



# 1Q21 results

Investor and analyst update

14<sup>th</sup> May 2021



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# 1Q21 highlights and outlook



## Strong cash flow generation across businesses

EBITDA improved by 52% from last quarter with higher contribution from Coal and Gas businesses



## Higher commodity price levels, driven by recovering demand

Gas price increased to \$3.5/MMBtu and coal price increased to \$89/t for the quarter, driven by increasing demand and supply tightness



## Antifragile\* strategy

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



## Greener, Smarter energy transition

Further investment in Greener business, through acquisition of 13.4% in Nakoso IGCC plant (543 MW), utilizing HELE\*\* technology



## Innovating the energy ecosystem of the future

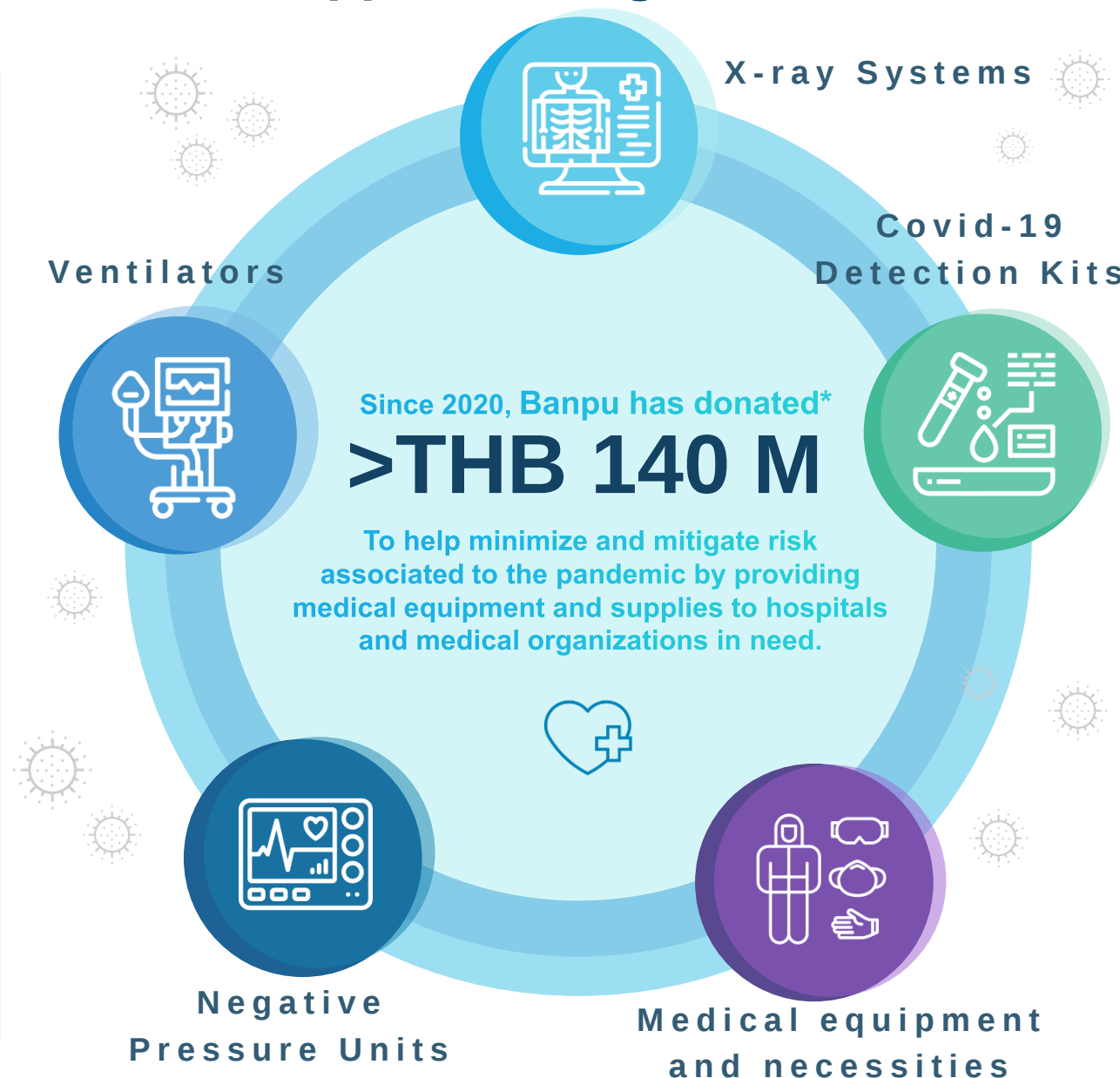
Continued implementation of solar rooftop solutions, hybrid-electric fast launch vessel, e-tuk tuk fleet expansion and UMT service area expansion



## Continuous efficiency improvements

Driven by firm-wide operational efficiency and Greener initiatives, including digital transformation

# Continuous Covid-19 relief support during Thailand's 3<sup>rd</sup> wave



# Banpu: continued ESG leadership and credit rating recognition

## ESG RATING

Member of  
**Dow Jones  
Sustainability Indices**

Powered by the S&P Global CSA

*The DJSI, managed by S&P Global, is the leading international standard for corporate sustainability*

**Gold**

Class on SAM Sustainability Award since 2015. In 2020, Banpu's combined ESG performance scores were 3x the industry average

**Sustainability Award**  
Gold Class 2021

**S&P Global**

*The Sustainability Yearbook 2021, published by S&P Global, showcases the sustainability performance of top companies*

**Gold**

Class distinction, achieving an ESG score within 1% of the industry's top-performing company's score



*The MSCI ESG Ratings is managed by MSCI, one of the most experienced ESG performance measuring agencies*

**A**

ratings for having a track record of managing the most significant ESG risks and opportunities relative to peers



*The THSI, prepared by SET, shortlists Thai companies following the highest ESG standards*

**5<sup>th</sup>**

consecutive year included in the THSI for sustainable operations in-line with responsible investment principles

## CREDIT RATING



*As a strategic partner of S&P Global, Tris Rating has over 20-year experience as a leading credit rating agency in Thailand*

**A+**

ratings with a '**stable**' outlook on the company and senior unsecured debentures

*"reflecting the company's stable business growth, strategic shift towards sustainability and leading position in the energy sector"*





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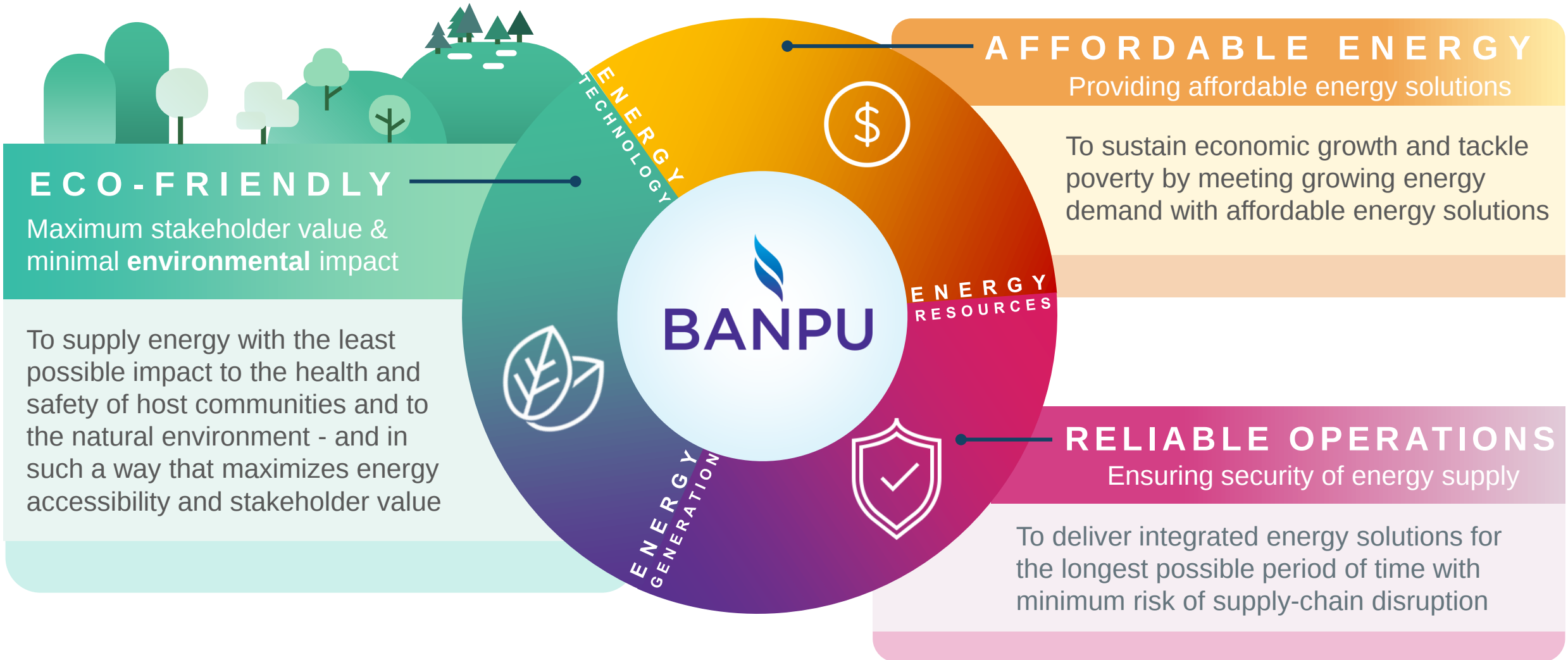
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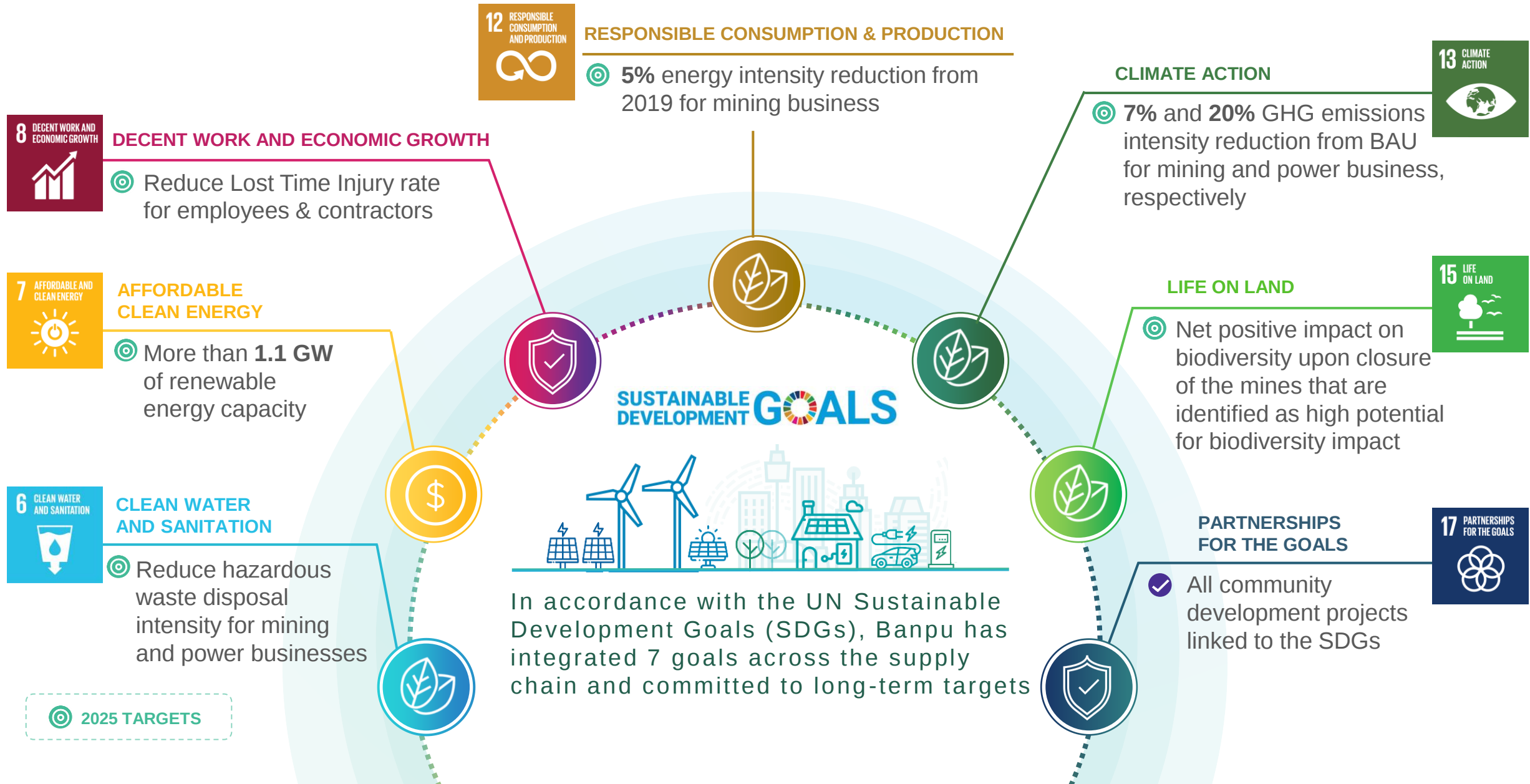
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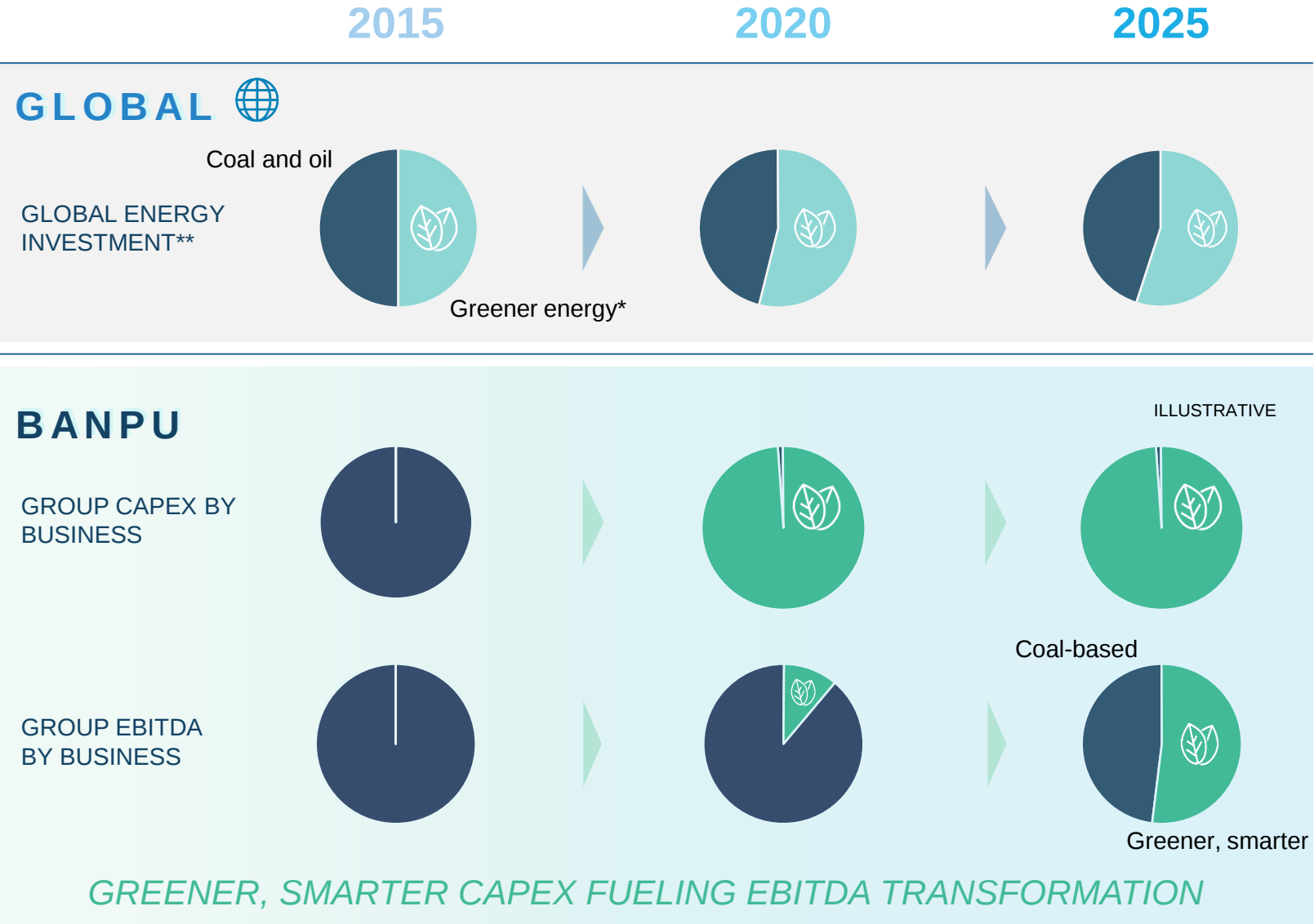
# Banpu: continued transition to greater sustainability



