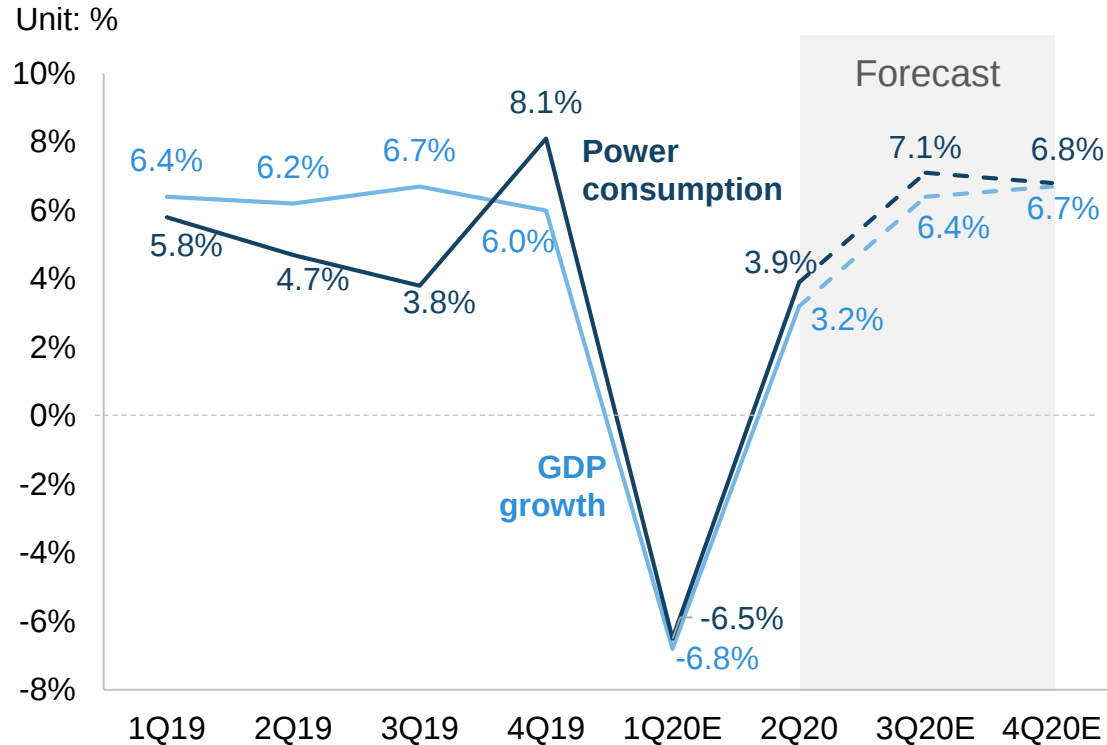


**Back energization
with 1000KV
transmission line**

expected by 3Q20

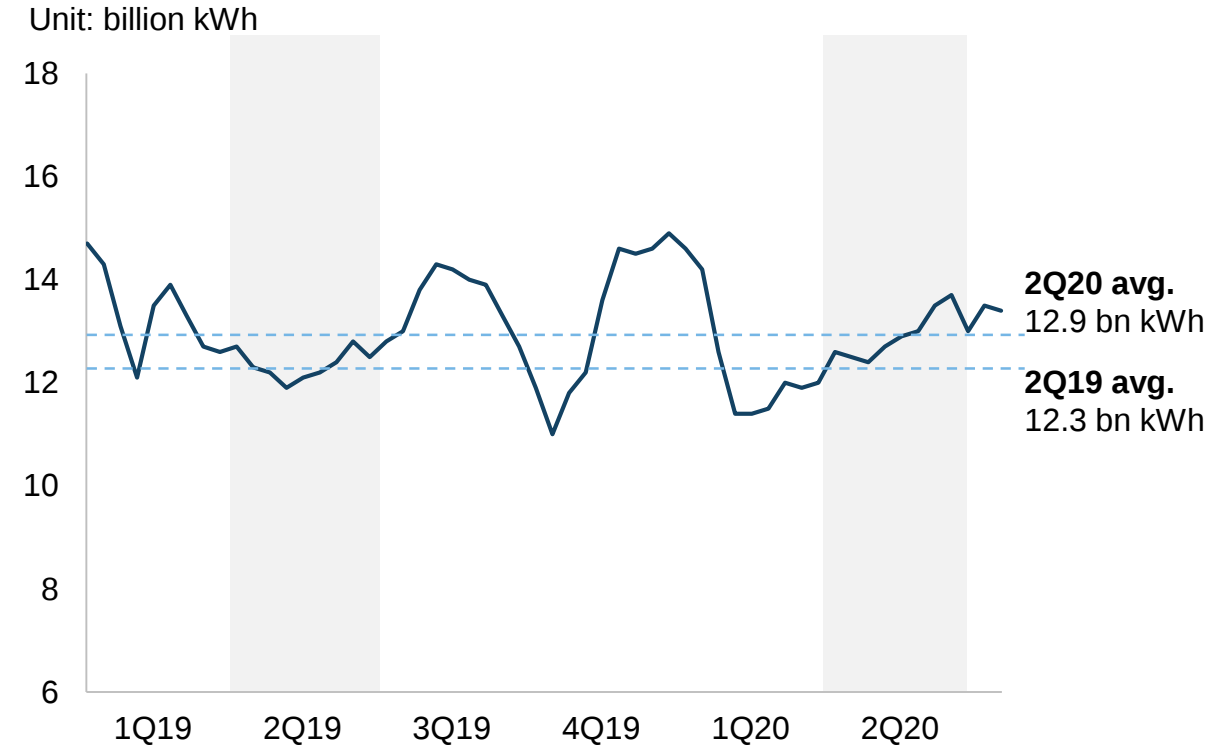
China power market continues to recover with rebound in GDP

CHINESE GDP AND POWER CONSUMPTION



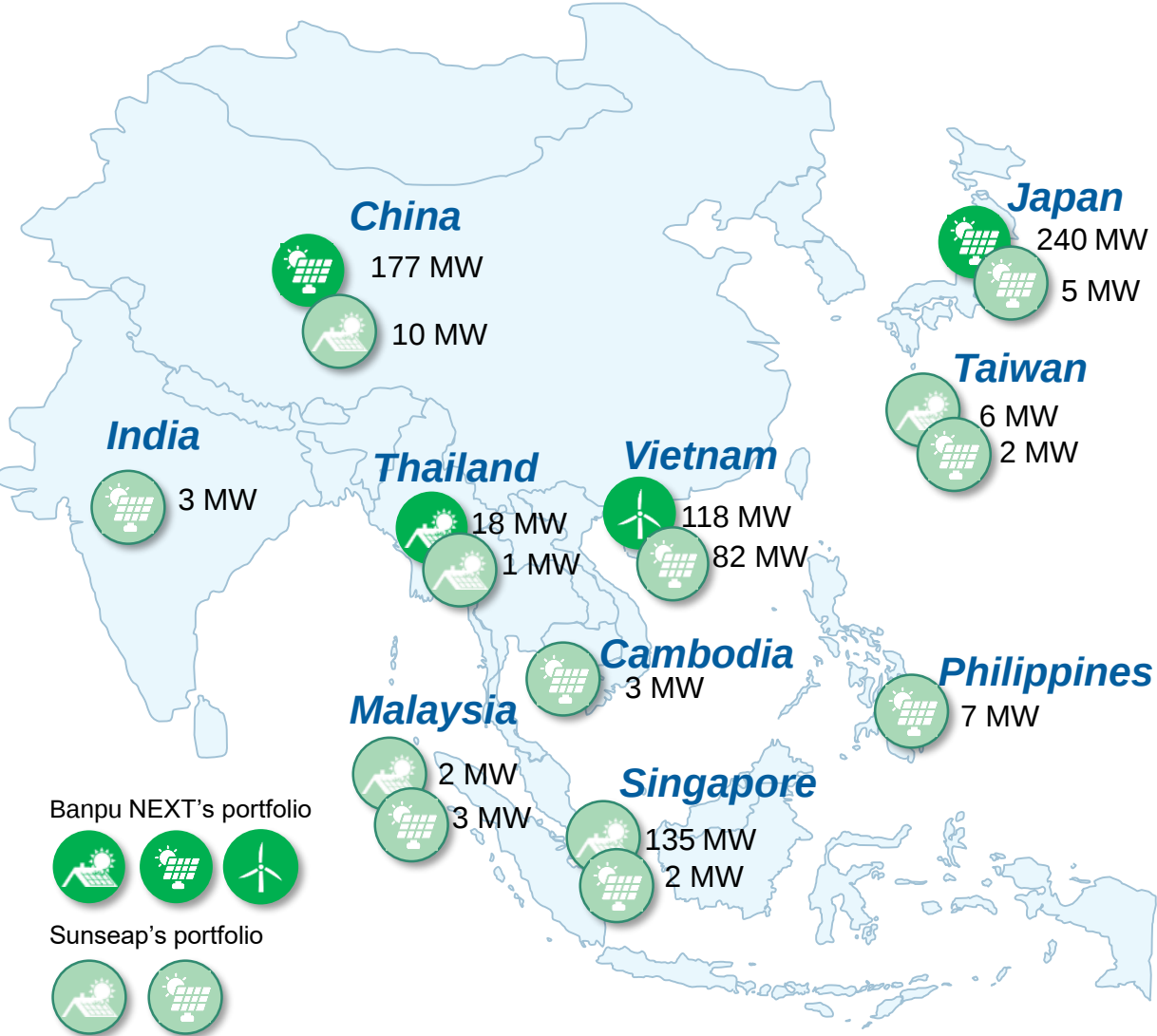
- China's economy rebounded in 2Q20 resulting in a strong recovery of the power consumption
- Power consumption is expected to continue to recover in 3Q20 and 4Q20 in line with GDP growth

CHINA COAL-FIRED POWER GENERATION



- China's power generation recovered in 2Q20 from February low and is currently higher than 2Q19 level
- Attributable factors include increase in industrial activities as factories gradually resume their operations and weak hydropower generation in April

Banpu Renewable Power: diversified Asia-Pacific portfolio*



814 MW
committed renewables
capacity across Asia



524 MW
committed solar
power capacity



172 MW
committed solar
rooftop capacity



118 MW
committed wind
capacity

*Banpu Renewable Power businesses are owned by Banpu Next (50% Banpu PLC, 50% Banpu Power)

Banpu Renewable Power: 2Q20 updates



China Solar

Higher power sold due to good weather conditions and more stabilize from Covid-19 situation

- Average capacity factor reported at 17%, +5% QoQ
- Power sold increased by 43% QoQ
- Reported revenue of RMB 56 M, +40% QoQ and +12% YoY

Japan Solar

Higher average capacity factor and more power sold due to better weather conditions

- Average capacity factor reported at 18%, +7% QoQ
- Power sold reported at 43 GWh, +59% QoQ with additional capacity from Kurokawa which COD in December 2019

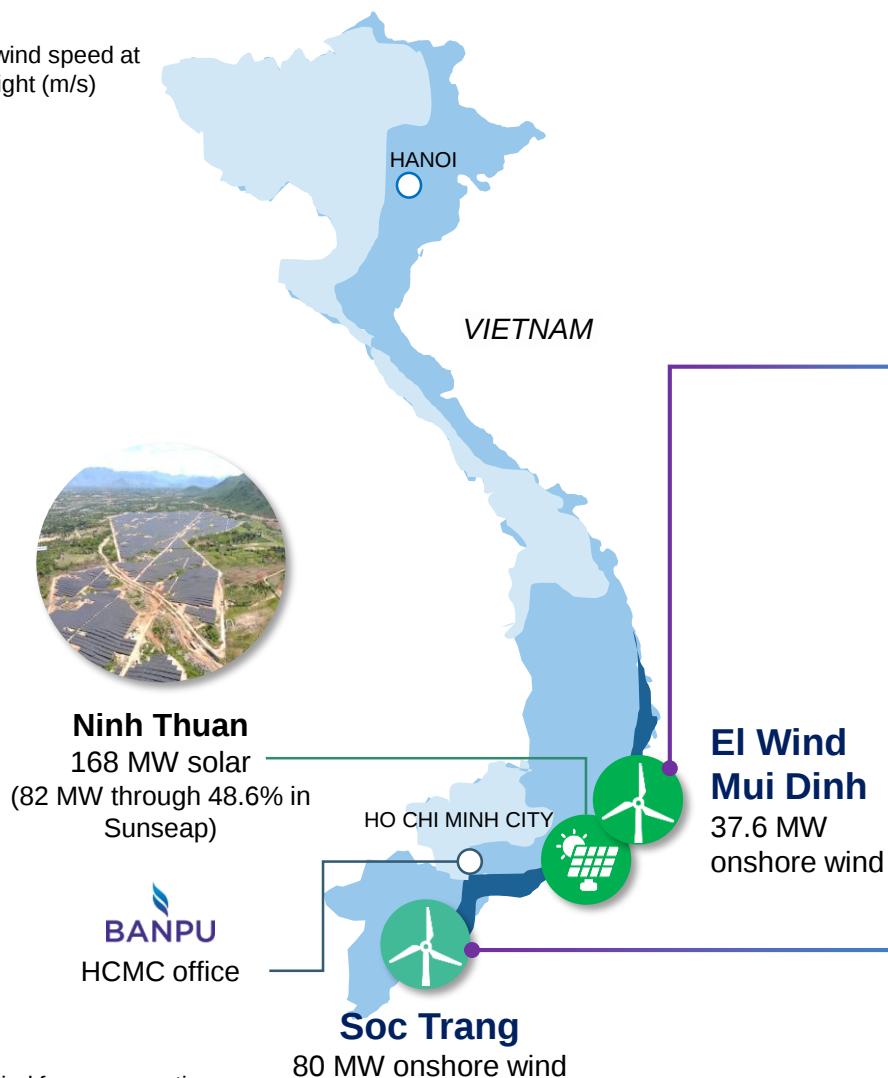
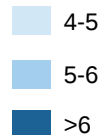
Vietnam Wind

Additional capacity from new acquisition of operating Mui Dinh wind farm of 37.6 MW

- Immediate earning upside once the deal is completed as expected in 4Q20
- Project Soc Trang phase 1 continue its construction with COD shifting to 1H21 as it was unable to transport equipment to site area due to Covid-19 situation while continue to develop the remaining phases to receive feasibility study approval

Banpu Renewable Power: growing portfolio in Vietnam

Average wind speed at
100 m height (m/s)



El Wind Mui Dinh (37.6 MW) – operating asset



Operating
since 23 April 2019



Offtake agreement
with Vietnam Electricity (EVN)
under 20-year PPA



Grid connection
Connected to National Grid
with 110 kV transmission



Feed-in-Tariff
Attractive tariff of US cents 8.5/kWh

Soc Trang project (80 MW) – under construction

16%

30 MW in phase 1
Construction progress as of June;
COD 1H21



50 MW in phase 2 & 3
Pre-feasibility study result
submitted; COD 2021

-  Wind farm – operating
-  Wind farm – under construction
-  Solar farm – operating