# Banpu: commitment to SDGs and best practice ESG

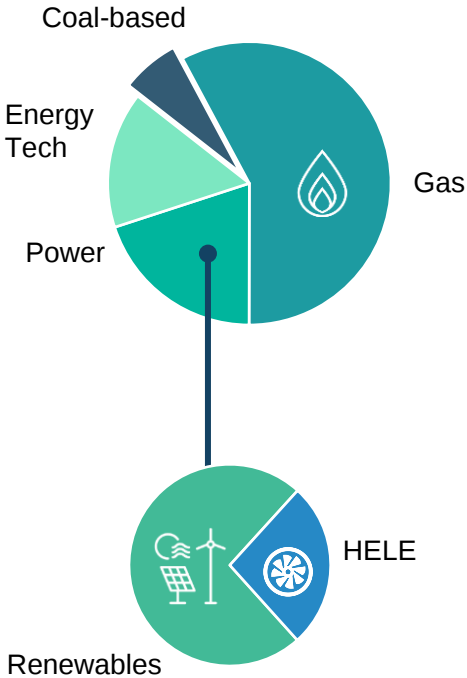


# Banpu: outpacing global energy transition



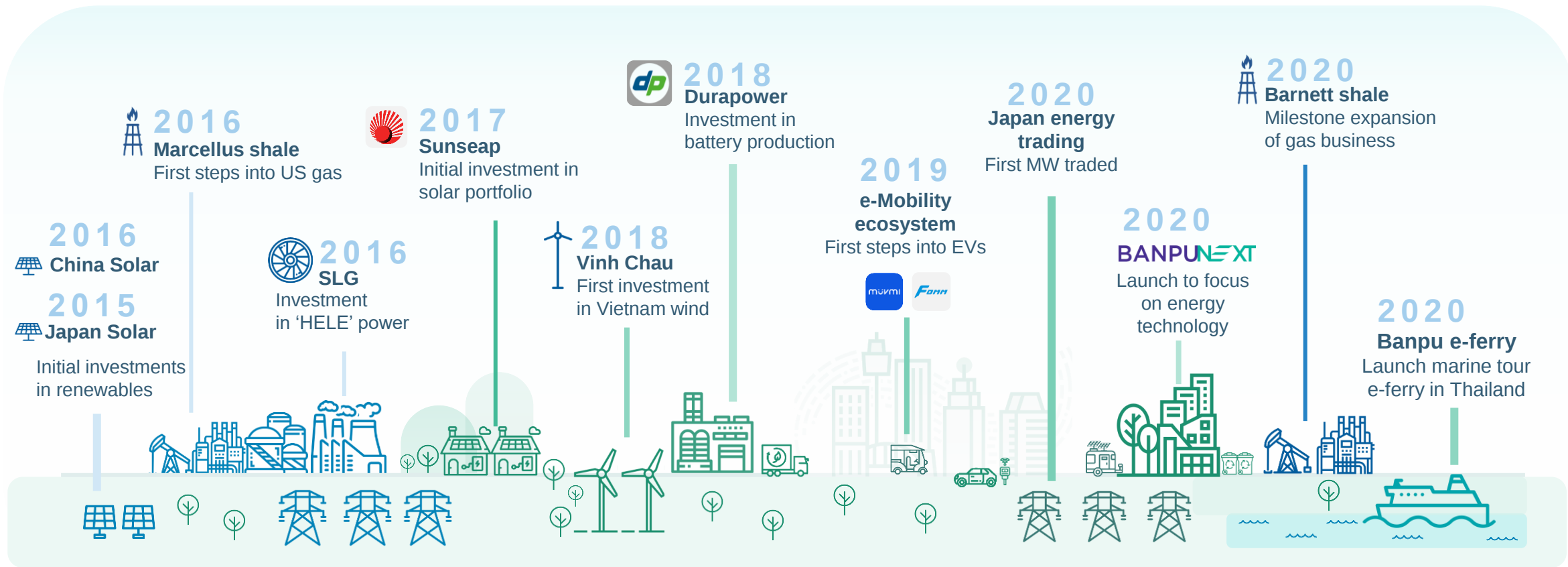
## CUMULATIVE CAPEX 2016-20

Over the past 5 years, **more than 90%** of Banpu's CAPEX has been allocated to *Greener, Smarter* investments



Note:  
\*Includes renewables, gas supply, and gas-fired power  
\*\*IEA World Energy Outlook – stated policies scenario (includes gas supply and gas-fired power)

# Banpu's Greener, Smarter journey so far

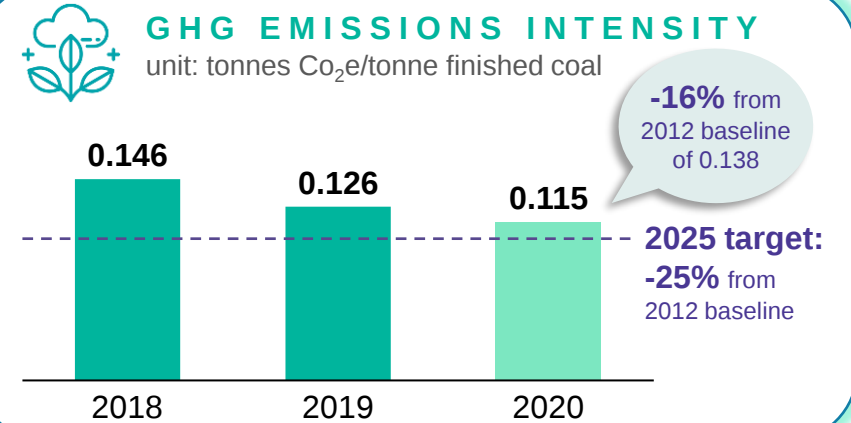
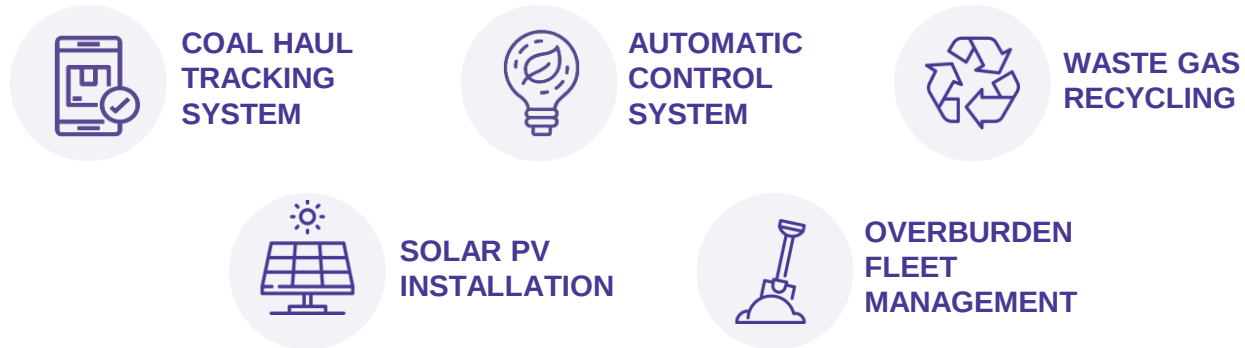


## CUMULATIVE INVESTMENT 2015 - 20



# Banpu Mining and Banpu Power – emissions reductions

## MINING GREENER, SMARTER INITIATIVES



## HELE INVESTMENTS

**SLG (+396 MW)**

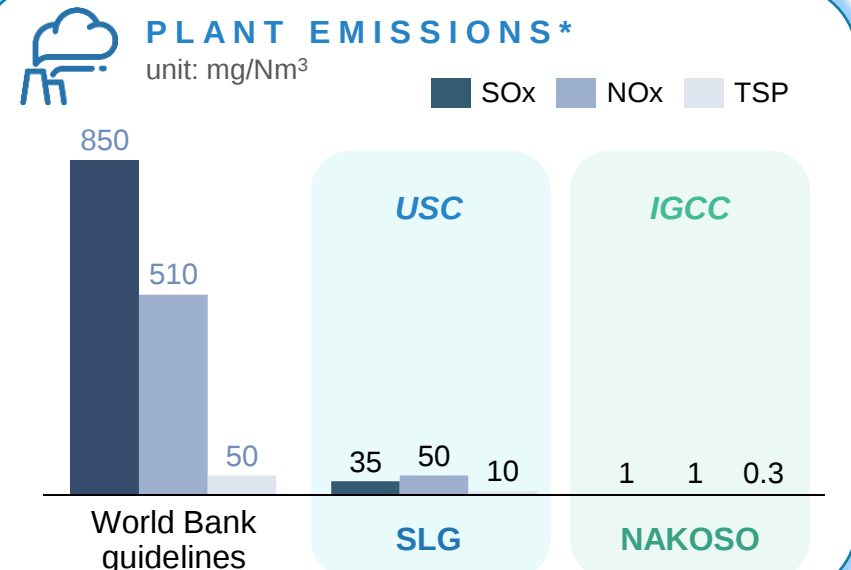


*Ultra Supercritical boiler technology (USC)*

**NAKOSO (+73 MW)**



*Integrated Gasification Combined Cycle technology (IGCC)*



# Energy Technology: investing in Thailand's future energy ecosystem



## SOLAR SOLUTIONS



Combining the total capacity of solar systems installed by Banpu NEXT:

We can help reduce  
 **>168,500 t**  
CO<sub>2</sub> per year



Equivalent to planting  
**>9,800**  
million trees

*Including solar systems installed across 68 faraway schools in Thailand*

## SOLAR ROOFTOPS



**summer lasalle**  
Reduction of  
**>470 t CO<sub>2</sub> to date**



**Rugby School**  
Reduction of  
**>740 t CO<sub>2</sub> per year**



**Chin Huay**  
Reduction of  
**>740 t CO<sub>2</sub> per year**

## E-MOBILITY

**BANPU E-FERRY**  
Promoting green tourism



Can eliminate  
**c. 26,250**  
liters of petrol  
consumption per year



Reduction of  
**>69 t CO<sub>2</sub>**  
per year



**mivmi e-Tuktuks**  
Currently 100 under fleet



Total fleet can reduce  
**c. 336,000**  
liters of petrol  
consumption per year



Equivalent to  
**560 t CO<sub>2</sub>e**  
per year

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## KEY FIGURES

**EBITDA** **\$274 M**

Strong result driven by increased contribution from Coal and Gas business

**NPAT** **\$51 M**

Improved performance with strong EBITDA generation and gain from non-recurring items

**ND/E** **1.39 x**

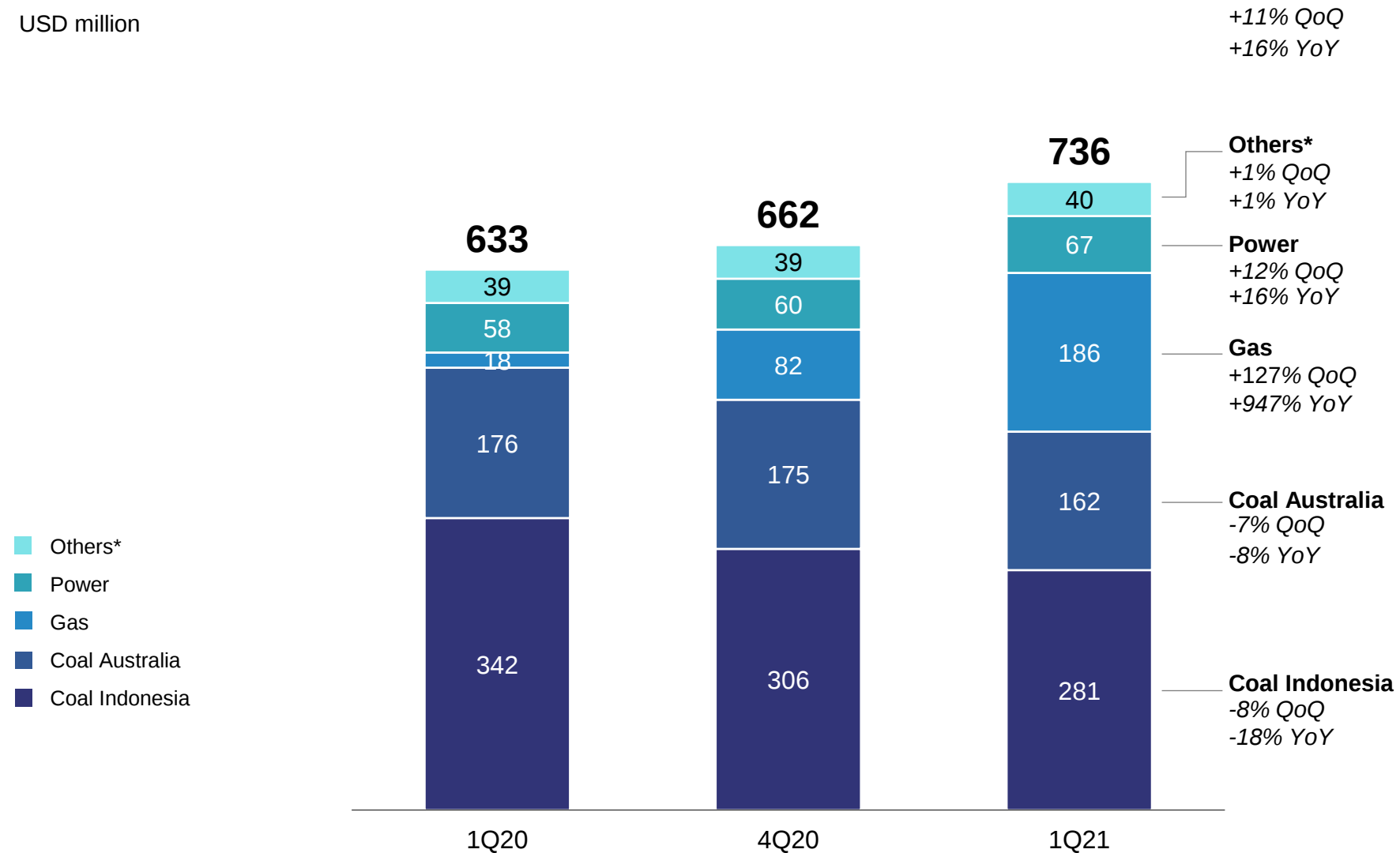
ND/E decreased from 1.47x in the previous quarter

## KEY TAKEAWAYS

- 1 Improved Coal business performance:** from higher ASP in Indonesia, Australia and China despite lower sales volume than the previous quarter
- 2 Higher Gas business contribution:** supported by increase in average local price\* and other income from trading JV
- 3 Strategic positioning:** Coal and Gas businesses well-positioned to benefit from current commodity price levels and demand
- 4 Gain from non-recurring items:** from foreign exchange gain providing support to the Group's earnings

# Banpu consolidated sales revenues – 1Q21

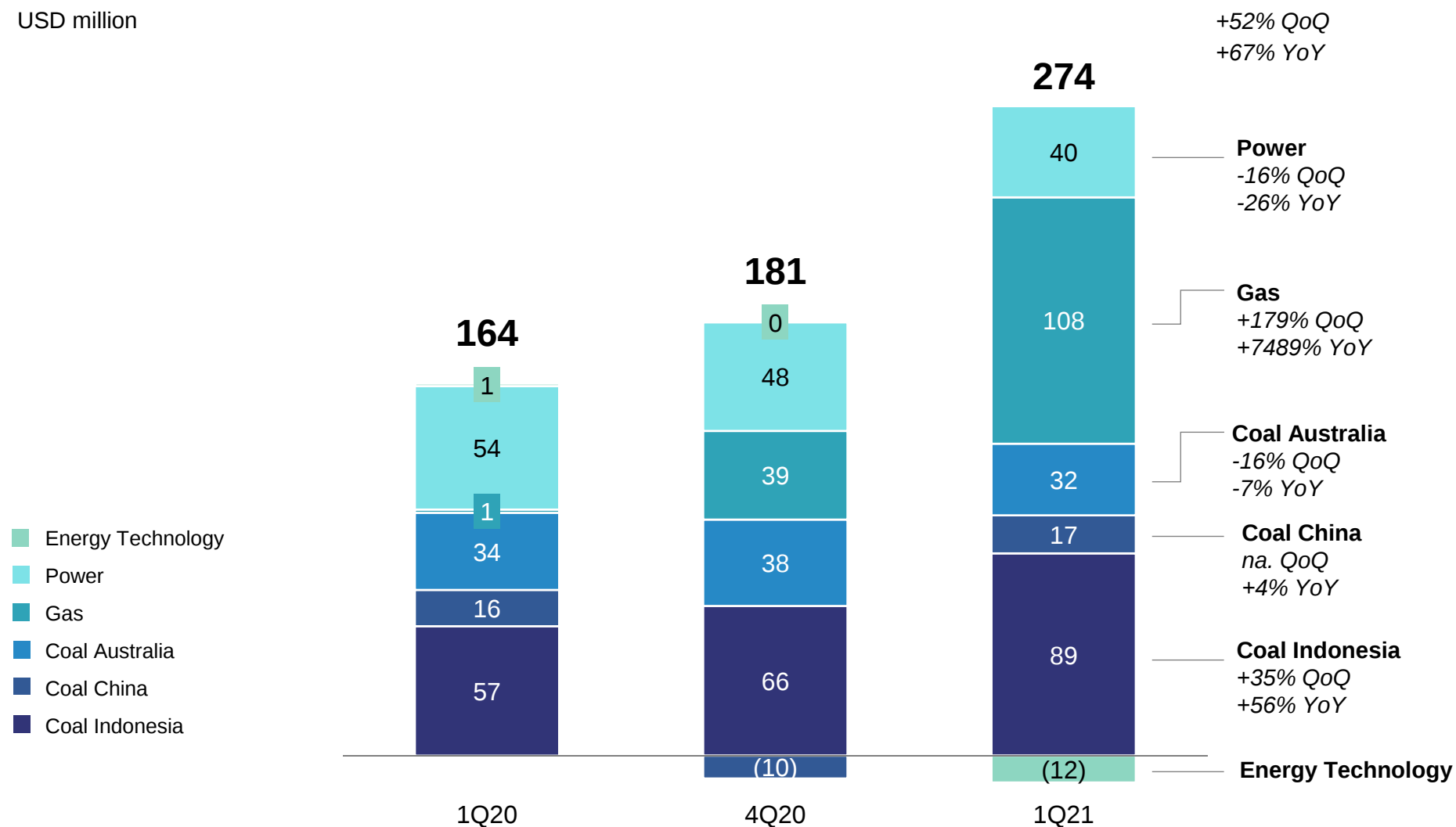
USD million



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

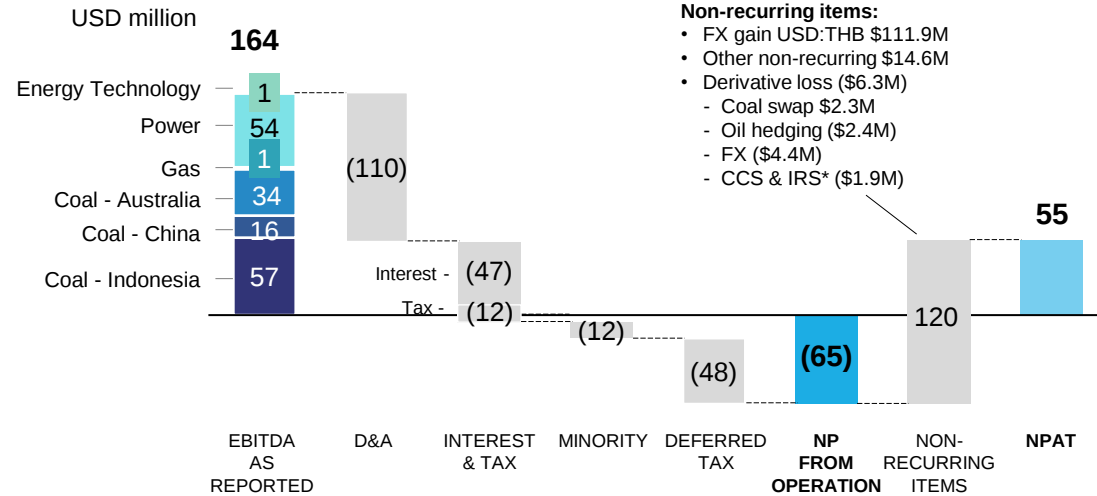
# Banpu consolidated EBITDA – 1Q21

USD million

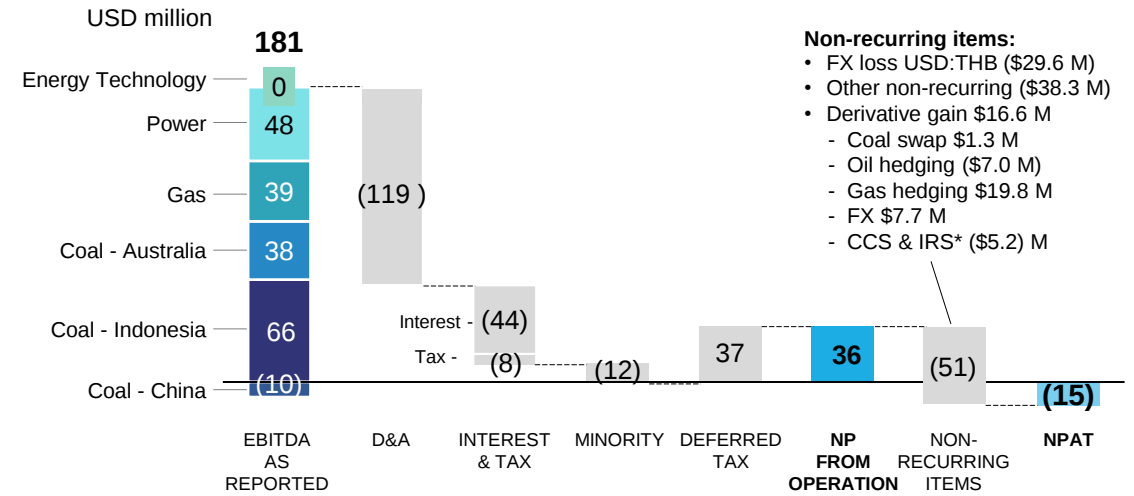


# Banpu consolidated NPAT – 1Q21

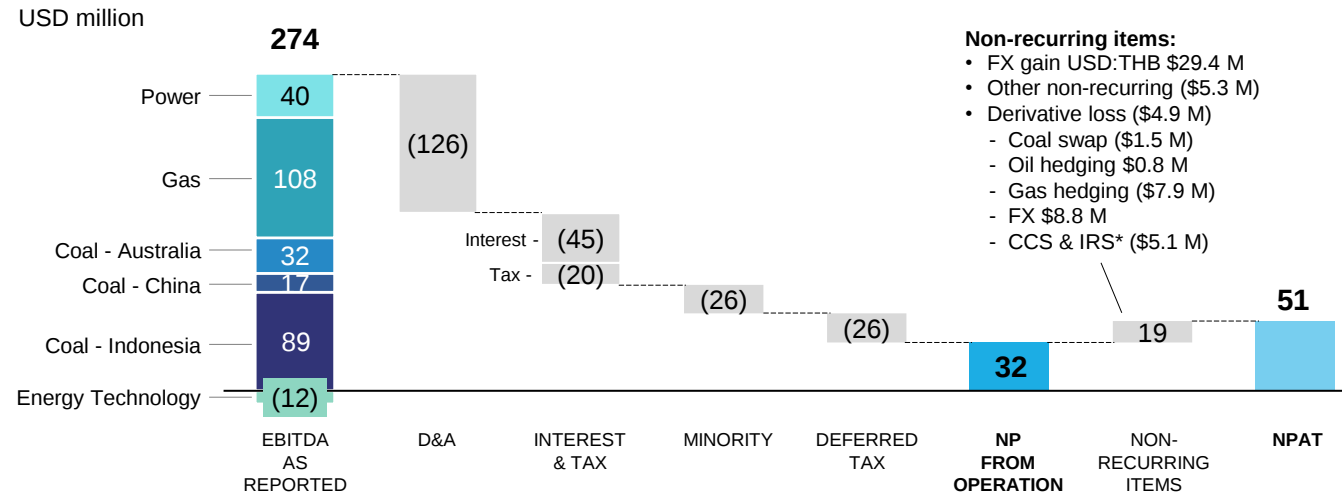
## 1Q20 NET PROFIT AFTER TAX



## 4Q20 NET PROFIT AFTER TAX



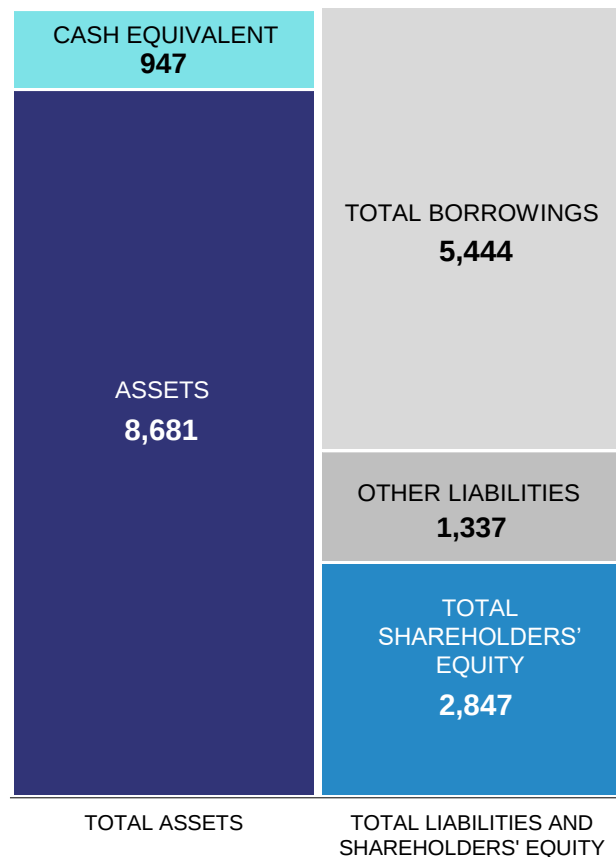
## 1Q21 NET PROFIT AFTER TAX



# Banpu consolidated balance sheet – 1Q21

## 1Q21 CONSOLIDATED FINANCIAL POSITION

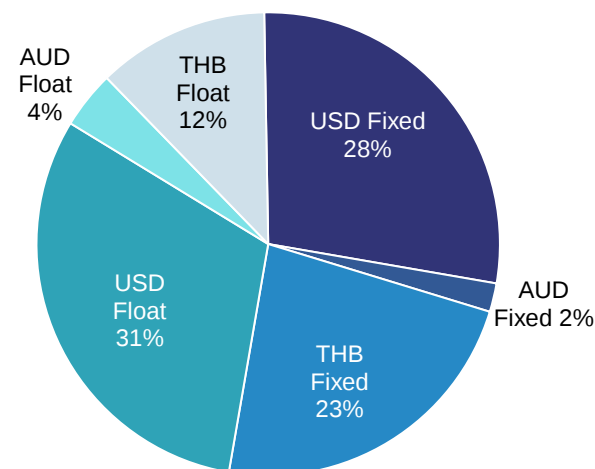
USD million



Note:

- 1 Net debt to book value of shareholders' equity
- 2 Net debt to enterprise value (enterprise value = net debt + book value of shareholders' equity)

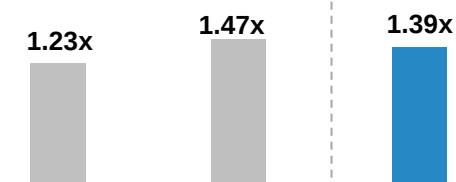
## DEBT FX STRUCTURE



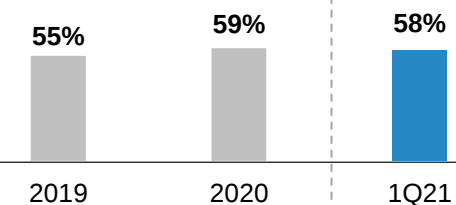
Total gross debt: US\$5.4 billion  
As of 31 March 2021

## GEARING RATIOS

Net debt / Equity <sup>1</sup> (x)



Net market gearing <sup>2</sup> (%)





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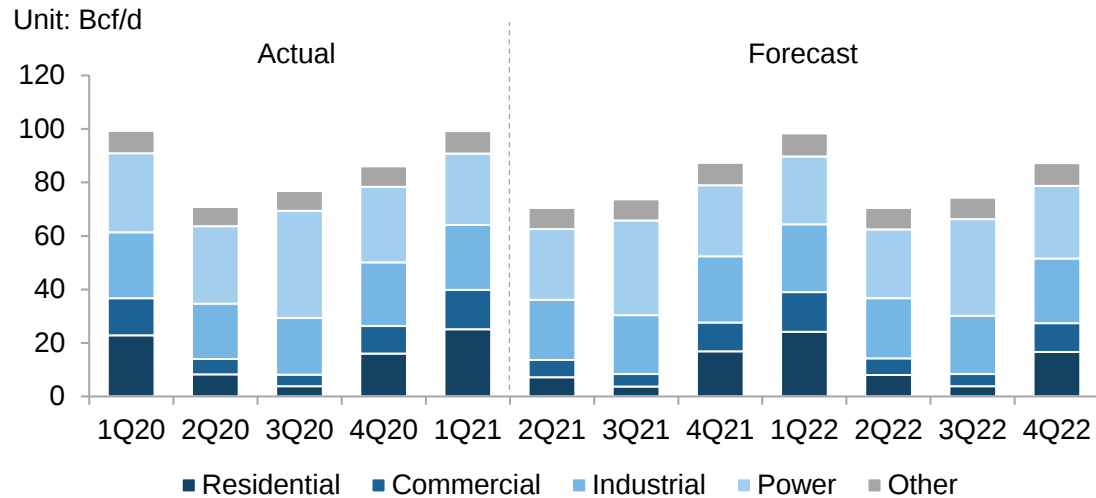
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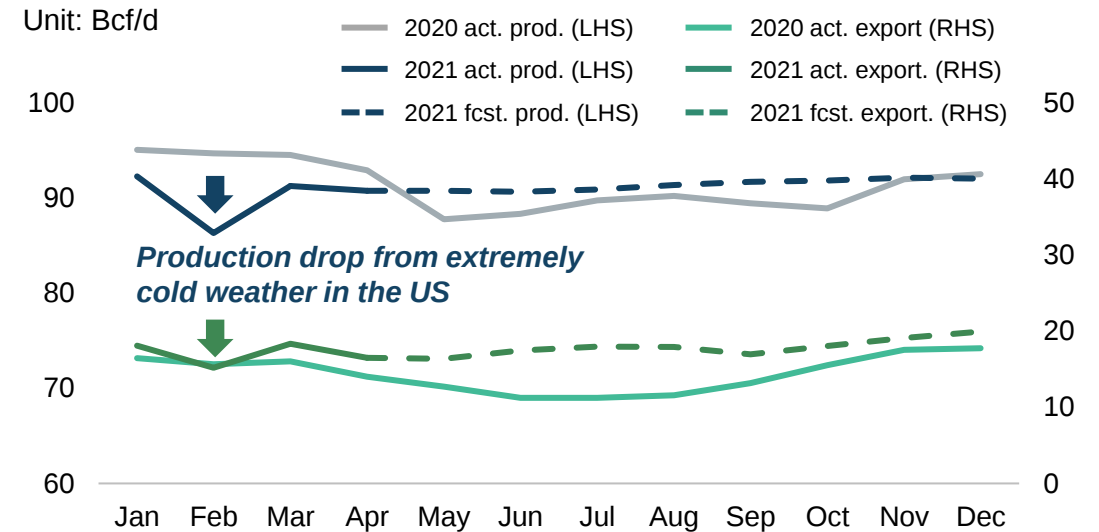
# U.S. gas market update

## RESILIENT DEMAND PROJECTION

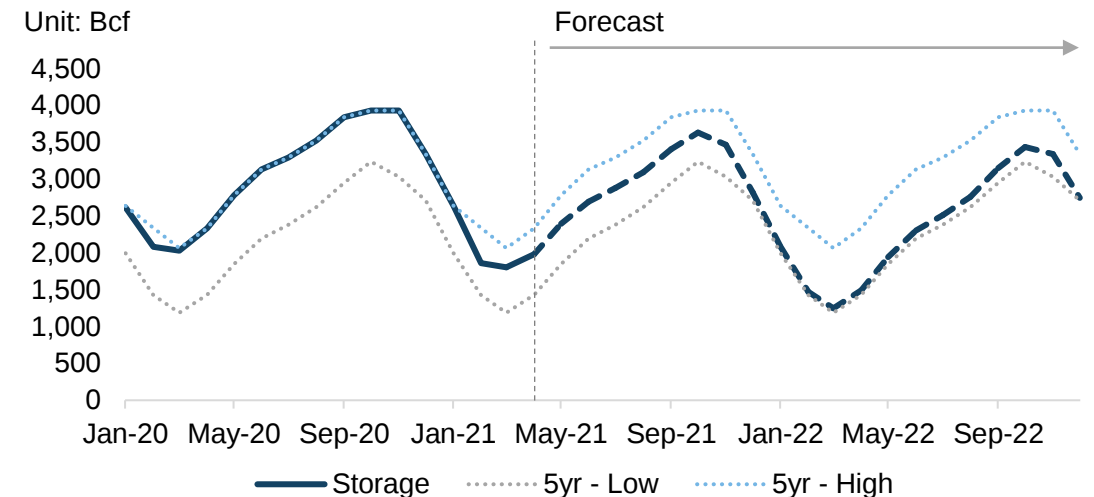


- Majority of US gas demand is domestic consumption. Price determined by local demand and supply with indirect linkage to oil via associated gas production.
- U.S. gas consumption is expected to average 82.6 Bcf/d in 2021, slightly down from 2020 as power generators switch to coal due to rising natural gas prices. With the expanding economic activity and colder temperature, residential, commercial and industrial natural gas consumption is expected to rise by 1.8 Bcf/d from 2020.
- Production fell by 6.0 Bcf/d in February to 86.3 Bcf/d because of cold weather, but it is expected to increase to the average of 90.8 Bcf/d in 2Q21, up 1% from 2Q20. Production is expected to average 91.1 Bcf/d for 2021, slightly down from 2020.
- Natural gas inventories ended April 2021 at almost 2.0 Tcf which is 3% lower than 5-year average due to higher natural gas withdrawals during the winter of 2020-21 as a result of drop in production from cold February temperature.