01

Highlights
2Q20

02

Financial
Summary

03

Energy
Resources

04

Energy
Generation

05

**Energy
Technology**

Banpu's emerging downstream smart energy ecosystem

SMART ENERGY SOLUTIONS

ENERGY SOLUTIONS

Energy sales and saving



E-MOBILITY SOLUTIONS

Transport, fleet management and services



TECH 4.0 ENABLERS



BLOCKCHAIN



BIG DATA ANALYTICS



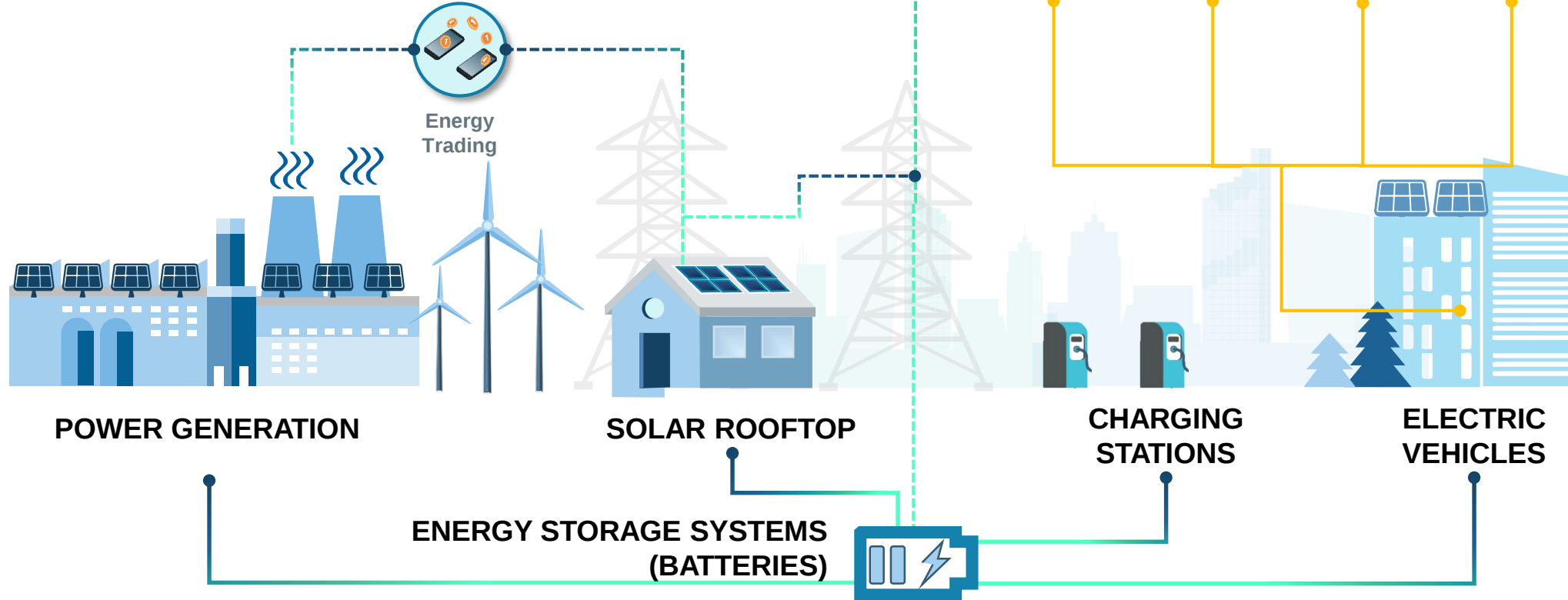
CLOUD COMPUTING



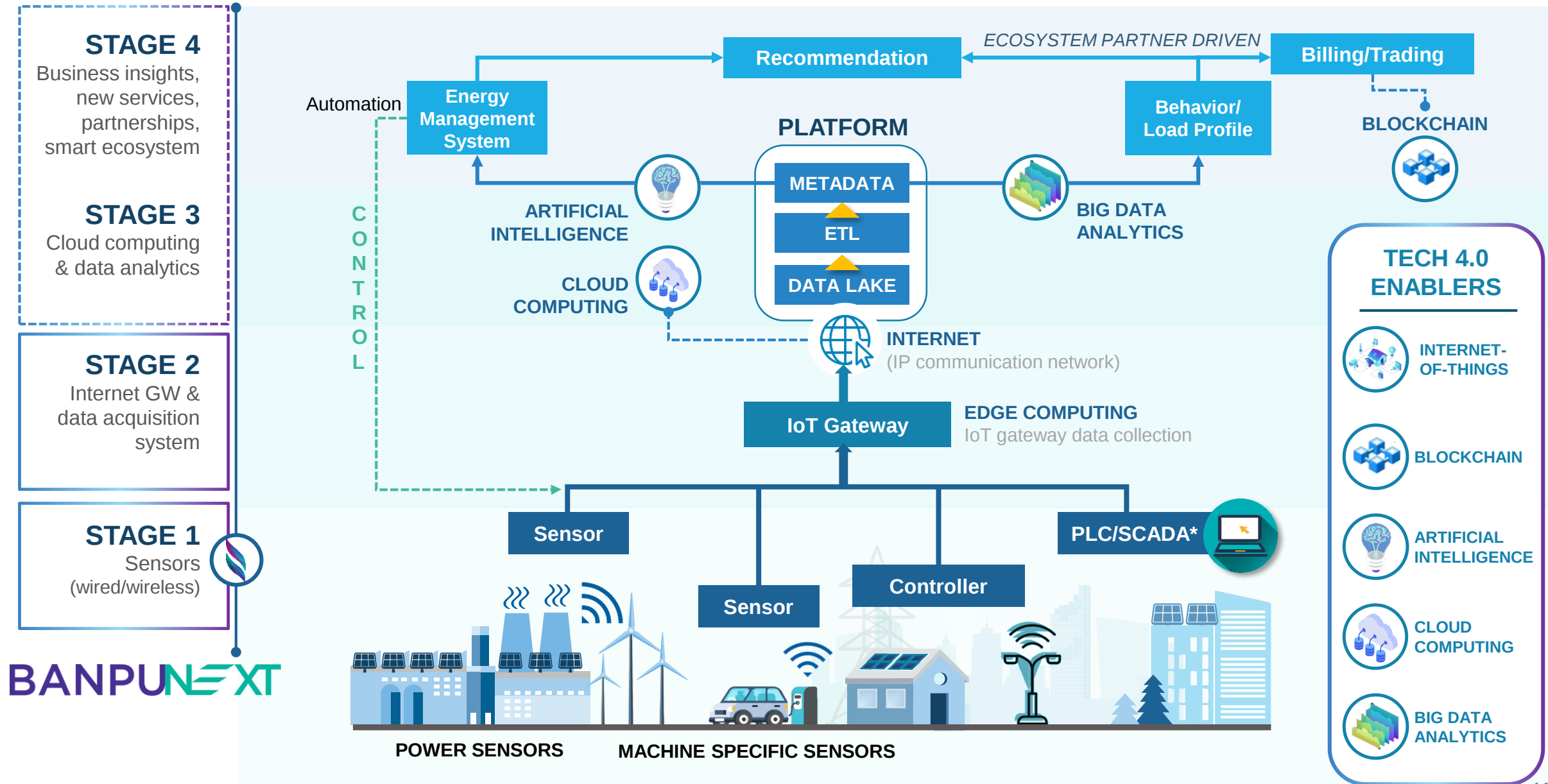
ARTIFICIAL INTELLIGENCE



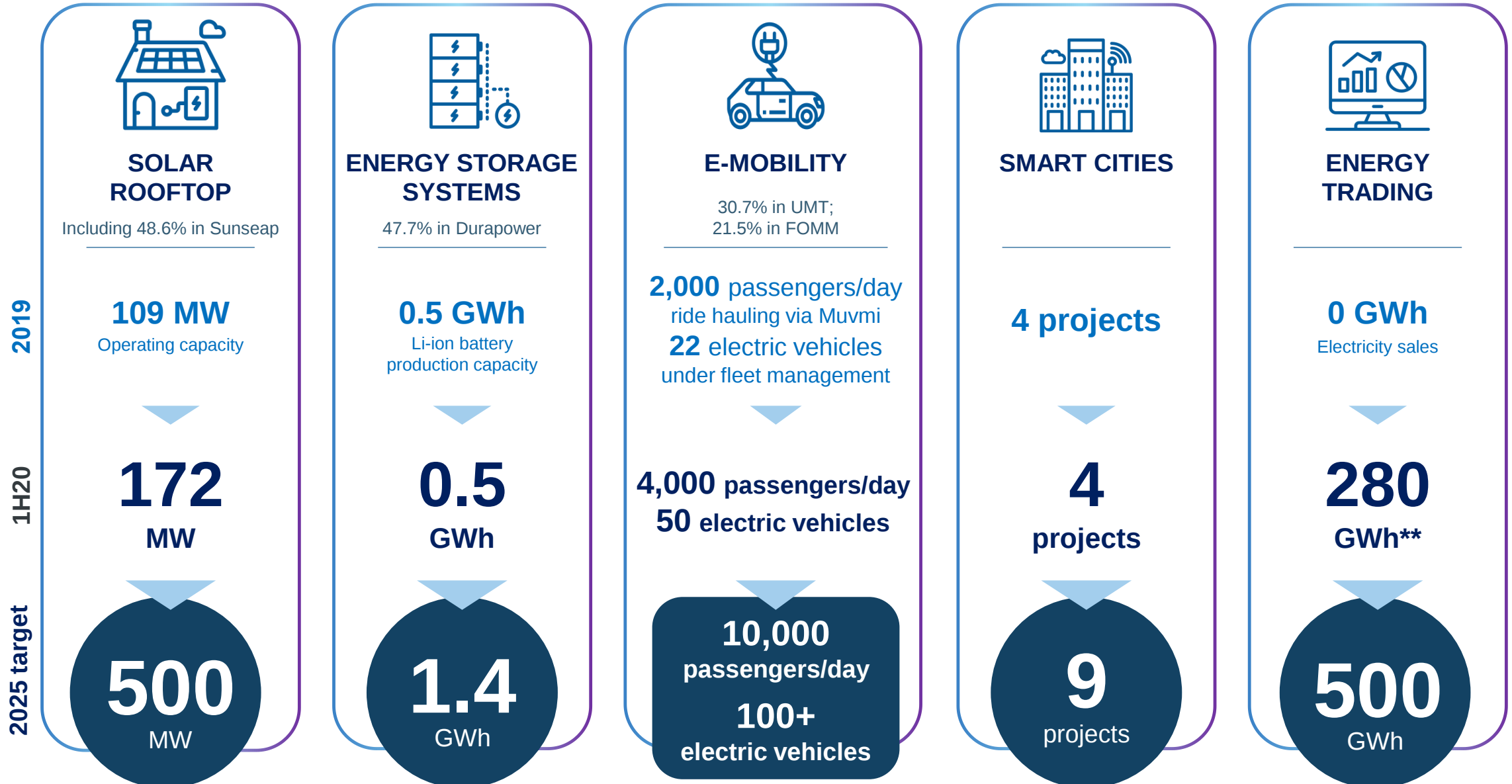
INTERNET-OF-THINGS



Our vision: Banpu's future smart energy architecture



Banpu Energy Technology: growing portfolio



*Based on 100% Banpu NEXT. Banpu NEXT is 50% owned by Banpu and 50% by Banpu Power **2020 target

Banpu Energy Technology 2Q20: updates



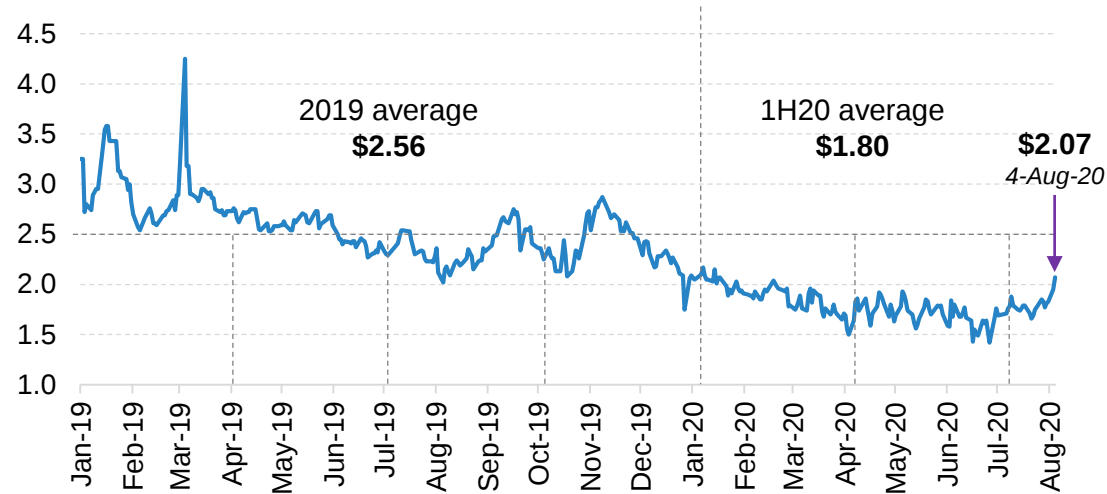


APPENDIX

U.S. gas market update

AVERAGE HENRY HUB PRICE AS OF JULY 2020

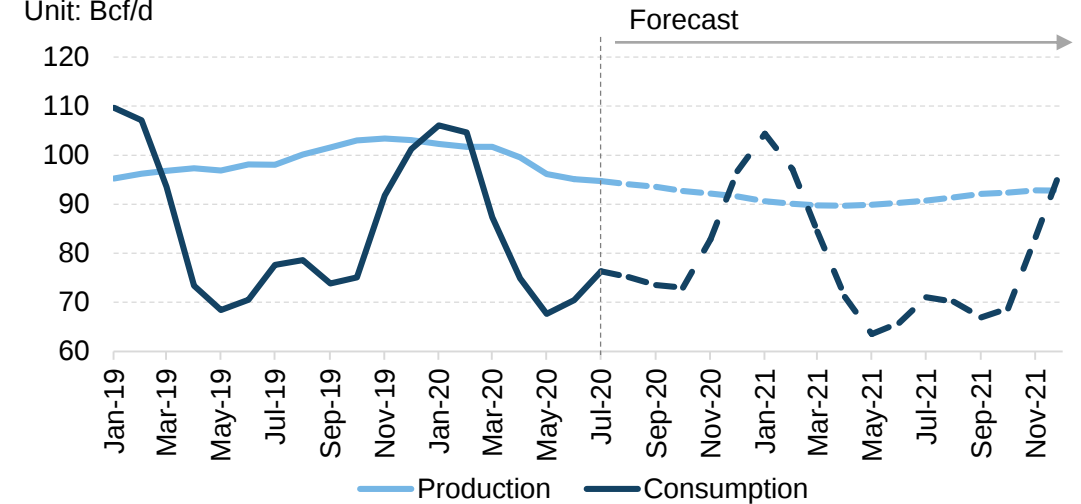
Unit: US\$/MMBtu



- **Gas Price:** Henry Hub price average around \$1.80 per MMBtu in 1H20 which was lower than the LTM average of around \$2.56 per MMBtu
- Weekly storage injections so far during April-October injection season have been close to five-year average as falling production has been offset by falling demand from industrial sector and LNG exports
- **Outlook:** Production is expected to decrease through 2H20 and 1H21 as a result of decline in drilling activity and production curtailments reflecting falling natural gas prices. EIA forecasts Henry Hub to average around \$1.93/MMBtu in 2020, subsequently increasing to \$3.10/MMBtu in 2021

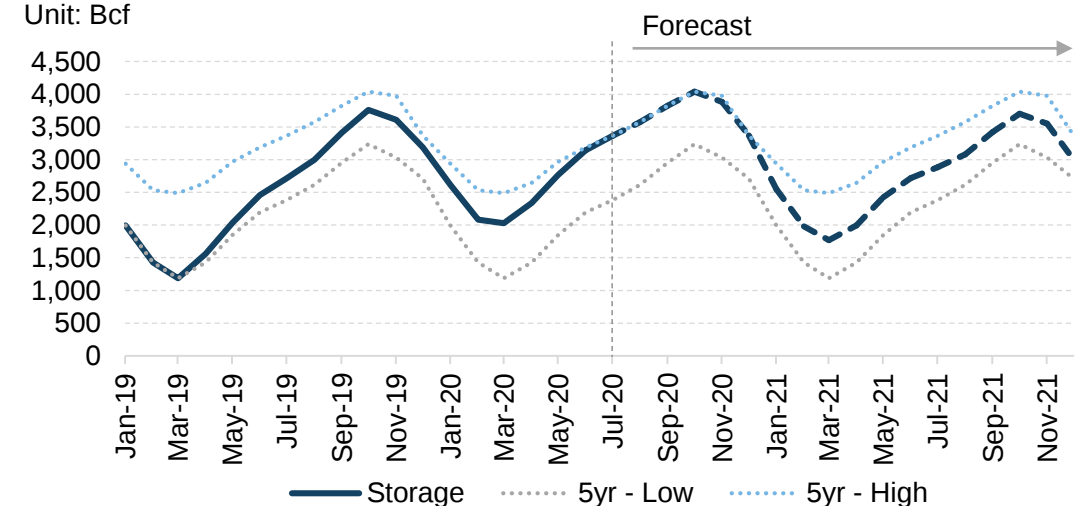
U.S. TOTAL NATURAL GAS PRODUCTION – CONSUMPTION