## US NATURAL GAS PRODUCTION



## U.S. STORAGE LEVEL



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

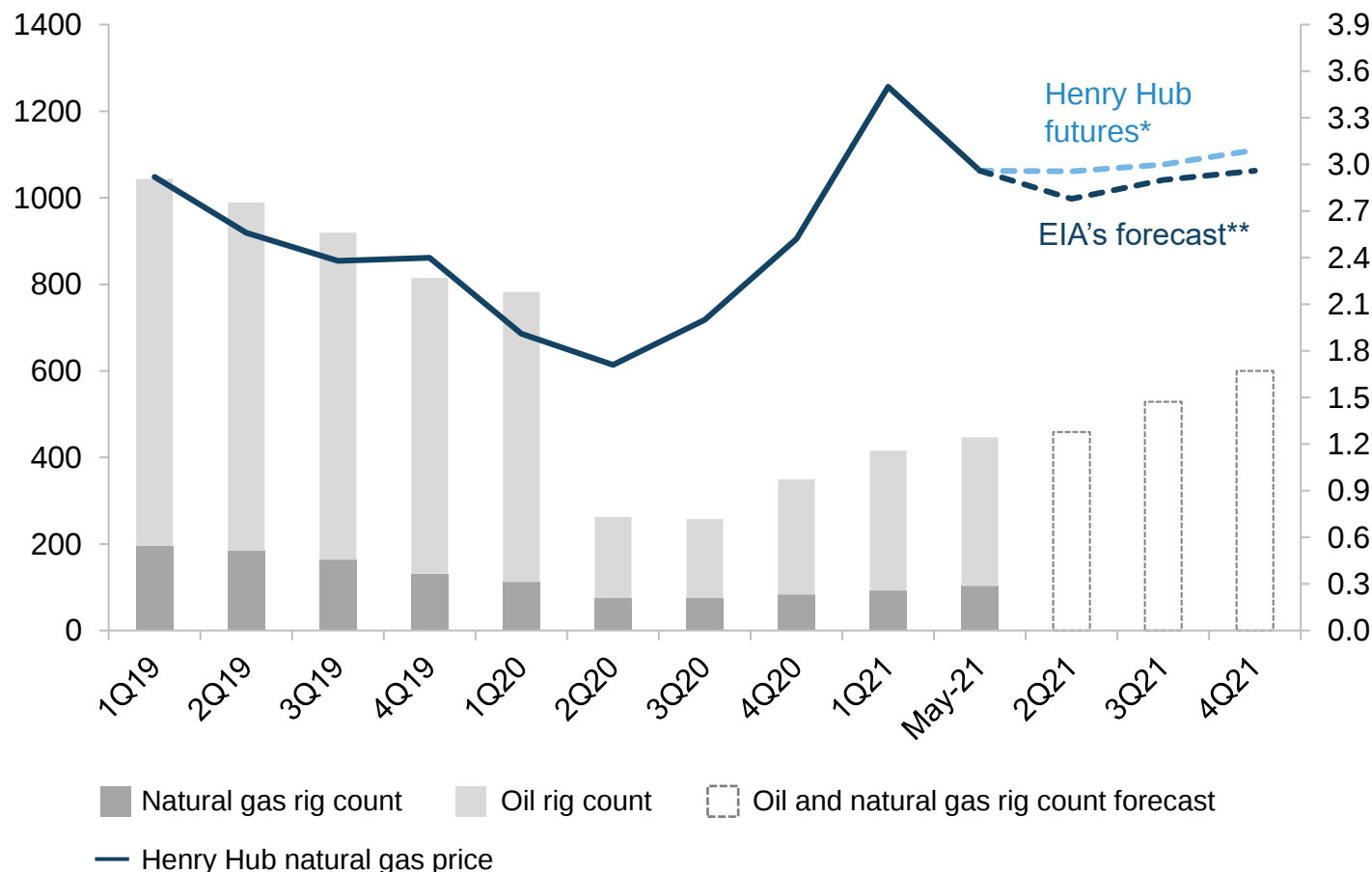
## US RIG COUNT VS HENRY HUB PRICE

### US OIL AND NATURAL GAS RIG COUNT

Unit: Rigs

### HENRY HUB SPOT PRICE

Unit: \$/MMBtu



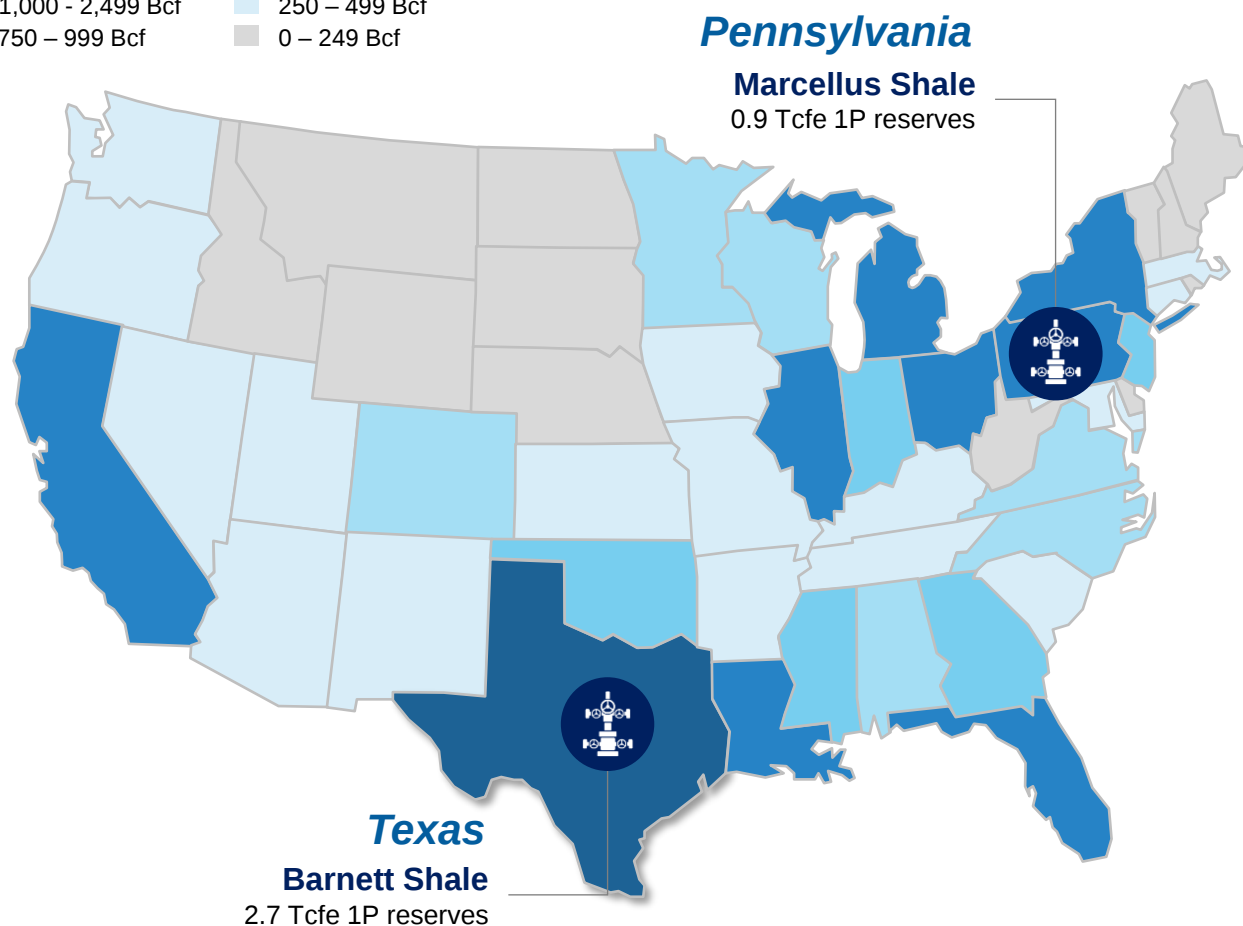
Note: \*as of May 11<sup>th</sup>, 2021, \*\*Short-Term Energy Outlook (May 2021)  
Source: IHS Markit report and Baker Hughes US natural gas rotary rig count (May 2021)

## COMMENT

- Oil and natural gas prices have continued to push higher in 1Q21 due to extreme weather conditions in the US affecting gas supply, demand and inventory outlook since February
- Capital spending is expected to increase in 2021 relative to 2020 but remain low in total compared to 2015-2019 average as the operators focus on cash flow generation and to the lesser extent on production growth
- With the increase in capital spending, oil and gas rigs are expected to increase slightly in 2Q21, up 21% from 2Q20 but remain at levels 55% lower than 1Q19
- Price returned to normal levels after a spike in February, Henry Hub futures signal a slight increase as supply growth is expected to lag behind demand growth and decline in inventory

# Banpu Gas: 1Q21 highlights

## US DRY GAS CONSUMPTION 2019 BY STATE\* (Bcfe)



Banpu shale gas operations

\*Source: EIA

\*\*Average local price = Henry Hub - basis differential

Average local price\*\*

**\$2.61/Mcfe**

+25% QoQ

Sales volume

**62 Bcfe**

-6% QoQ

EBITDA

**\$108 M**

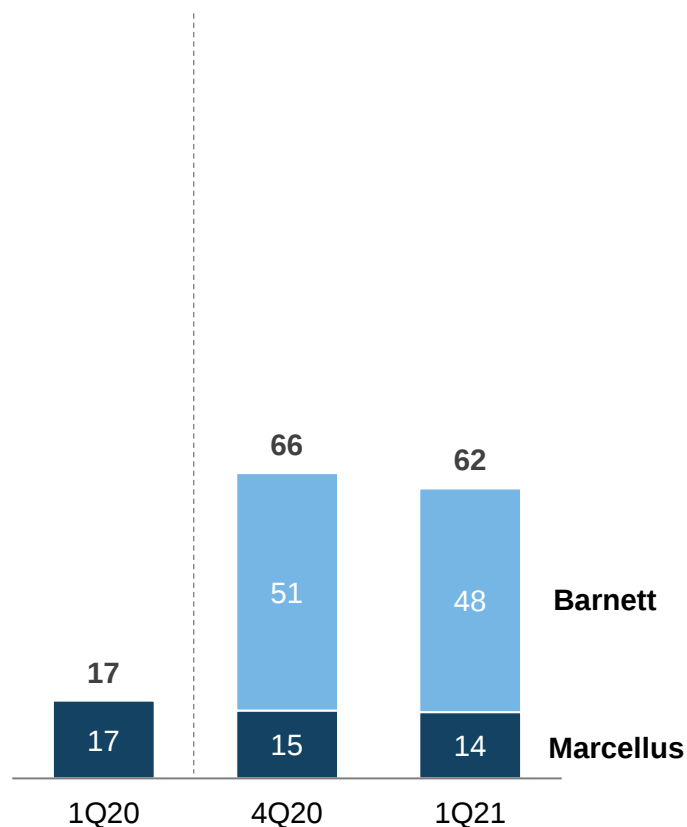
+179% QoQ

# Banpu Gas: 1Q21 performance

1Q21 highlighted our agility to successfully deliver strong production and financial results despite unprecedented weather conditions. Record EBITDA of \$108 M in 1Q21 with \$49 M of other income from our trading JV.

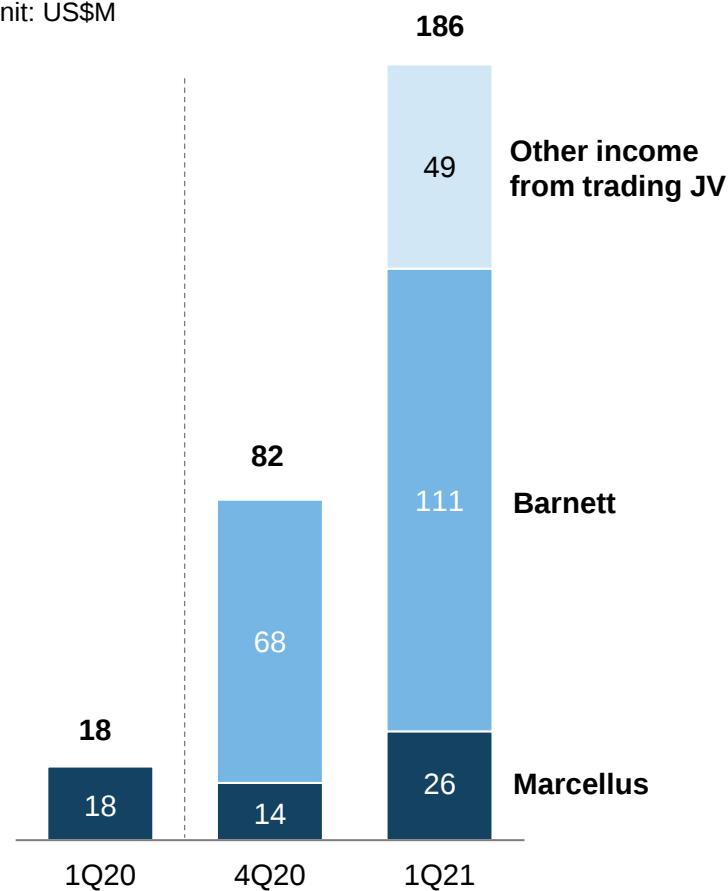
## SALES VOLUMES

Unit: Bcf\*



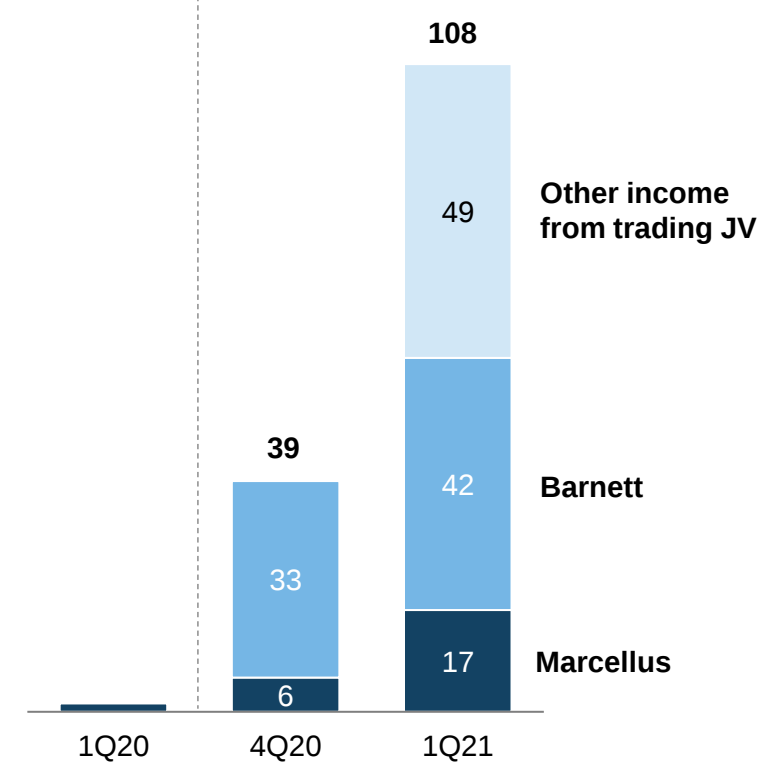
## TOTAL REALIZED REVENUE

Unit: US\$M



## EBITDA

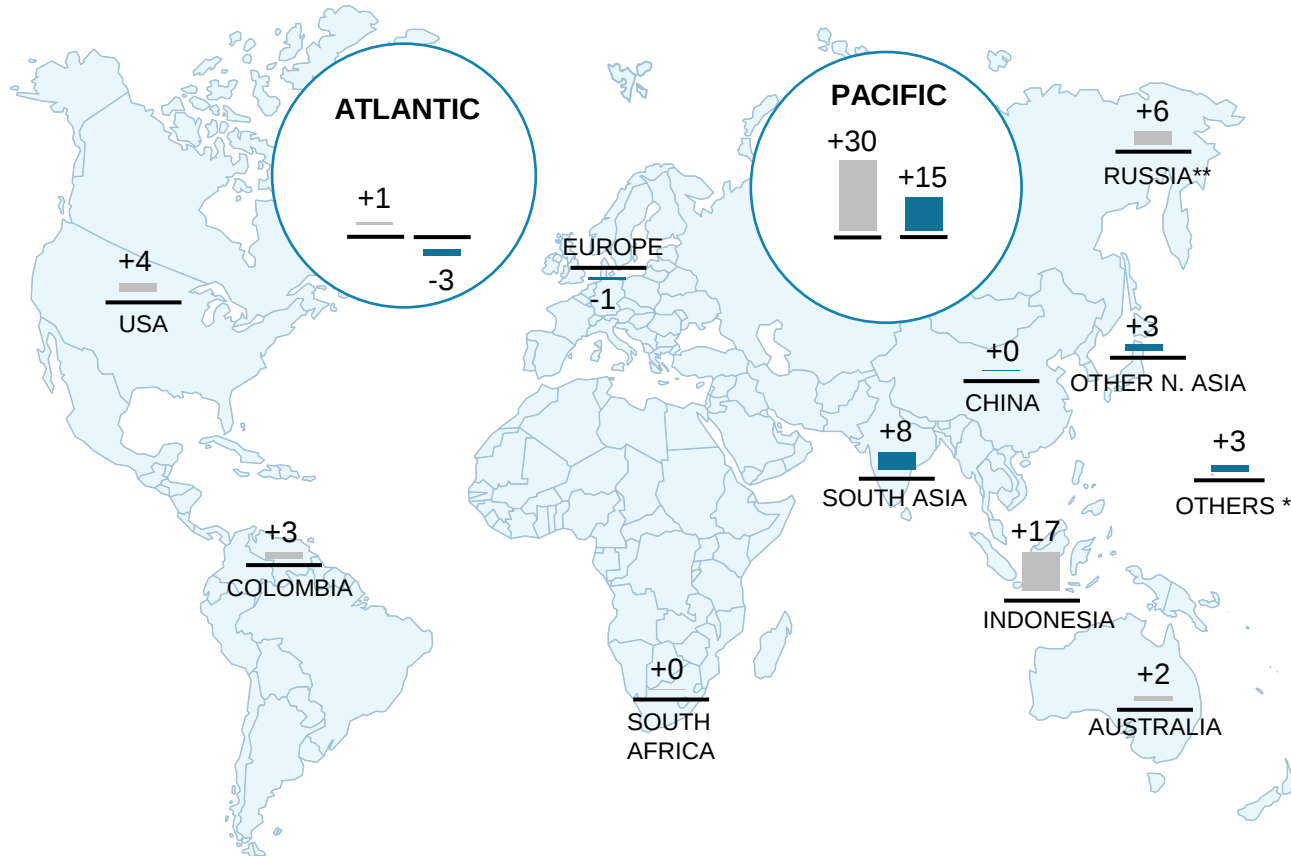
Unit: US\$M



# Global thermal coal market

## COAL DEMAND AND SUPPLY CHANGE – 2021E VS 2020

Unit: Mt      ■ SUPPLY      ■ DEMAND



## TRENDS

### DEMAND

Economic recovery supports coal demand but a resurgence in coronavirus infections slower the growth. Trade tensions between China and Australia has been elevated and are likely to continue to affect coal trade flow throughout the year which helps to support seaborne coal prices.

- **China:** Healthy economy supports strong coal demand amid tight supply which pushes domestic coal prices up. Expectations of some relaxation on import control.
- **India:** Second coronavirus waves slow economic recovery, but the impact seems less severe than last year.
- **JKT:** Post-pandemic demand and commissioning of 3 GW new coal plants in South Korea will add more demand this year but restricted coal use to reduce carbon emissions will limit growth.
- **Europe:** High carbon and low gas prices amid increasing renewable capacity add downside pressure to coal demand and prices.

### SUPPLY

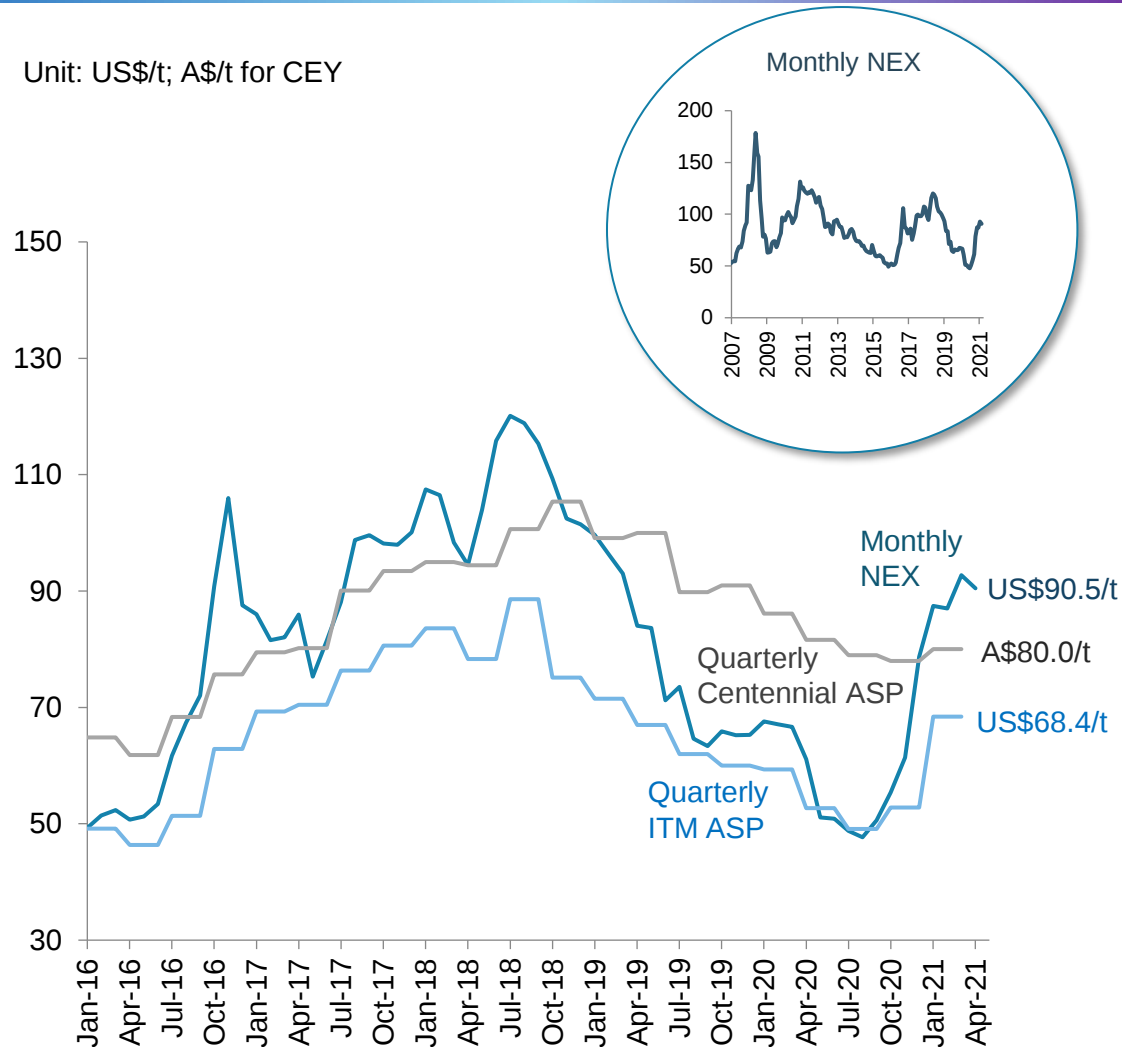
Tight supply since the beginning of 2021 as rain impacts production in Indonesia and Australia amid strong demand. Incidents and maintenance in key exporting countries reduce export availability and help to tighten supply.