Unit: Bcf/d



U.S. STORAGE LEVEL

Unit: Bcf



Natural gas: reserve and production term



Reserve

DEFINITION

- Natural Gas Reserve Definitions in the US are defined by the SEC and are the same as used for oil:
 - Proved Developed Producing (PDP)
 - Proved Developed Not Producing (PDNP)
 - Proved Undeveloped (adjacent to a producing well) (PUD)
 - Probable (in the same area as production but not adjacent) (PROB)
 - Possible (contingent on additional drilling) (POSS)
- Reserves have to be economically viable.



Production

PRODUCTION UNIT

- In the US, production is measured in 1000 cubic feet (MCF)
 - 1000 MCF = 1 MMCF
 - 1,000,000 MCF = 1 BCF
 - 1000 BCF = 1 TCF
 - 1 MCF = 28.3 Meters³
 - 1 MCF = 1.0 Million BTU (MMBTU) or Decatherms (dry gas)
 - 1 BCF = 1.0 Trillion BTU
 - 1 Meter³ = 35.3 MCF
 - 1 Billion Meters³ = 35.3 BCF

2H20 indicative guidance

ILLUSTRATIVE AND INDICATIVE ONLY

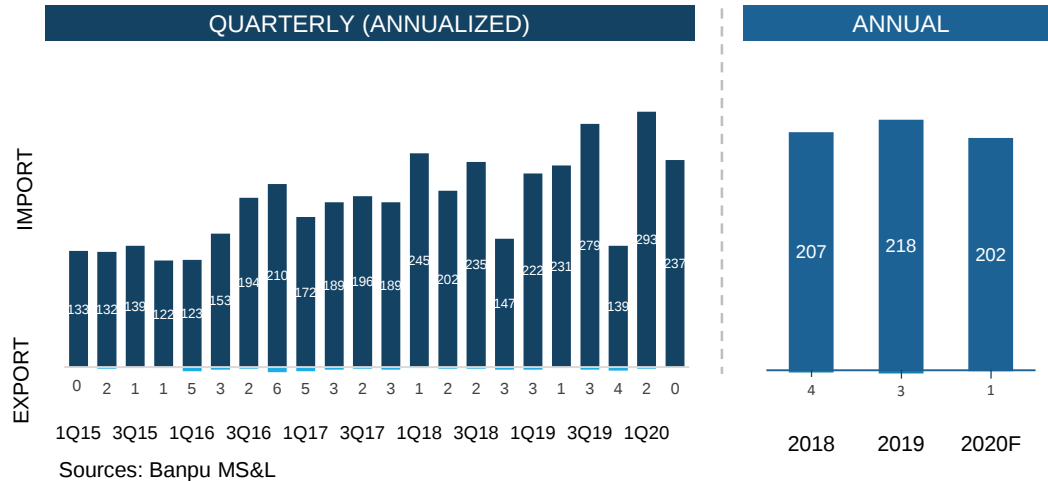
UNIT GUIDANCE (US\$/MCF)		COMMENTS
REVENUE		
<i>Reserves (Bcf)</i>	<i>1,250</i>	
<i>Production volume (Mmcfd)</i>	<i>170-200</i>	
Average differential to Henry Hub	\$0.20 - \$0.35	Difference selling points and Henry Hub (NYMEX basis)
G&C costs	\$0.45 - \$0.60	Gathering and compression costs (to intrastate pipelines)
Transportation	\$0.20	
Pipeline revenue	\$0.10 - \$0.15	Applicable to Chaffee Corners volume only
COSTS		
Lease operating costs	\$0.18 - \$0.22	Main component of operating costs
G&A	\$0.25 - \$0.35	General and administration costs
Taxes	21%	Currently benefit from tax shield due to accelerated DD&A
DD&A	\$0.80 - \$0.95	Depreciation, depletion and amortization
Drilling and completion costs	\$0.80 - \$1.20	Costs incurred to drill and to make the well ready for production

NET BACK

China: import quota uncertainty stifled seaborn coal imports

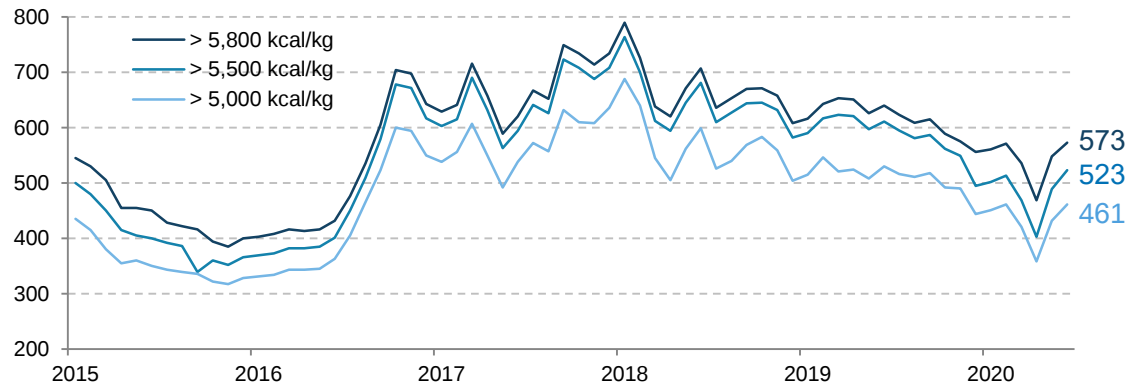
CHINA THERMAL COAL IMPORTS/EXPORTS*

Unit: Mt



CHINA DOMESTIC COAL PRICES

Unit: RMB/t



Note: *Includes lignite but excludes anthracite imports/exports
Source: www.sxcoal.com/cn 13 July 2020

2Q20

- China has lifted the containment measurement across the country in April, thermal coal demand returned to growth in April and jumped in May with the strong resurgence in economic activity.
- Beside the economic revival, higher than normal temperatures but lower than normal rainfall was also supported coal burn in Q2, driving coal burn returns to last year's levels.
- Domestic coal supply was tighter as supply was curtailed ahead of National Congress meeting in May resulted in rising domestic coal prices.
- Thermal coal import remained strong on the year despite tighter import restrictions which indicated that buyers try to import cheap coal as much as they can before government not allow them to do as imported coal was cheaper than domestic coal.
- However, Import restriction continues to pressure seaborne coal prices.
- China announced a stimulus package to improve the economy post-coronavirus but we do not expect the stimulus to have a large impact on the seaborne market as the government will likely act to control both domestic coal prices and imports.

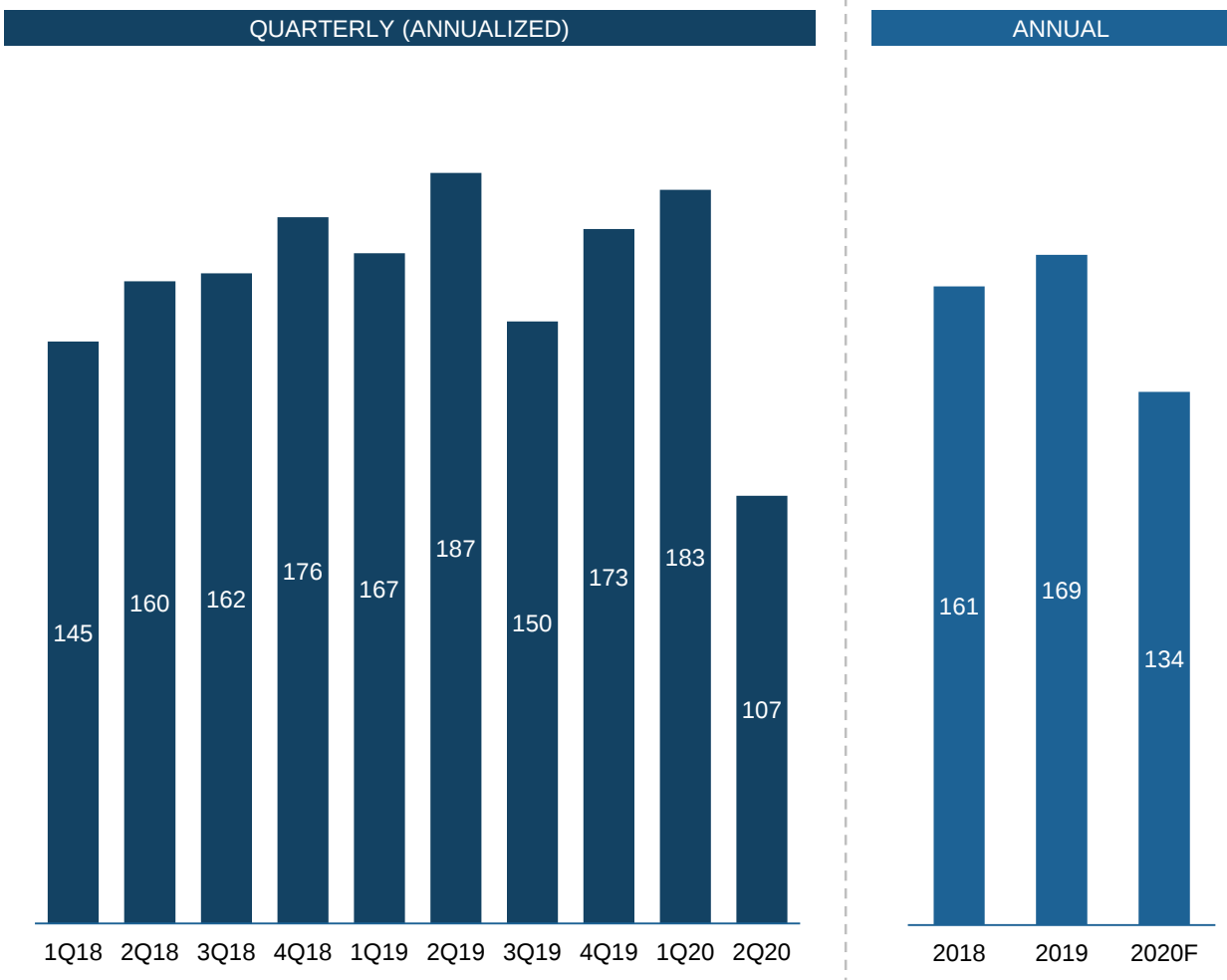
OUTLOOK

- Heavy rain in many southern regions will dampen near-term coal demand.
- China's economic planner, NDRC, urged major coal mining regions to boost production to meet strong summer demand in Q3.
- Utility companies in China are running out of 2020 thermal coal import quotas and are shifting towards domestic coal to cover their upcoming summer requirements.
- NDRC may loosen import restrictions during summer peak demand if domestic supply could not fill the gap.
- Much less stringent approach of government authorities to recent outbreaks in the city suggests that the government will try to support economic growth by not imposing blanket wide-scale lockdown measures.

India: lockdown easing but coal demand remains weak

INDIA THERMAL COAL IMPORTS*

Unit: Mt



Note: *Includes lignite grade imports
Source: Commodity Insights, Banpu MS&L

2Q20

- Partially lifted coronavirus restrictions earlier in June but economic activity and coal demand remains subdued.
- Total power generation in Q2-2020 was down 8% QoQ and down by 18% versus Q2 last year. However, coal-fired generation in Q2-2020 dropped by 18% QoQ and 25% year on year amid rising gas and hydro generation.
- Supply chain disruptions, muted demand, workforce and liquidity issues led to a decline in coal demand in non-power sector.
- Huge inventories at the end of Q1 and lower demand post Covid-19 outbreak, led to 12% decline in production and 21% decline in dispatches of Coal India Limited (CIL) in Q2 over last year.
- With weak demand from power producers, CIL offers more coal to non-power consumers.
- Thermal coal imports fell sharply in Q2 amid lower power sector demand with total Q2 import was 27 Mt, down from 46 Mt in Q1 and from 47 Mt in Q2 last year.
- Devaluation of Indian Rupee kept buyers away from imports.

Outlook

- A stronger-than-expected monsoon period will likely have an impact on coal imports in Q3.
- Continuing pandemic in the country halted further growth in power generation as some states are considering tightening measures to control the spread of the coronavirus which will curtail industrial activity and power consumption, hurting the outlook for coal imports.
- “Special Spot e-auction Scheme 2020 for Import Substitution” launched by CIL will allow buyers to procure coal at a highly competitive prices and will intensify import substitution.
- Indian government is emphasising more consumption of domestic coal by both the power and non-power sectors.

Coal quarterly output summary

AUSTRALIA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON EQUITY BASIS

Mines	CV (kcal/kg)*	2Q19	1Q20	2Q20	3Q20e
Western operations		0.8	1.6	1.8	1.4
Springvale	6,700	0.3	0.8	0.9	0.4
Clarence	6,700	0.4	0.4	0.5	0.6
Airly	6,700	0.2	0.4	0.4	0.4
Northern operations		1.4	1.7	1.5	1.6
Mandalong	6,700	1.0	1.4	1.2	1.2
Myuna	6,700	0.4	0.3	0.3	0.3
Total Australia coal		2.0	3.2	3.3	3.0

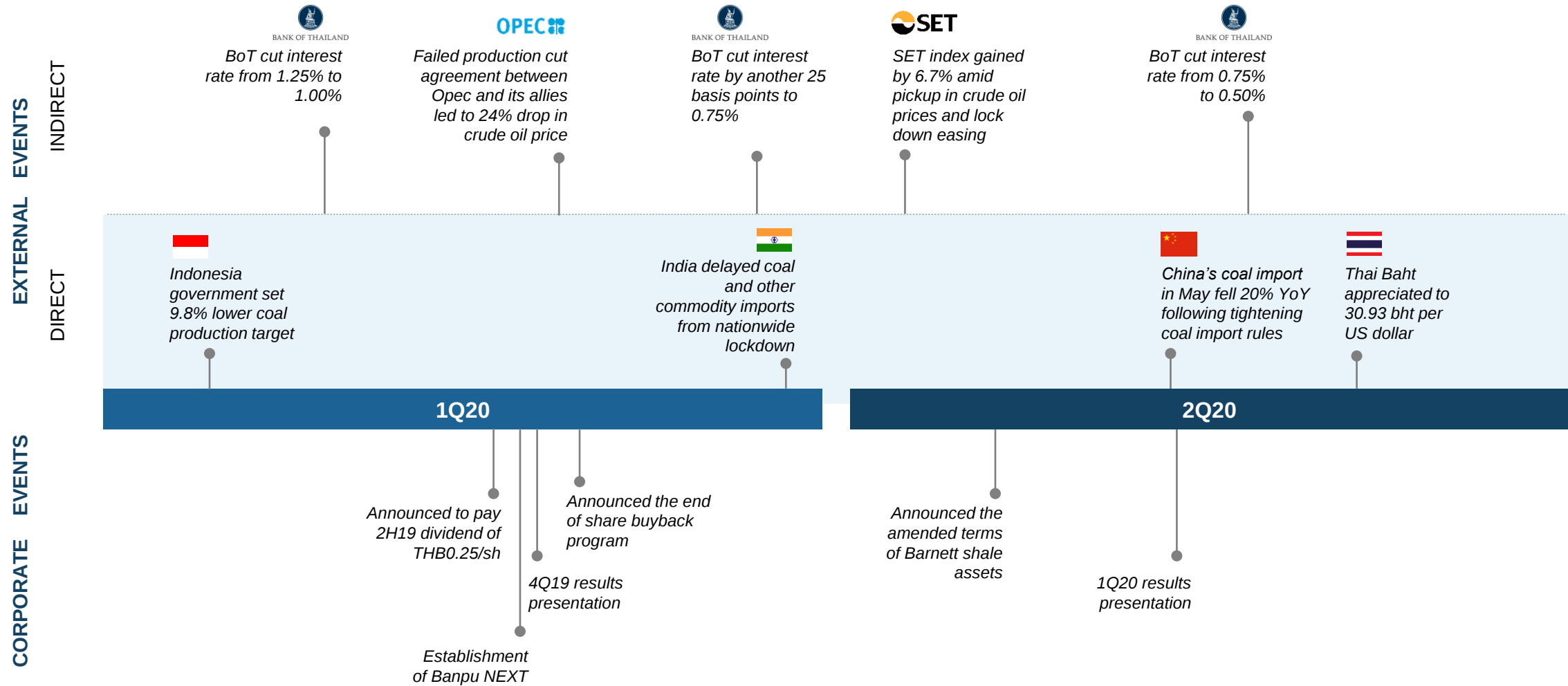
INDONESIA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON 100% BASIS