- **Indonesia:** Benefits from China's ban on Australian coal with strong China demand helps to drive Indonesian coal prices.
- **Australia:** Exports continue to be impacted by the ban on Australian coal into China but mostly hit on high ash coal. High CV supply remains tight.
- **Others:** Maintenance work and shortage of locomotives reduce availability of supplies from South Africa while high coal prices support coal exports from US and Colombia. Russian production and export remain strong with more coal ships to Asia.

# Banpu ASPs vs thermal coal benchmark prices

## BANPU ASP VS BENCHMARK PRICES

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



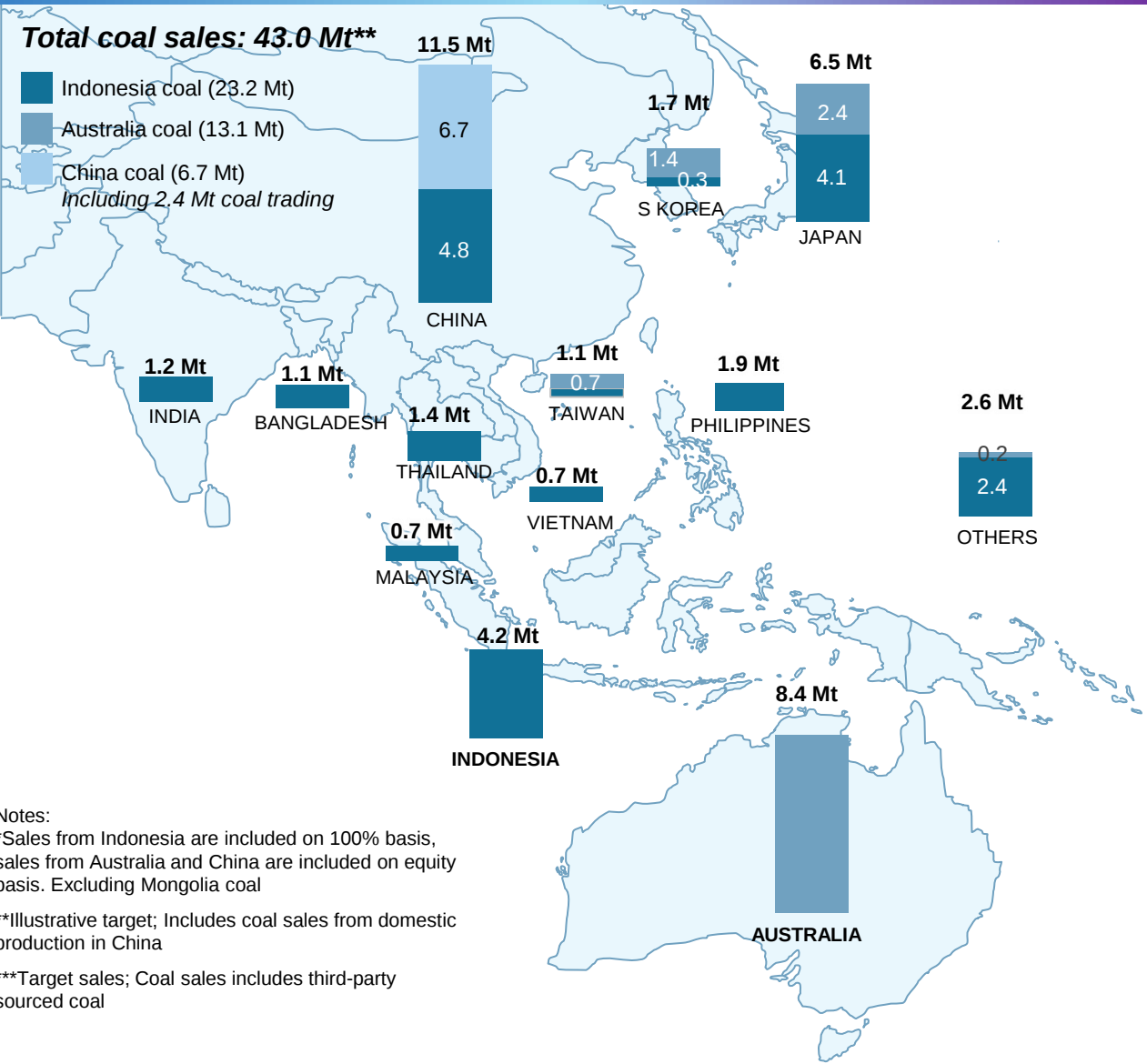
## COMMENTS

- Coal price surge momentum continued into 1Q21 mainly as a result of the Northern Hemisphere cold snap, however, the surge started losing steam as milder temperatures kicked-in alongside domestic production in China recovering and good inventory levels at power plants.
- Newcastle coal price surged again when the NCIG, one of the two major Newcastle port operators, suspended ship loading for two weeks due to urgent repairs that was immediately followed by heavy rains, interrupting coal shipments, however prices retreated after situation cleared into April.
- JPU Reference Price likely not be concluded this 2021 year.
- Unresolved China – Australia conflict led to the import ban by China, pushed up Indonesia Coal price, certain coal qualities trade at premium over Newcastle price on heat equivalent basis.
- Newcastle future price with slight backwardation at around US\$90
- ASP in Q1 recovered, shadowing the price recovery trend and is expected to surge, following the NEX index trend.
- Key price metrics:
  - ITM ASP 1Q21 : US\$68.4/t\* (+30% QoQ)
  - CEY ASP 1Q21 : A\$80.0/t\* (+3% QoQ)
  - ASP Domestic A\$76.5/t (-3% QoQ), ASP Export A\$88.5/t (+16% QoQ)
  - NEX (May 14<sup>th</sup>, 2021)\*\*: US\$101.0/t

Note: \* Includes post shipment price adjustments as well as traded coal  
 \*\* The Newcastle Export Index (previously known as the Barlow Jonker Index – BJI)

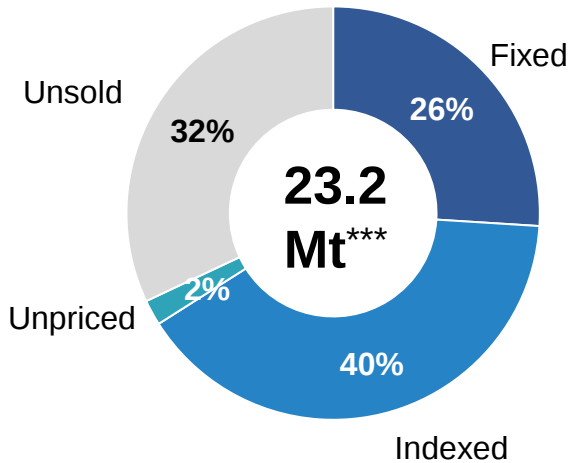
# Banpu Mining: group coal sales and pricing status 2021e

## COAL SALES\* SOURCE – DESTINATION ANALYSIS

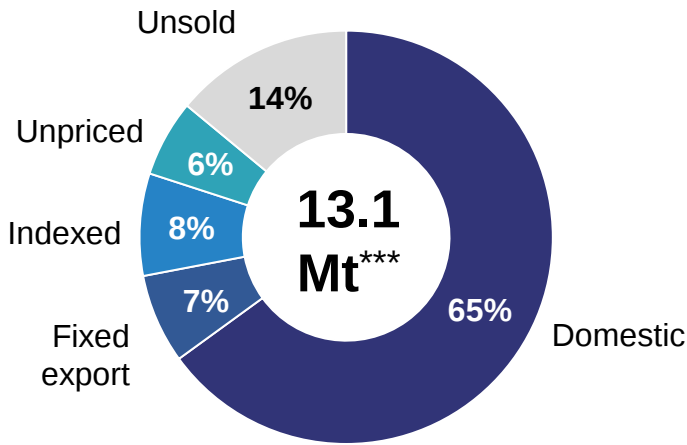


## COAL SALES PRICING STATUS

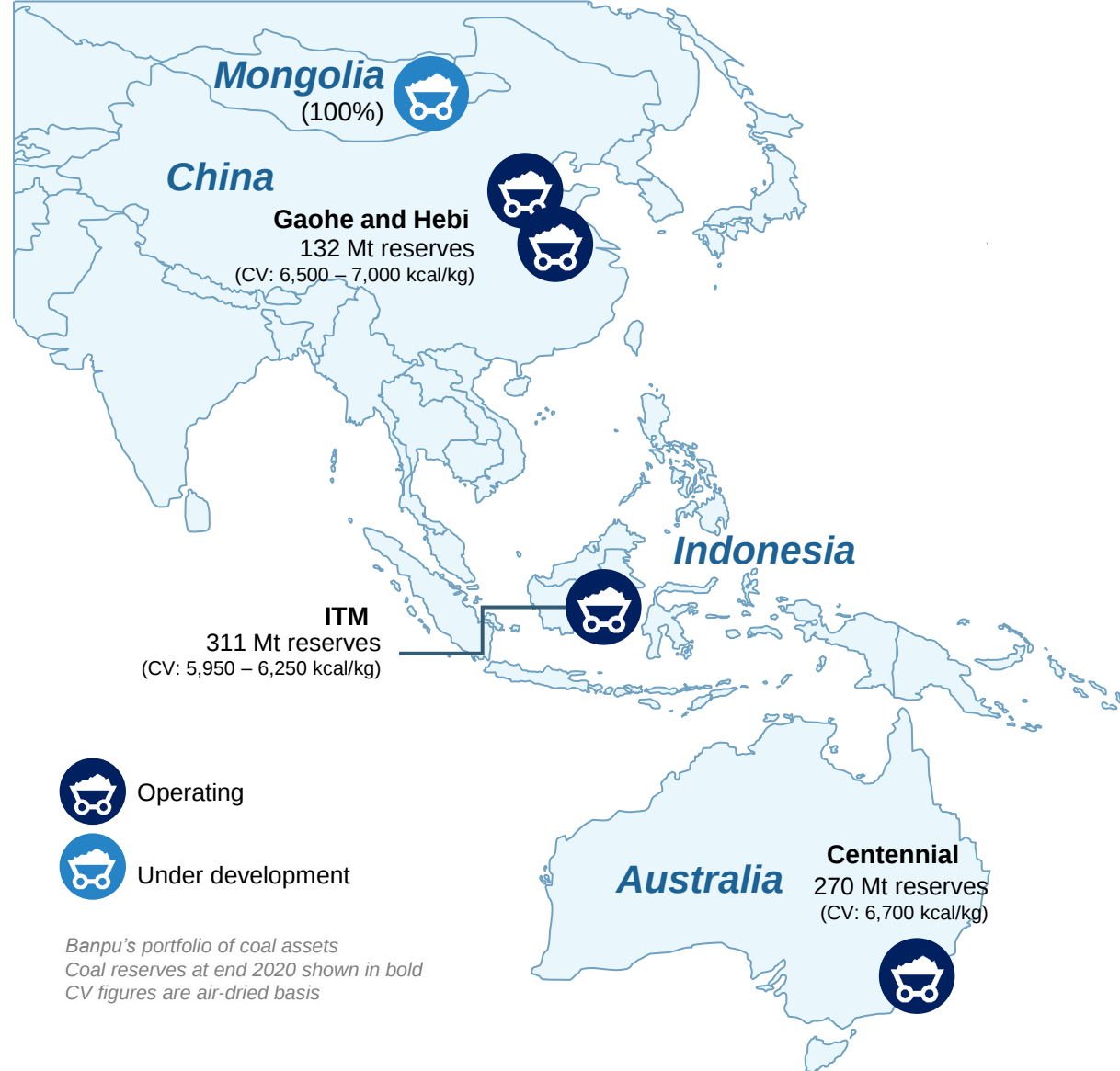
### INDONESIA



### AUSTRALIA



# Banpu Mining: 1Q21 highlights



Production volume\*

**8.9 Mt**

-11% QoQ

Sales volume\*

**8.2 Mt**

-21% QoQ

EBITDA

**\$138 M**

+46% QoQ

Note: \*Based on 100% basis

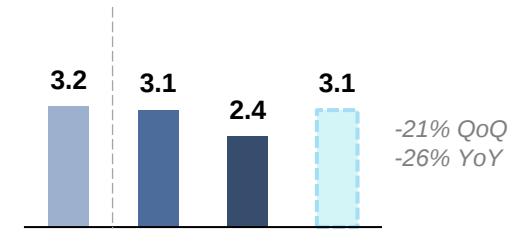
# Banpu Mining: operational summary

## 2021E COAL OUTPUT



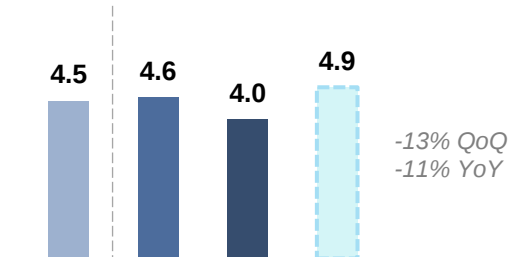
## ROM PRODUCTION AND KEY UPDATES

### AUSTRALIA COAL\*\*



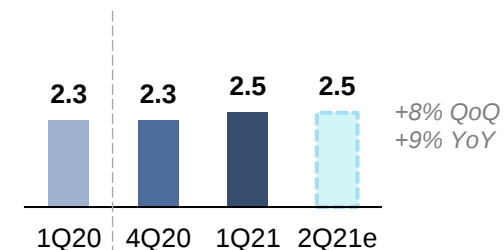
- Production was down compared to last quarter, with Springvale and Myuna impacted by complex geology, while Mandalong and Airly remained consistent.
- 2Q21 - anticipated improved conditions and reduced time in longwall changeover mode.

### INDONESIA COAL\*



- Despite heavy rainfall condition, production achieved as targeted with slightly lower production from Trubaindo but offset by Bharinto performance.

### CHINA & MONGOLIA COAL\*

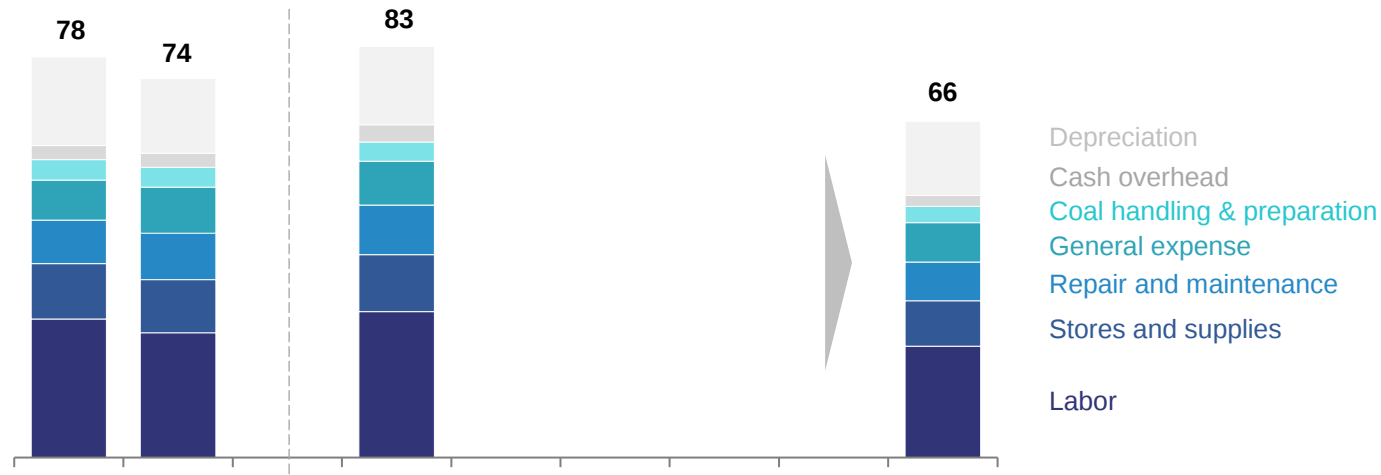


- Gaohe: Higher production and sales in Q1 due to high demand in heat-period and continued economic recovery.
- Hebi: Lower production in Q1 due to challenging geological conditions

# Banpu Mining: average production cost breakdown

## AUSTRALIAN COAL – AVERAGE PRODUCTION COST<sup>1</sup>

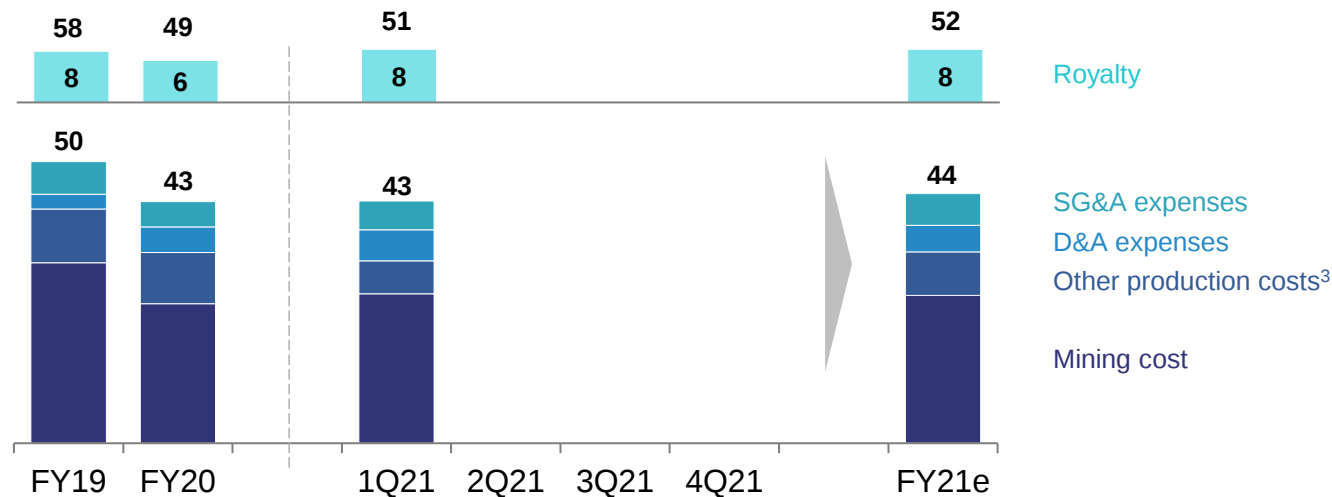
Unit: A\$/t



- Costs impacted by mining conditions, equipment issues and lower sales tonnes.
- Continued cost reduction in contractor labor and overheads targeted to further drive costs down.

## INDONESIAN COAL – AVERAGE TOTAL COST<sup>2</sup>

Unit: US\$/t



- Average total cost (excl. royalty) maintained at \$43/t in 1Q21. Total cost increase in-line with higher royalty as a result of rising coal price.
- Higher fuel price may contribute to slightly higher FY21 average total cost.

Note: 1 These figures do not include selling, distribution and royalty costs; based on 'sold' production, 2 Coal business only, 3 including repair and maintenance, salaries and allowances, inventory adjustment, others etc.



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# Banpu Energy Generation: 3,382 MW committed capacity



**11 countries**  
operations across Asia



**2,476 MW**  
committed thermal  
equity capacity\*

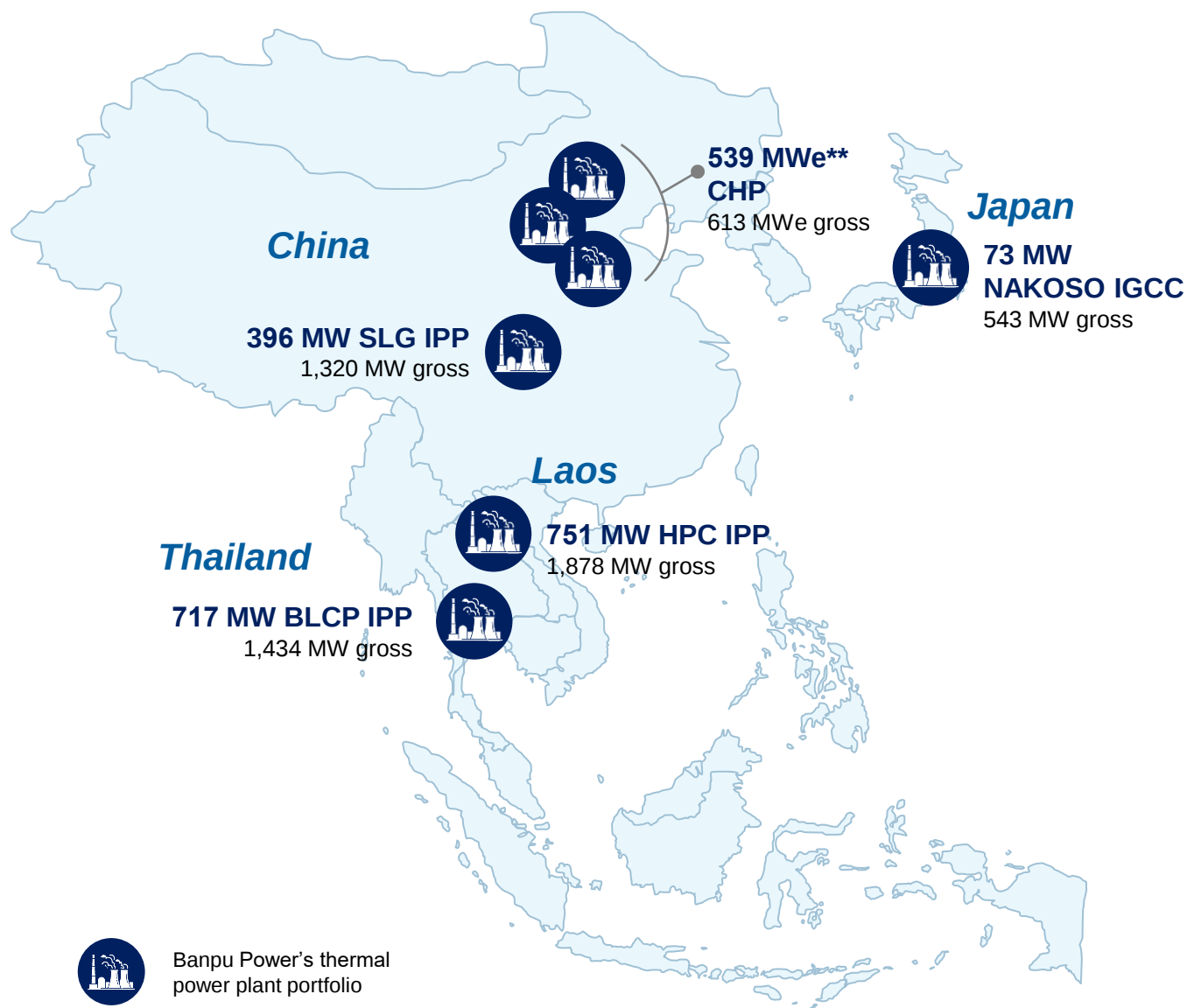


**906 MW**  
committed renewables  
equity capacity\*\*

-  Solar power plant portfolio
-  Solar rooftop portfolio
-  Banpu Power's thermal power plant portfolio
-  Wind power plant portfolio

\*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: 1Q21 highlights



EBITDA  
**\$40 M**  
-16% QoQ

Achieved EAF  
**85%** at BLCP  
**84%** at HPC

Growth update  
**+73 MW**  
from recent investment in  
Nakoso IGCC in Japan

# Banpu Thermal Power: 1Q21 updates



## BLCP

*Continued high reliability, although unplanned maintenance was conducted to repair tube leak incident*

- Continued high reliability with EAF\* reported at 85%
- Total revenue reported at THB 3.2 bn, EBITDA at THB 0.8 bn
- Share of profit at THB 47 M.

## HPC

*Completed yearly maintenance of unit 2 for 28 days as planned, to improve efficiency and plant reliability*

- Reported EAF of 83% despite planned maintenance of unit 2
- Total revenue reported at THB 4.9 bn, EBITDA at THB 2.7 bn
- Reported share of profit at THB 0.8 bn

## China CHP

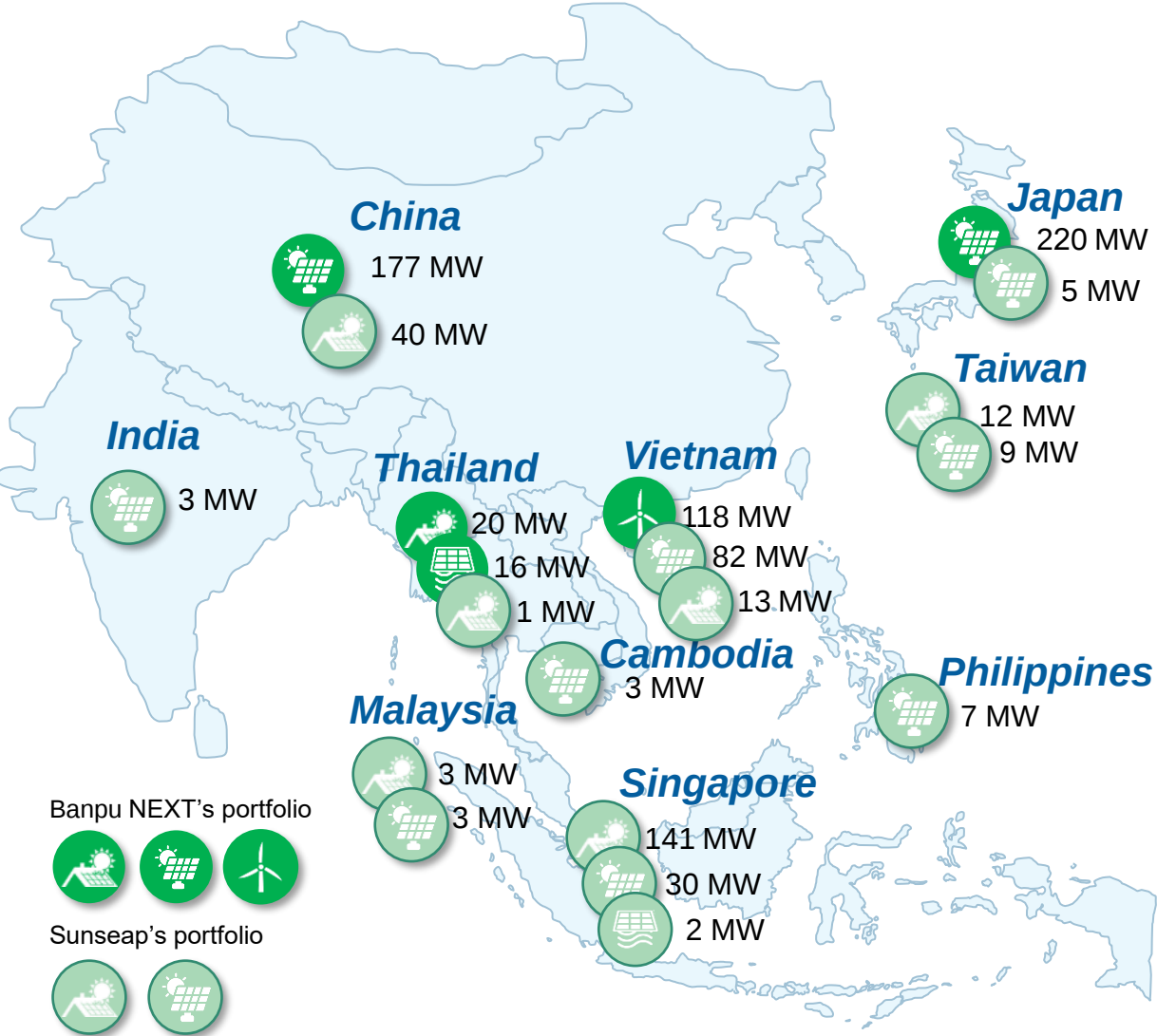
*Continued to serve high demand for power and steam driven by economic recovery but impacted by high coal cost*

- Reported revenue of RMB 387 M.

## SLG

- Under trial operation, with expected commercial dispatch by latter half of 2021

# Banpu Renewable Power: diversified Asia-Pacific portfolio\*



  
**906 MW**  
committed renewables  
capacity across Asia

  
**539 MW**  
committed solar  
power capacity

  
**249 MW**  
committed solar  
rooftop and floating  
solar capacity

  
**118 MW**  
committed wind  
capacity

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

# Banpu Renewable Power: 1Q21 updates



## China Solar

*Higher power sold supported by favorable weather conditions which resulted in higher capacity factor*

- Average capacity factor 1Q21 reported at 14.1%
- Power sold was 54 GWh, +18% QoQ
- Reported revenue of RMB 45 M with profit contribution of RMB 17 M

## Japan Solar

*Higher power sold from COD of Yamagata and Yabuki projects despite lower average capacity factor due to unfavorable weather conditions*

- Average capacity factor 1Q21 reported at 9.2%
- Power sold was 29 GWh, +22% QoQ
- Reported TK distribution of JPY 593 M

## Vietnam Wind

*Construction progress of Vinh Chau reaching at 57% while El Wind Mui Dinh ownership transfer is in process*

- Phase 1 of Vinh Chau project in Soc Trang province achieved construction progress of 57%
- Complete wind turbine foundation and reached 50% of transmission line progress



01

Highlights  
1Q21

02

Focus: Energy  
Transition

03

Financial  
Summary

04

Energy  
Resources

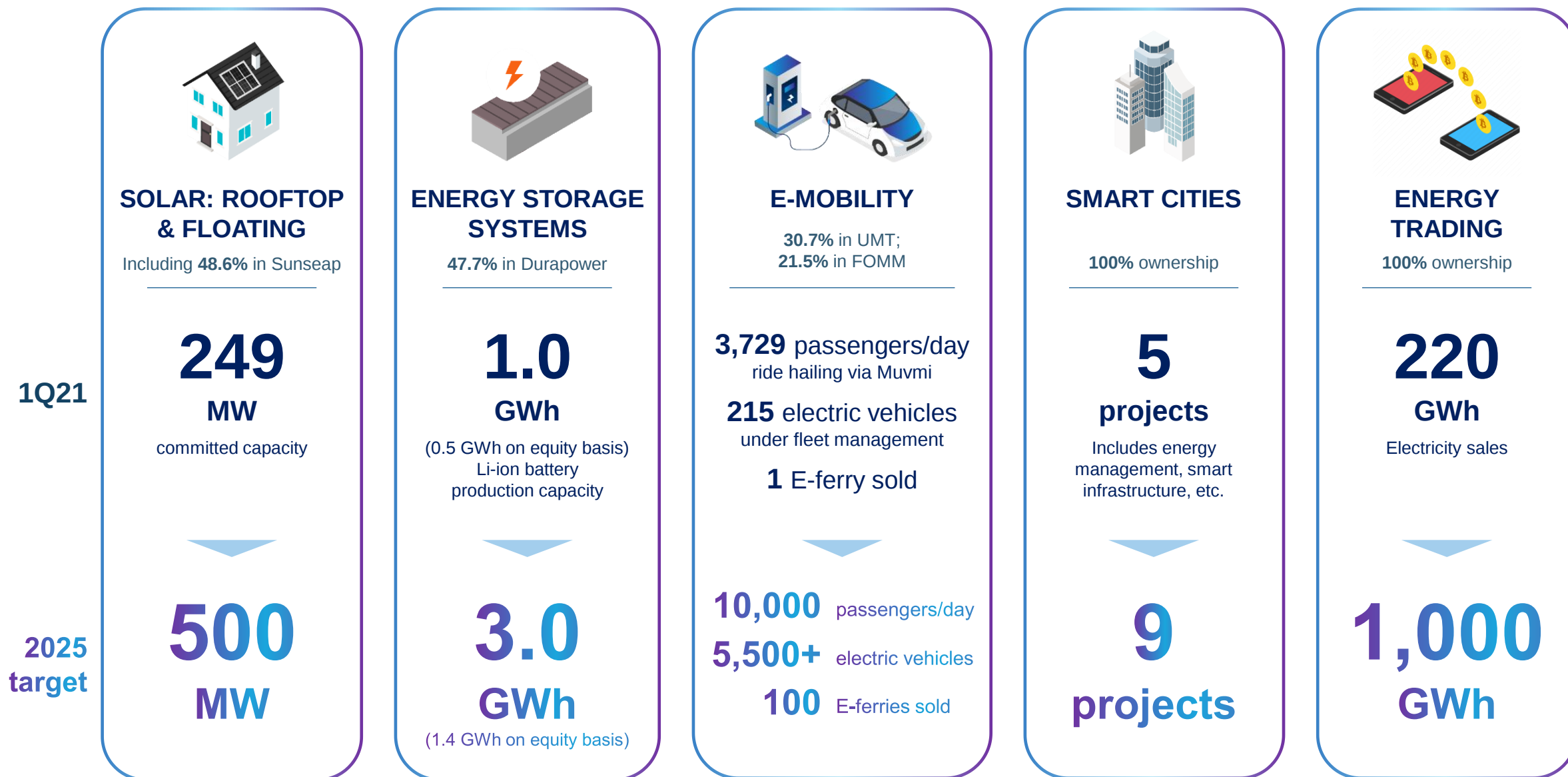
05

Energy  
Generation

06

**Energy  
Technology**

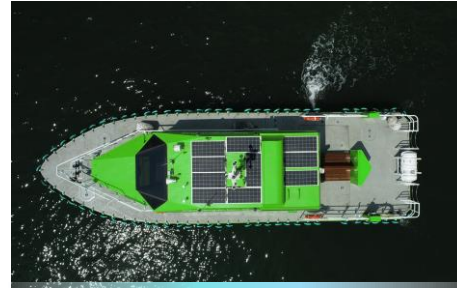
# Banpu Energy Technology: growth targets 2025



# Banpu Energy Technology: 1Q21 updates



## HYBRID-ELECTRIC BOAT



### FIRST HYBRID FAST LAUNCH VESSEL

Durapower partnered with Danfoss Editron, Sea Forrest Power Solutions, Penguin International and Bureau Veritas to launch Singapore's first hybrid-electric fast launch vessel

## FLEET EXPANSION



### ACHIEVED FLEET EXPANSION

Increased e-tuk tuk fleet to 100 units after achieving new high of 111k users in March (up 40% from December)



### EXPANSION TARGET BY 2021

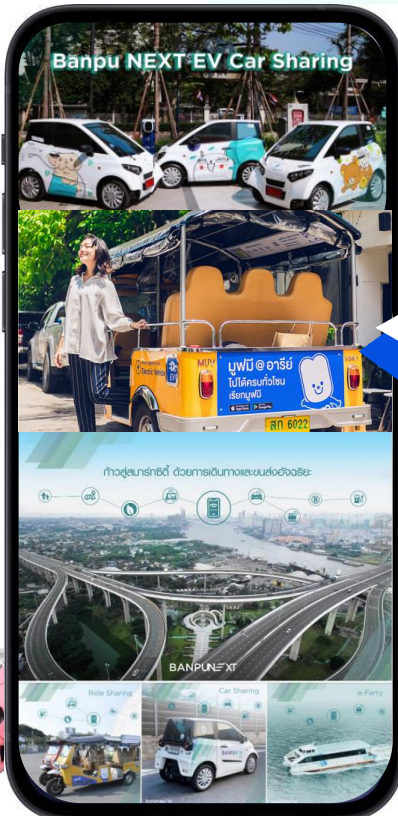
UMT targets to expand its service area coverage to 2,000 points in Bangkok by the end of 2021

# Banpu Energy Technology: eco-friendly transportation in Bangkok

BANPUNEXT

×

U.T.A.C.C.