Mines	CV (kcal/kg)*	2Q19		1Q20		2Q20		3Q20e	
		Output (Mt)	Strip ratios (bcm/t)	Output (Mt)	Strip ratios (bcm/t)	Output (Mt)	Strip ratios (bcm/t)	Output (Mt)	Strip ratios (bcm/t)
Indominco – West block	5,950 – 6,250	0.4	26.1	0.5	12.8	0.7	16.9	0.8	13.1
Indominco – East block		2.7	9.3	2.0	9.4	1.5	9.6	1.4	10.7
Trubaindo	6,550 – 6,700	1.1	13.5	1.0	10.9	1.0	11.3	1.3	9.1
Bharinto		0.7	10.2	0.5	9.9	0.6	7.9	0.9	6.8
Kitadin-Embalut	5,800	0.3	10.1	0.2	16.4	0.4	10.9	0.4	11.0
Jorong	5,300	0.4	8.1	0.3	11.3	0.2	6.2	0.3	6.9
Total Indonesia coal		5.5	11.6	4.5	10.7	4.4	10.8	5.1	9.7

CHINA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON 100% BASIS

Mines	CV (kcal/kg)*	4Q19	1Q20	2Q20	3Q20e
Gaohe		2.6	2.0	2.6	2.5
Hebi		0.4	0.3	0.3	0.4
Total China coal		3.0	2.3	2.9	2.9

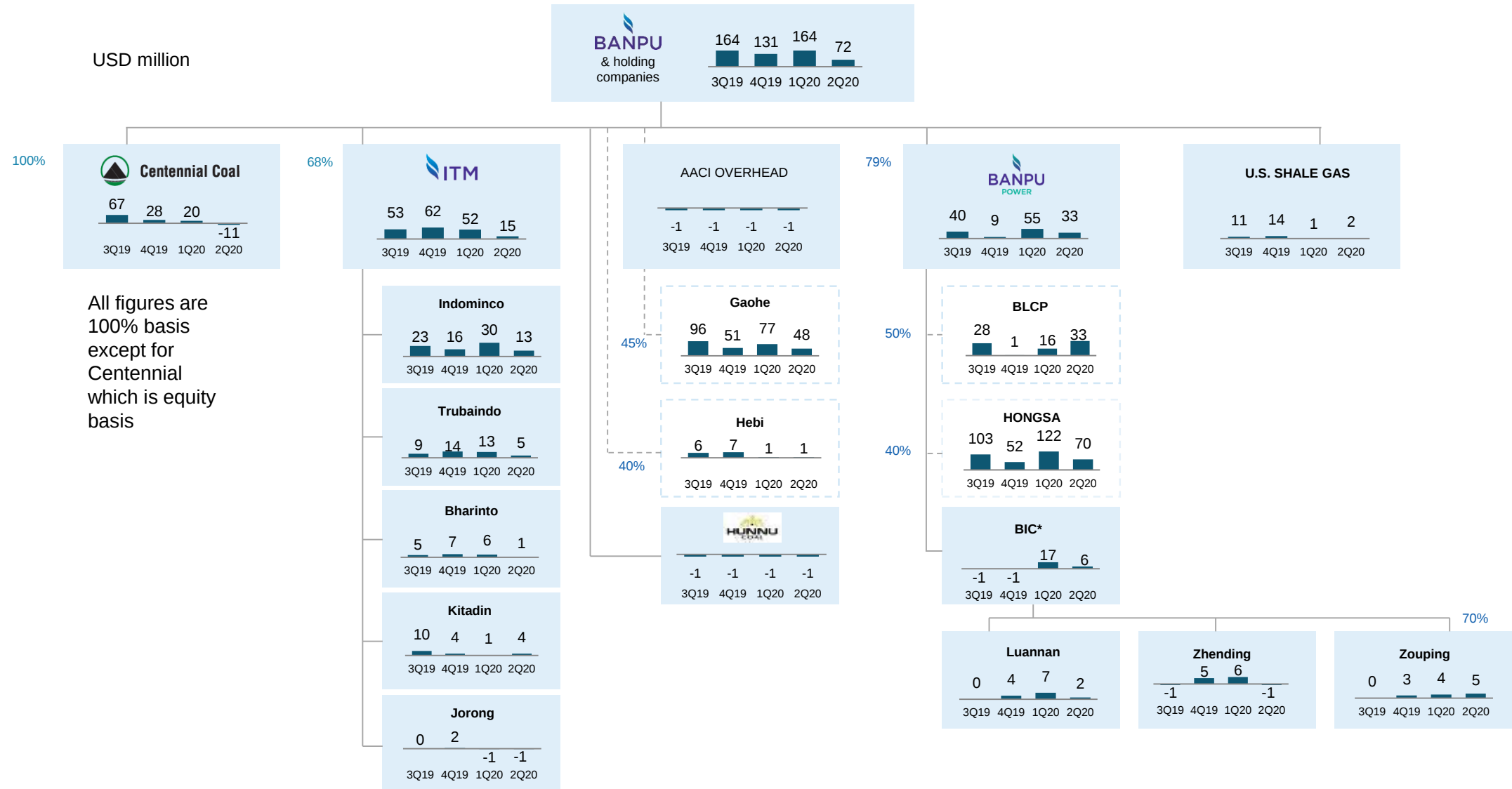
Key external and corporate events



FX impact analysis guidance on P&L

CURRENCY EXPOSURE	NPAT IMPACT 2Q20 (US\$M)	APPROXIMATE FX EXPOSURE (US\$M)		NPAT 5% SENSITIVITY 3Q20 (US\$M)
		NET LIABILITY	NET ASSET	Assuming 5% depreciation of local currencies against USD
Banpu: THB bond and Others	-19.2	-660		THB 26 ▪ BOT lower growth forecast -8.1% in 2020 and 5% in 2021
ITMG: IDR asset and liabilities	0.1		20	IDR -1.2 ▪ World bank forecasted Indonesia's growth forecast 0% in 2020 and 4.8% in 2021
CEY: USD asset	-1.9		10	AUD 0.7 ▪ RBA forecast lower growth, -6% in 2020 and 5% in 2021
Net	-21.0			NET 26

Banpu group EBITDA breakdown



Note: all ownership 100% unless otherwise shown

*BIC = Banpu Investment China

Consolidated NOT consolidated

Banpu group net debt breakdown



Note: all ownership 100% unless otherwise shown

*BIC = Banpu Investment China

Banpu consolidated: operating profit

USD million	2Q20	1Q20	2Q19	QoQ%	YoY%
Total sales revenues*	518	633	731	-18%	-29%
Sales revenue – Coal	453	525	645	-14%	-30%
Sales revenue – Gas	11	18	25	-41%	-58%
Sales revenue – Power	41	58	41	-29%	1%
Cost of sales	(491)	(491)	(569)		
Gross Profit*	62	142	162	-56%	-62%
Gross profit – Coal	57	125	148	-54%	-61%
Gross profit – Gas	(6)	(3)	8	n.a.	n.a.
Gross profit – Power	9	18	6	-49%	44%
GPM	12%	22%	22%		
<i>GPM – Coal</i>	<i>13%</i>	<i>24%</i>	<i>23%</i>		
<i>GPM – Gas</i>	<i>-55%</i>	<i>-16%</i>	<i>32%</i>		
<i>GPM – Power</i>	<i>23%</i>	<i>32%</i>	<i>16%</i>		

Banpu consolidated: operating profit

USD million	2Q20	1Q20	2Q19	QoQ%	YoY%
Gross Profit	62	142	162	-22%	-26%
GPM	12%	22%	22%		
SG&A	(75)	(83)	(88)		
Royalty	(44)	(52)	(63)		
Income from associates	31	48	77		
Other income and Dividend	8	8	10		
Mining property	(8)	(9)	(9)		
EBIT	(26)	54	89	n.a.	n.a.
EBIT – Coal	(42)	20	44	n.a.	n.a.
EBIT – Gas	(12)	(15)	3	n.a.	n.a.
EBIT – Power	28	49	42	-44%	-35%
EBITDA	72	164	168	-56%	-57%
EBITDA – Coal	37	107	105	-65%	-64%
EBITDA – Gas	2	1	16	14%	-90%
EBITDA – Power	33	55	47	-40%	-30%

Banpu consolidated: net profit

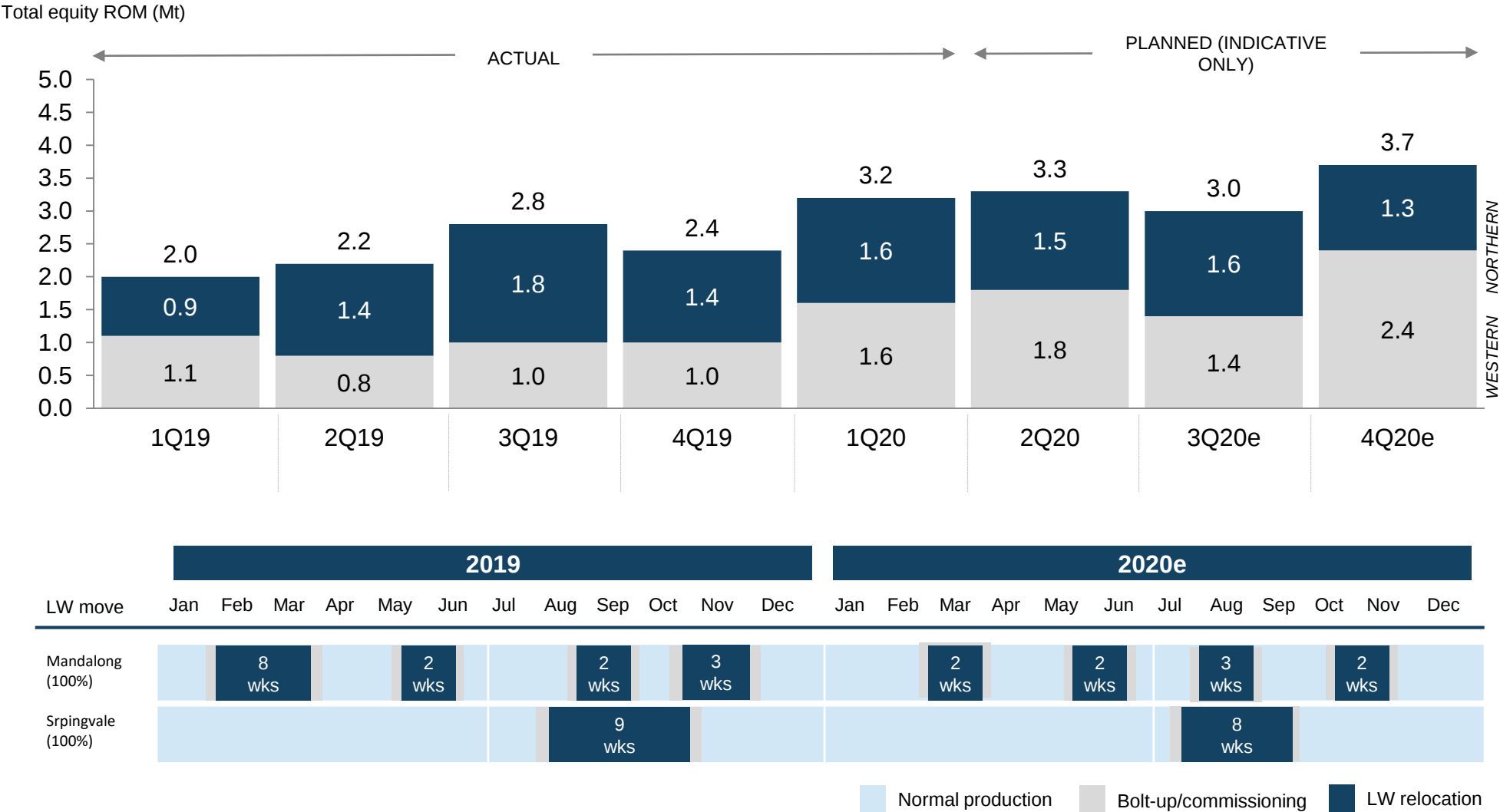
USD million	2Q20	1Q20	2Q19	QoQ%	YoY%
EBIT	(26)	54	89	n.a.	n.a.
Interest expenses	(46)	(47)	(47)		
Income tax (core business)	(7)	(20)	(15)		
Minorities	(6)	(12)	(17)		
Net profit before extra items	(85)	(25)	9	n.a.	n.a.
Non-recurring items*	(33)	15	3		
Gain (Loss) on Derivatives Transactions	19	(6)	15		
Income tax (non - core business)	(3)	(0)	(2)		
Deferred tax income (expenses)	44	(40)	18		
Net profit before FX	(58)	(57)	44	n.a.	n.a.
FX translation	(21)	112	(41)		
Net Profit	(79)	55	3	n.a.	n.a.
EPS (US\$/share)	(0.015)	0.011	0.001		

Note: * income from non-core assets and other non-operating expenses

Centennial: income statement

USD million	2Q20	1Q20	2Q19	QoQ%	YoY%
Sales volume (Mt)	3.1	3.1	2.9	0%	7%
Sales revenue	165.1	175.8	200.1	-6%	-18%
Cost of Sales	(171.5)	(160.9)	(179.3)		
Gross Profit	(6.4)	15.0	20.9	n.a.	n.a.
GPM	-4%	9%	10%		
SG&A	(23.0)	(21.5)	(26.2)		
Royalty	(11.1)	(11.6)	(11.8)		
Other income	1.7	1.5	0.1		
Other expenses	-	-	-		
EBIT	(38.8)	(16.6)	(17.1)	n.a.	n.a.
Interest expenses	(5.2)	(5.7)	(5.6)		
Financial expenses	(0.5)	(0.5)	(0.5)		
Gain (loss) on exchange rate	(1.9)	1.5	0.6		
Gain (loss) on derivative	4.7	(2.8)	2.2		
Corporate income tax	-	-	6.2		
Deferred tax income	12.5	7.2	-		
Net Profit	(29.2)	(16.9)	(14.3)	n.a.	n.a.

Australia coal: quarterly equity rom output



Note: 1 Production generally responds to the timing of longwall changeovers (i.e. lower production results during a longwall changeover period)
2 As of 1 December 2019, Centennial's economic interest in each of Angus Place and Springvale became 100%.