LET'S RIDE AROUND  
**BANGKOK**  
with **muvmi**



>110k users

In March 2021  
(+40% vs Dec. 2020)



**1,000 pick up spots**

Across 6 routes in Bangkok city!  
(with plans to expand  
to 2,000 by year end)



**100 e-tuktuks**

Available for service

Chula-Samyan



Ratanakosin

Asoke-Nana



Kaset-Sena

Ari-Pradipat



Phaholyothin



# Banpu Energy Technology: 1Q21 updates (cont'd)



**SOLAR:  
ROOFTOP &  
FLOATING**



**ENERGY  
STORAGE  
SYSTEMS**



**E-MOBILITY**



**SMART CITIES**



**ENERGY  
TRADING**

## ROOFTOP SOLUTIONS



### NEW ROOFTOP PROJECTS COMMISSIONED

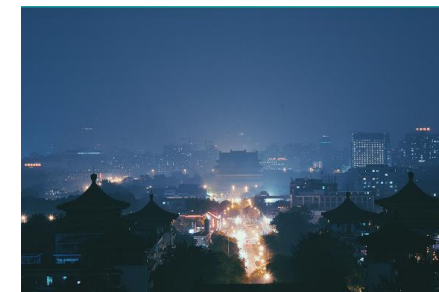
Four new solar rooftop projects commissioned in 1Q21, including Rugby School's main sport hall building (579 kW), UOB (28 kW), Syntec Construction (88 kW) and Betagen Sampran (1,166 kW).



### COMPLETION OF ROOFTOP SOLUTIONS

Banpu NEXT completed phase 1 and 2 of solar rooftop installation for the Summer Lassalle project with a capacity of 359 kWp and 190 kWp, pioneering the sustainable office concept

## ELECTRICITY SALES



### SECURED NEW SUPPLY CONTRACT

To deliver 10 GWh of electricity to Inter-University Research Organization in Tokyo for a period of 1 year from February 2021 – January 2022



## APPENDIX

# Banpu: 'integrated energy solutions' 2021

## ENERGY RESOURCES

### Shale Gas



**~700** MMcfed  
Net production

## ENERGY GENERATION

### Renewable Power



**657** MW  
Committed capacity

## ENERGY TECHNOLOGY

### Solar: Rooftop & Floating



**249** MW  
Committed capacity

### Mining



**43.0** Mt  
Coal sales

### Thermal Power



**2,476** MW  
Committed capacity

### Clean Energy Tech



**1.0 GWh** (100% basis)  
Li-ion batteries



**E-mobility services**  
**E-mobility solutions**



**5 smart city**  
projects



**220 GWh**  
electricity trading

# 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 Meters<sup>3</sup>
  - 1 MCF = 1.0 Million BTU (MMBTU) or Decatherms (dry gas)
  - 1 BCF = 1.0 Trillion BTU
  - 1 Meter<sup>3</sup> = 35.3 MCF
  - 1 Billion Meters<sup>3</sup> = 35.3 BCF

# 2021 indicative guidance

ILLUSTRATIVE AND INDICATIVE ONLY

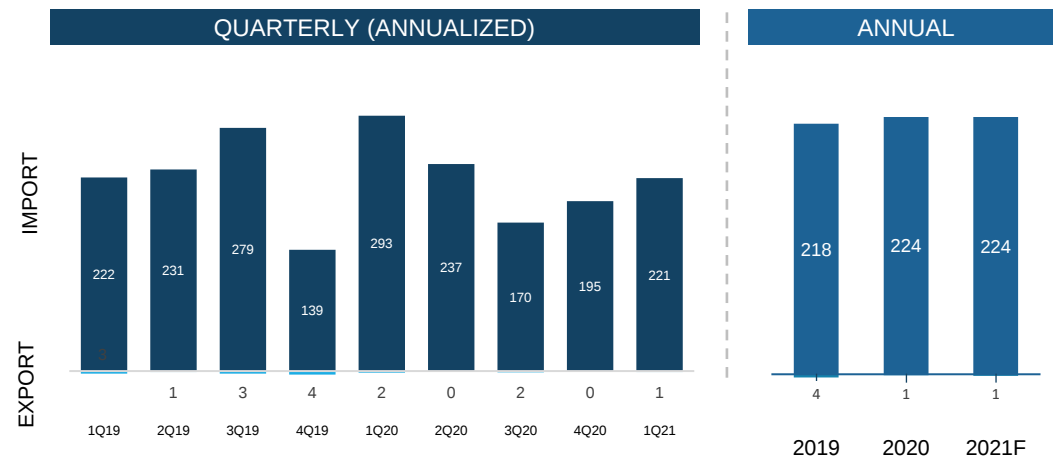
NET BACK

| UNIT GUIDANCE (US\$/MCF)          |                  | COMMENTS                                                          |
|-----------------------------------|------------------|-------------------------------------------------------------------|
| <b>REVENUE</b>                    |                  |                                                                   |
| <i>Reserves (Tcf)</i>             | <i>3 – 4</i>     |                                                                   |
| <i>Production volume (Mmcfd)</i>  | <i>600 – 700</i> |                                                                   |
| Average differential to Henry Hub | \$0.20 - \$0.40  | Difference selling points and Henry Hub (NYMEX basis)             |
| GCP&T costs                       | \$1.17 - \$1.24  | Gathering, compression, fractionation and transportation costs    |
| Pipeline revenue                  | \$0.02 - \$0.05  | Applicable to Chaffee Corners volume only                         |
| <b>COSTS</b>                      |                  |                                                                   |
| Lease operating expense           | \$0.40 - \$0.47  | Main component of operating costs                                 |
| G&A                               | \$0.24 - \$0.29  | Recurring general and administration costs                        |
| Taxes                             | 21%              | Currently benefit from tax shield due to accelerated DD&A         |
| DD&A                              | \$0.38 - \$0.45  | Depreciation, depletion and amortization                          |
| Drilling and completion costs     | \$0.22 - \$0.28  | Costs incurred to drill and to make the well ready for production |

# China: supply tightness will continue into summer

## CHINA THERMAL COAL IMPORTS/EXPORTS\*

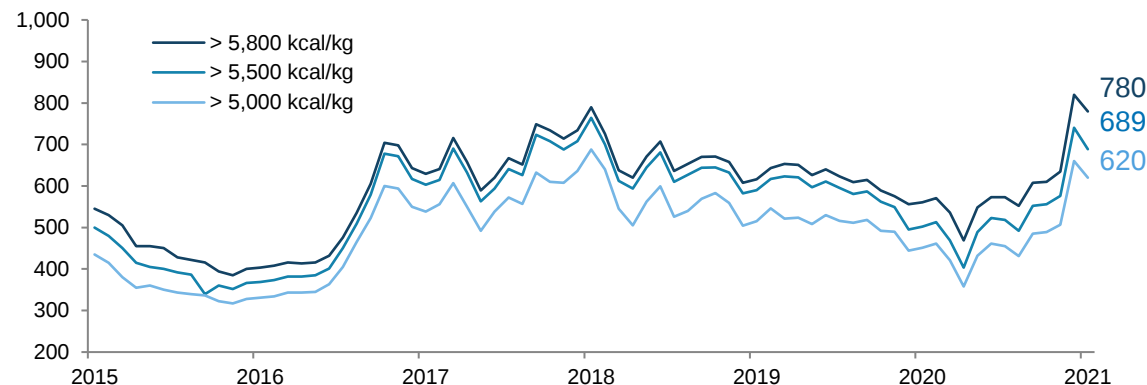
Unit: Mt



Sources: Banpu MS&L

## CHINA DOMESTIC COAL PRICES

Unit: RMB/t



Note: \*Includes lignite but excludes anthracite imports/exports  
Source: www.sxcoal.com/cn 9 April 2021

## 1Q21

- Strong economy and cold weather lead to robust thermal coal demand in Q1.
- Domestic coal production improve but still lag behind demand with ongoing safety inspections limited production growth
- Domestic coal prices rose sharply due to strong demand amid tight supply. Weak hydro, soaring ocean freight and reducing output by Inner Mongolia all contributed to an upward sentiment for coal price.
- Utilities delayed spot coal purchase due to high prices resulted in low stock at power plants.
- High Chinese domestic coal price and ban on Australian coal supported non-Australian coal prices especially Indonesian coal.
- High ocean freight curtailed buying interest.
- China-Australia trade tension has been elevated after Australia's recent scrapping of Victoria's Belt and Road agreement with China. The ban on Australian coal will likely affect trade flow through 2022.

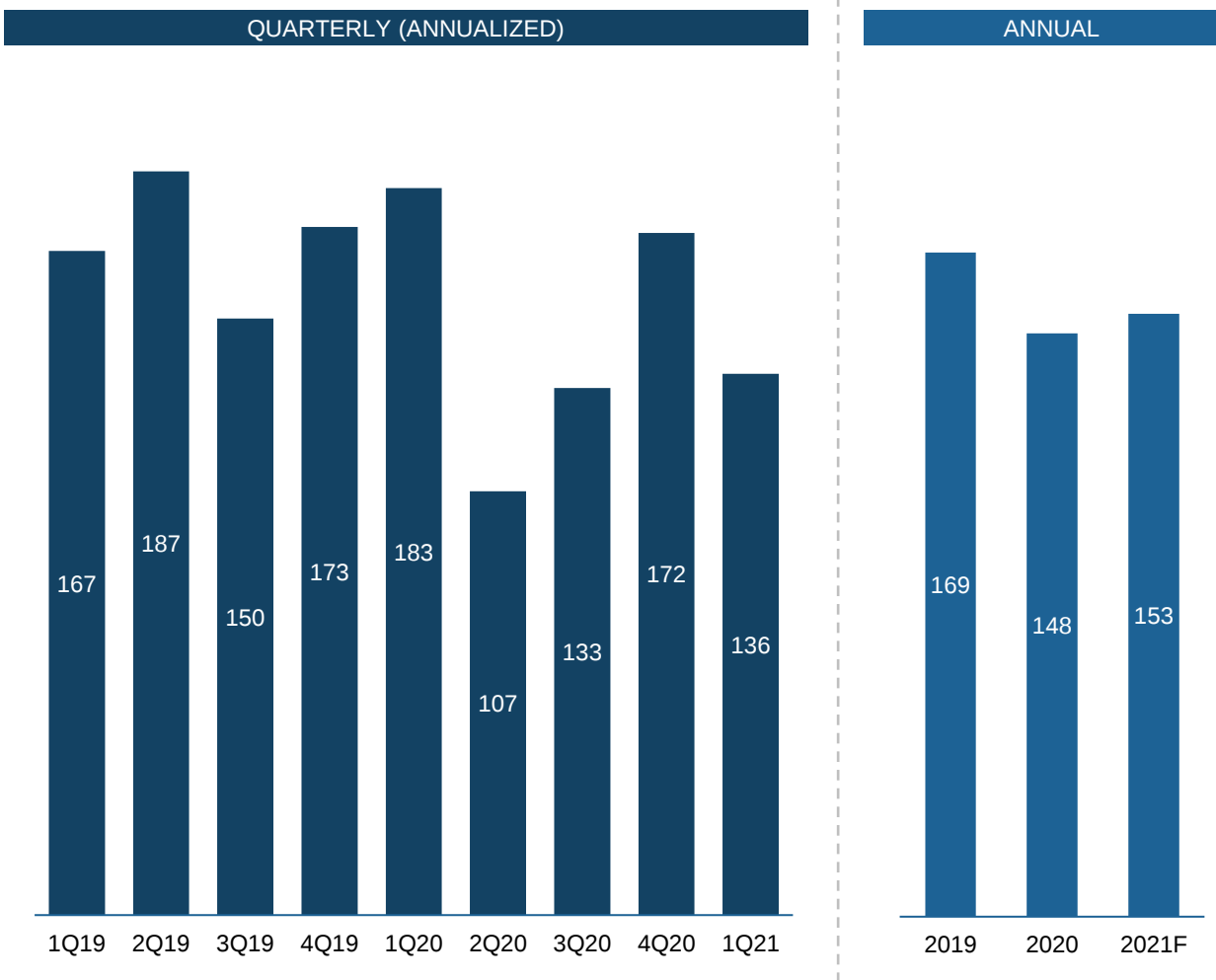
## OUTLOOK

- Strong economic outlook and hot weather will keep coal demand firm.
- Low stock at power plants may force power utilities to come to the market during high price to build stocks ahead of summer.
- We expect domestic coal supply will remain tight despite the National Development and Reform Commission (NDRC) urged major state-owned mines to push for production increases as ongoing mine safety inspections will limit supply from small miners.
- NDRC may relax import quota to ensure sufficient supply during summer. Recently, NDRC encouraged Gencos to import more. There will be an upside risk for our import estimates.
- China's ban on Australian coal has changed coal trade routes and has lifted coal prices and will continue to benefit non-Australian coal.

# India: strong demand in Q1 but the pandemic weigh on outlook

## INDIA THERMAL COAL IMPORTS\*

Unit: Mt



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

## 1Q21

- Growth in coal-fired generation and other industrial activity led to firm thermal coal demand in Q1.
- Total power generation in Q1-2021 was up by 9% YoY and up by 7% QoQ. Coal-fired generation in Q1-2021 was up by 13% YoY and up 13% QoQ due to strong industrial activity and low renewable and hydro generation.
- Coal India Limited (CIL) produced 203 Mt of coal in Q1, but dispatched only 164 Mt. While production was down 5%, dispatch was flat year-on-year. CIL added 40 Mt of coal inventory in Q1, reaching about 100 Mt by the end of March.
- Thermal coal imports in Q1-2021 was 34 Mt, down 21% QoQ and down by 26% YoY. A drop drove by high international coal prices and freight which forced consumers to use coal from stocks or purchased domestic coal and slow purchase of imported coal.
- Imported coal demand for power plants which requires imported coal for blending has been weak as government's drive to use domestic coal.
- Strong import demand from sponge iron and cement producers.
- Indian buyers purchased more Australian coal due to high Indonesian and South African coal prices.

## Outlook

- Second wave of the pandemic which resulted in restrictions at state level is weighing on the demand outlook.
- The construction sector will be affected in the near term due to migrant workers returning to their hometown which reduce steel and cement demand.
- CIL will continue offering massive volumes in the spot market in 2021 due to high stocks, impacting imports particularly for the power sector.

# Coal quarterly output summary

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

| Mines                       | CV (kcal/kg)* | 3Q20       | 4Q20       | 1Q21       | 2Q21e      |
|-----------------------------|---------------|------------|------------|------------|------------|
| <b>Western operations</b>   |               | <b>1.1</b> | <b>1.7</b> | <b>1.1</b> | <b>1.7</b> |
| Springvale                  | 6,700         | 0.3        | 1.0        | 0.5        | 1.0        |
| Clarence                    | 6,700         | 0.5        | 0.4        | 0.3        | 0.4        |
| Airly                       | 6,700         | 0.4        | 0.4        | 0.3        | 0.3        |
| <b>Northern operations</b>  |               | <b>1.7</b> | <b>1.3</b> | <b>1.3</b> | <b>1.4</b> |
| Mandalong                   | 6,700         | 1.5        | 1.1        | 1.1        | 1.0        |
| Myuna                       | 6,700         | 0.2        | 0.2        | 0.2        | 0.4        |
| <b>Total Australia coal</b> |               | <b>2.8</b> | <b>3.1</b> | <b>2.4</b> | <b>3.1</b> |

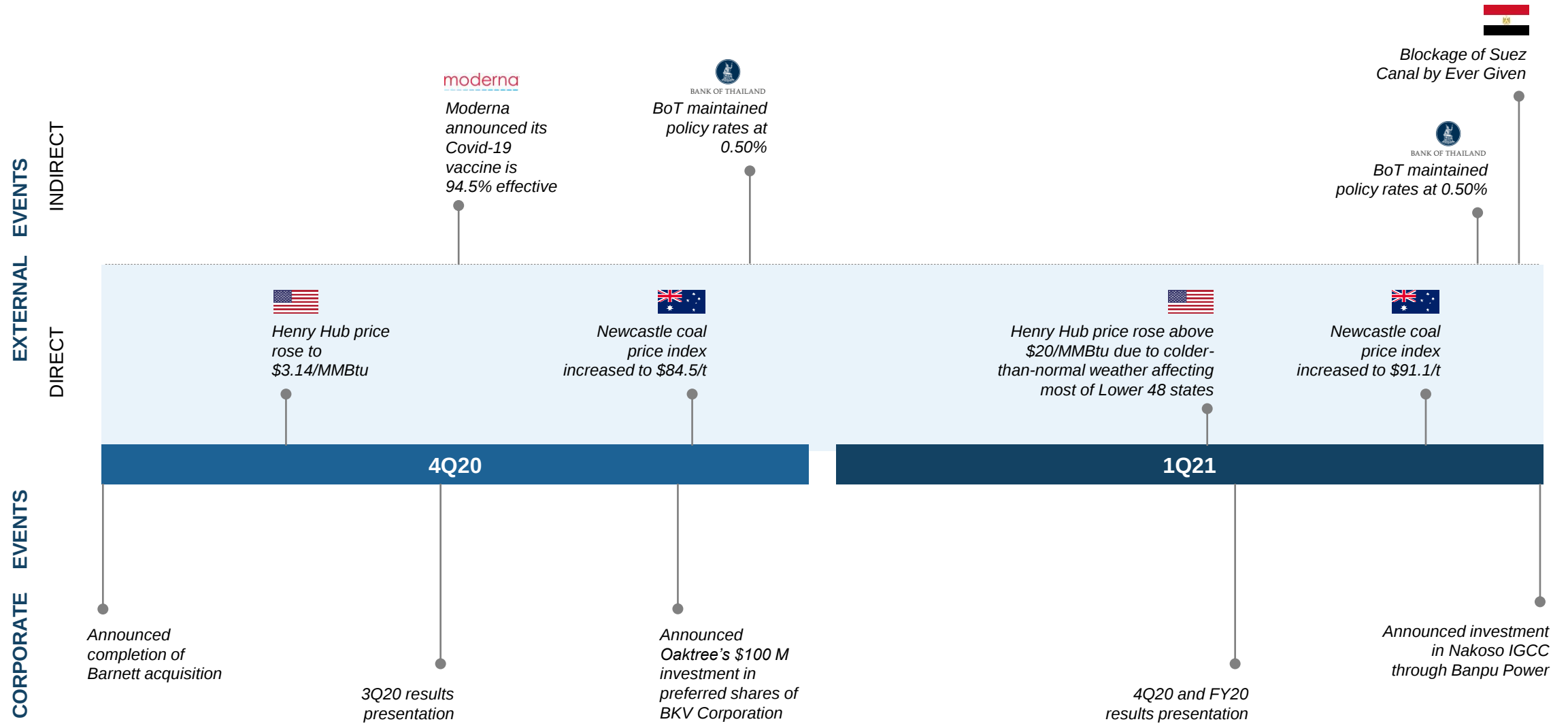
## INDONESIA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON 100% BASIS

| Mines                       | CV (kcal/kg)* | 3Q20        |                      | 4Q20        |                      | 1Q21        |                      | 2Q21e       |                      |
|-----------------------------|---------------|-------------|----------------------|-------------|----------------------|-------------|----------------------|-------------|----------------------|
|                             |               | 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                   | 5,950 – 6,250 | 2.0         | 11.9                 | 2.3         | 10.3                 | 1.8         | 12.5                 | 1.8         | 9.9                  |
| Trubaindo                   | 6,550 – 6,700 | 1.4         | 8.9                  | 0.9         | 8.3                  | 0.7         | 14.0                 | 0.9         | 11.3                 |
| Bharinto                    |               | 0.8         | 7.5                  | 1.1         | 6.7                  | 1.0         | 6.7                  | 1.4         | 6.8                  |
| Kitadin-Embalut             | 5,800         | 0.4         | 10.6                 | 0.1         | 10.6                 | 0.3         | 18.6                 | 0.5         | 15.2                 |
| Jorong                      | 5,300         | 0.3         | 7.8                  | 0.2         | 7.4                  | 0.2         | 11.6                 | 0.3         | 9.8                  |
| <b>Total Indonesia coal</b> |               | <b>4.9</b>  | <b>10.0</b>          | <b>4.6</b>  | <b>8.9</b>           | <b>4.0</b>  | <b>11.5</b>          | <b>4.9</b>  | <b>9.8</b>           |

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

| Mines                   | CV (kcal/kg)* | 3Q20       | 4Q20       | 1Q21       | 2Q21e      |
|-------------------------|---------------|------------|------------|------------|------------|
| Gaohe                   |               | 2.3        | 2.0        | 2.3        | 2.3        |
| Hebi                    |               | 0.4        | 0.3        | 0.2        | 0.2        |
| <b>Total China coal</b> |               | <b>2.7</b> | <b>2.3</b> | <b>2.5</b> | <b>2.5</b> |

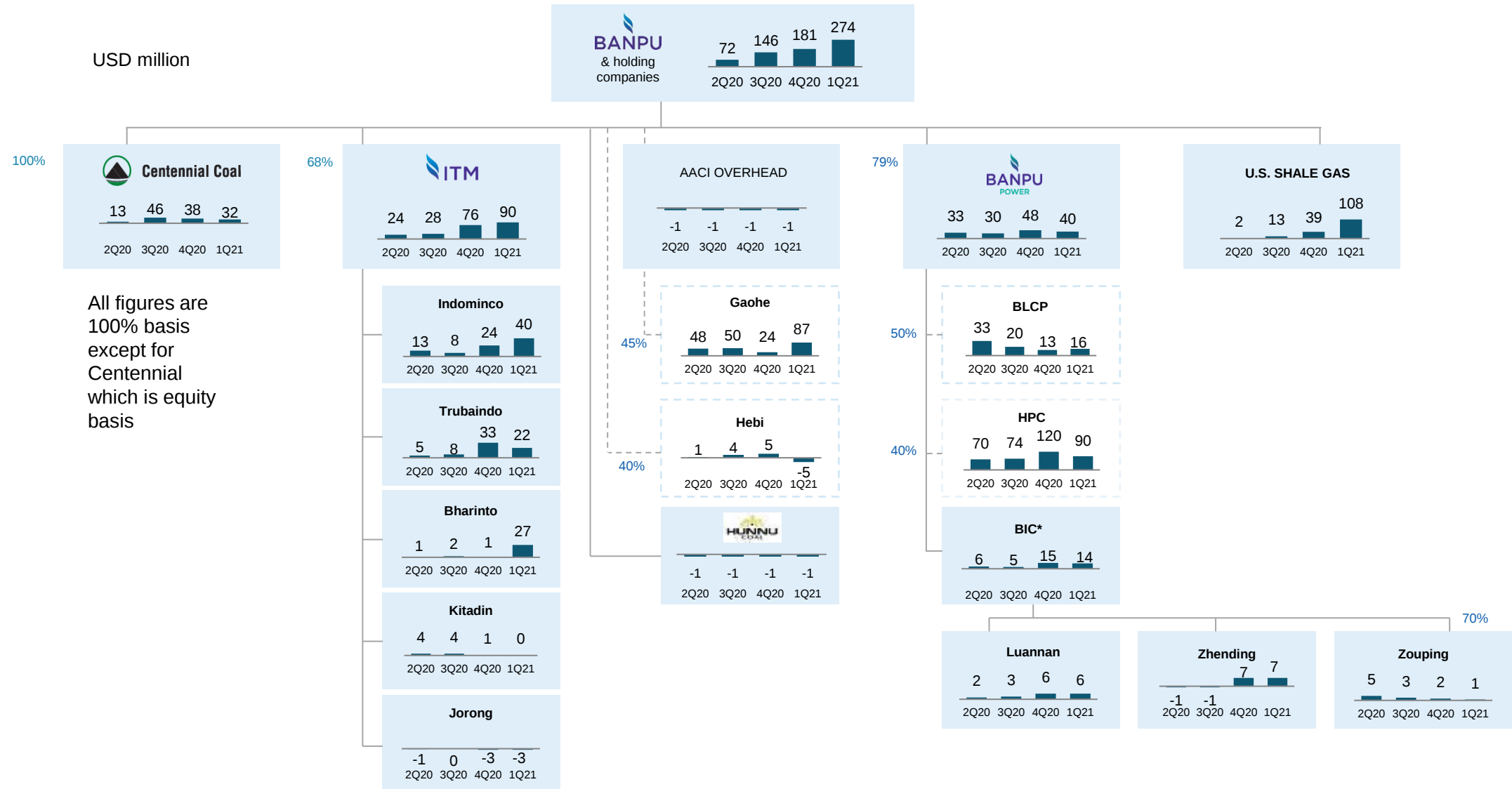
# Key external and corporate events



# FX impact analysis guidance on P&L

| CURRENCY EXPOSURE               | NPAT IMPACT 1Q21 (US\$M) | APPROXIMATE FX EXPOSURE (US\$M) |           | NPAT 5% SENSITIVITY 2Q21 (US\$M)                             |
|---------------------------------|--------------------------|---------------------------------|-----------|--------------------------------------------------------------|
|                                 |                          | NET LIABILITY                   | NET ASSET | Assuming 5% depreciation of local currencies against USD     |
| Banpu: THB bond and Others      | 31.8                     | -950                            |           | THB 40<br>▪ BOT revised down growth forecast 1%-2% in 2021   |
| ITMG: IDR asset and liabilities | -2.6                     |                                 | 50        | IDR -2<br>▪ BI revised down growth forecast 4.1-5.1% in 2021 |
| CEY: USD asset                  | 0.2                      | -50                             |           | AUD -3<br>▪ RBA forecast revised up growth 4.75% in 2021     |
| Net                             | 29.4                     |                                 |           | NET 35                                                       |

# 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                  | 1Q21       | 4Q20       | 1Q20        | QoQ%        | YoY%        |
|------------------------------|------------|------------|-------------|-------------|-------------|
| <b>Total sales revenues*</b> | <b>736</b> | <b>662</b> | <b>633</b>  | <b>+11%</b> | <b>+16%</b> |
| Sales revenue – Coal         | 461        | 497        | 524         | -7%         | -12%        |
| Sales revenue – Gas          | 186        | 82         | 18          | +127%       | +947%       |
| Sales revenue – Power        | 67         | 60         | 58          | +12%        | +16%        |
| Cost of sales                | (508)      | (503)      | (491)       |             |             |
| <b>Gross Profit*</b>         | <b>227</b> | <b>159</b> | <b>142</b>  | <b>+43%</b> | <b>+60%</b> |
| Gross profit – Coal          | 121        | 115        | 125         | +5%         | -3%         |
| Gross profit – Gas           | 105        | 29         | (3)         | +263%       | n.a.        |
| Gross profit – Power         | 16         | 15         | 18          | +4%         | -14%        |
| <b>GPM</b>                   | <b>31%</b> | <b>24%</b> | <b>22%</b>  |             |             |
| <i>GPM – Coal</i>            | <i>26%</i> | <i>23%</i> | <i>24%</i>  |             |             |
| <i>GPM – Gas</i>             | <i>56%</i> | <i>35%</i> | <i>-16%</i> |             |             |
| <i>GPM – Power</i>           | <i>23%</i> | <i>25%</i> | <i>32%</i>  |             |             |

# Banpu consolidated: operating profit

| USD million                | 1Q21       | 4Q20       | 1Q20       | QoQ%         | YoY%         |
|----------------------------|------------|------------|------------|--------------|--------------|
| <b>Gross Profit</b>        | <b>227</b> | <b>159</b> | <b>142</b> | <b>+43%</b>  | <b>+60%</b>  |
| <b>GPM</b>                 | <b>31%</b> | <b>24%</b> | <b>22%</b> |              |              |
| SG&A                       | (81)       | (79)       | (83)       |              |              |
| Royalty                    | (44)       | (50)       | (52)       |              |              |
| Income from associates     | 43         | 25         | 48         |              |              |
| Other income and Dividend  | 11         | 16         | 8          |              |              |
| Mining property            | (8)        | (9)        | (9)        |              |              |
| <b>EBIT</b>                | <b>148</b> | <b>62</b>  | <b>53</b>  | <b>+137%</b> | <b>+177%</b> |
| EBIT – Coal                | 44         | 8          | 20         | +482%        | +126%        |
| EBIT – Gas                 | 82         | 12         | (15)       | +608%        | n.a.         |
| EBIT – Power               | 36         | 44         | 49         | -18%         | -26%         |
| EBIT – Energy Technology   | (14)       | (2)        | 0          | n.a.         | n.a.         |
| <b>EBITDA</b>              | <b>274</b> | <b>181</b> | <b>164</b> | <b>+52%</b>  | <b>+67%</b>  |
| EBITDA – Coal              | 138        | 94         | 107        | +46%         | +28%         |
| EBITDA – Gas               | 108        | 39         | 1          | +179%        | +7489%       |
| EBITDA – Power             | 40         | 48         | 54         | -16%         | -27%         |
| EBITDA – Energy Technology | (12)       | 0          | 1          | n.a.         | n.a.         |

# Banpu consolidated: net profit

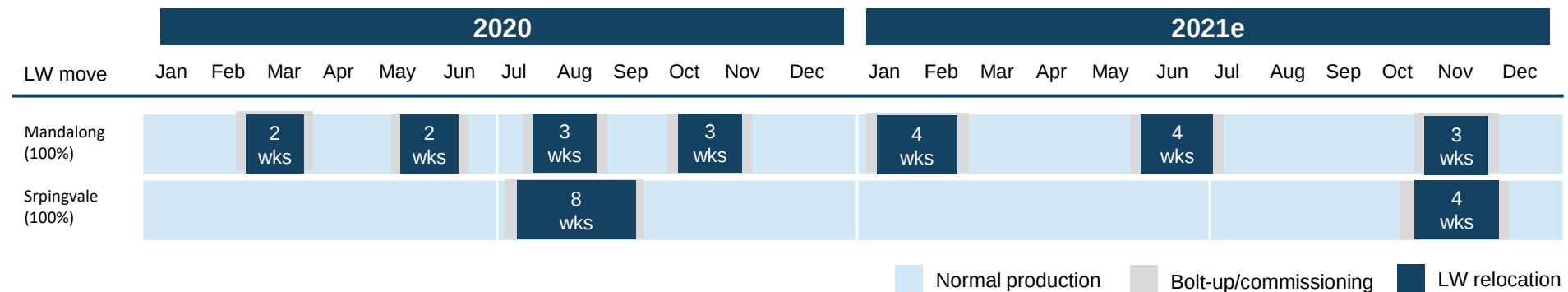
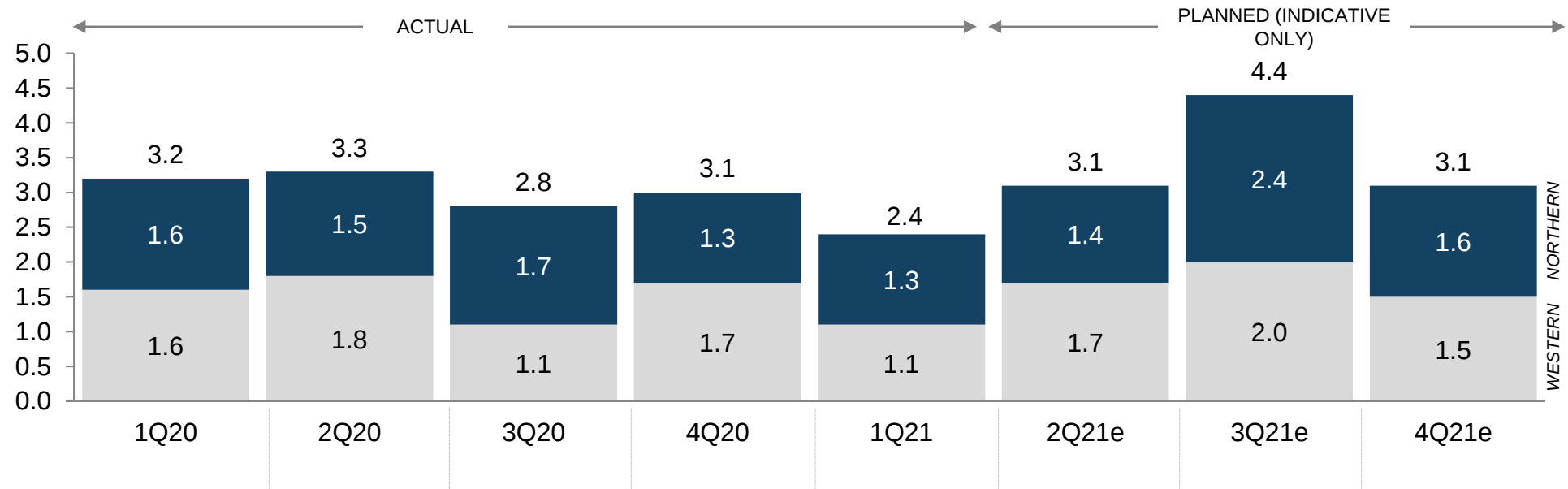
| USD million                             | 1Q21       | 4Q20        | 1Q20        | QoQ%   | YoY%  |
|-----------------------------------------|------------|-------------|-------------|--------|-------|
| <b>EBIT</b>                             | <b>148</b> | <b>62</b>   | <b>54</b>   | +137%  | +176% |
| Interest expenses                       | (43)       | (42)        | (45)        |        |       |
| Financial expenses                      | (2)        | (2)         | (2)         |        |       |
| Income tax (core business)              | (20)       | (5)         | (20)        |        |       |
| Minorities                              | (26)       | (12)        | (12)        |        |       |
| <b>Net profit before extra items</b>    | <b>58</b>  | <b>1</b>    | <b>(25)</b> | +4470% | n.a.  |
| Non-recurring items*                    | (5)        | (38)        | 15          |        |       |
| Gain (Loss) on Derivatives Transactions | (5)        | 17          | (6)         |        |       |
| Income tax (non - core business)        | (0)        | (3)         | (0)         |        |       |
| Deferred tax income (expenses)          | (26)       | 37          | (40)        |        |       |
| <b>Net profit before FX</b>             | <b>21</b>  | <b>14</b>   | <b>(57)</b> | +48%   | n.a.  |
| FX translation                          | 29         | (30)        | 112         |        |       |
| <b>Net Profit</b>                       | <b>51</b>  | <b>(15)</b> | <b>55</b>   | n.a.   | -7%   |
| EPS (US\$/share)                        | 0.01       | (0.003)     | 0.011       |        |       |

# Centennial: income statement

| USD million                  | 1Q21          | 4Q20         | 1Q20          | QoQ% | YoY% |
|------------------------------|---------------|--------------|---------------|------|------|
| <b>Sales volume (Mt)</b>     | <b>2.6</b>    | <b>3.1</b>   | <b>3.1</b>    | -15% | -15% |
| Sales revenue                | 162.3         | 174.9        | 175.8         | -7%  | -8%  |
| Cost of Sales                | (164.7)       | (165.2)      | (160.9)       |      |      |
| <b>Gross Profit</b>          | <b>(2.4)</b>  | <b>9.8</b>   | <b>15.0</b>   | n.a. | n.a. |
| GPM                          | -1%           | 6%           | 9%            |      |      |
| SG&A                         | (20.3)        | (20.5)       | (21.5)        |      |      |
| Royalty                      | (10.6)        | (11.8)       | (11.6)        |      |      |
| Other income                 | 1.4           | 16.8         | 1.5           |      |      |
| Other expenses               | -             | -            | -             |      |      |
| <b>EBIT</b>                  | <b>(31.9)</b> | <b>(5.8)</b> | <b>(16.6)</b> | n.a. | n.a. |
| Interest expenses            | (5.6)         | (5.8)        | (5.7)         |      |      |
| Financial expenses           | (0.7)         | -            | (0.5)         |      |      |
| Gain (loss) on exchange rate | 0.2           | 3.0          | 1.5           |      |      |
| Gain (loss) on derivative    | (2.4)         | 2.3          | (2.8)         |      |      |
| Corporate income tax         | -             | -            | -             |      |      |
| Deferred tax income          | 12.1          | 2.4          | 7.2           |      |      |
| <b>Net Profit</b>            | <b>(28.3)</b> | <b>(3.8)</b> | <b>(16.9)</b> | n.a. | n.a. |

# Australia coal: quarterly equity rom output

Total equity ROM (Mt)



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%.

