



Banpu 1Q24 results

Investor and analyst update

16th May 2024



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The background of the slide features a composite image. On the left, a large, semi-transparent blue number '01' is overlaid on a dark blue gradient. The rest of the background is a photograph of a city skyline, likely Hong Kong, viewed from an elevated position. A large white wind turbine is prominent in the foreground on the right side. In the upper center, a small airplane is visible in flight against a clear blue sky. The city below is densely packed with buildings, and a body of water with a bridge is visible in the middle ground.

01

Highlights & Strategic Review

1Q24 highlights

Key financial metrics

\$250 M

EBITDA

Resilient performance despite low commodity prices, supported by Power business

\$44 M

NPAT

Impacted by lower coal and gas prices

0.87 x

ND/E

Decreased from 0.90x in the previous quarter

Key operational metrics



830 MMcfed

Gas production



900 MW

Renewable power*



41.0 Mt

Coal sales**

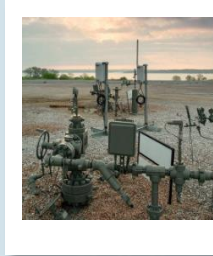


4,008 MW

Thermal power*

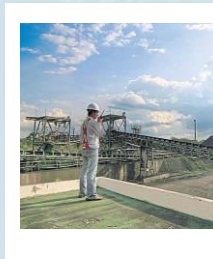
Note: *Committed capacity; **Coal sales target 2024

Key developments



CCUS development

Steady increase in Barnett Zero injection rate to 75% of target by the end of 1Q24. The Cotton Cove project is targeted to commission in 4Q24



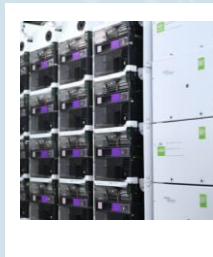
Operational enhancement

Through cost-saving initiatives, operational efficiencies, third-party coal blending and domestic / export sales balancing strategy



Battery and BESS development

Commenced operations of Banpu NEXT and SVOLT Energy Battery Pack Factory and signed strategic cooperation with SVOLT for future BESS developments



Expanding into an AI-integrated platform

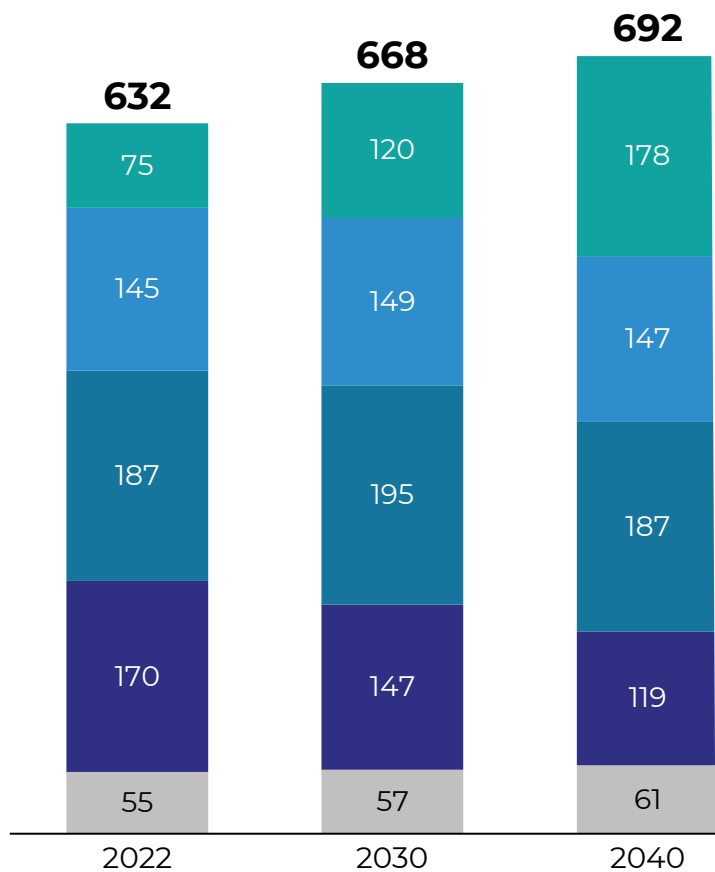
Banpu NEXT invested US\$3.2 M in Series B funding for Enspired, an energy-trading-as-a-service company using AI to build trading strategies

Global energy transition driven by the 3Ds

WORLD PRIMARY ENERGY DEMAND

Unit: Exajoules

Renewables Natural gas Oil Coal Other



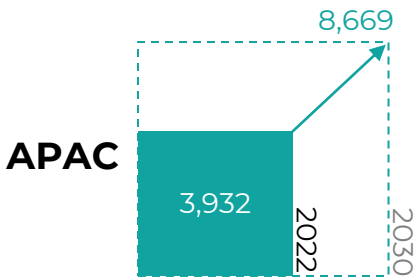
Source: IEA WEO 2023 Stated Policies Scenario
Note: *billion cubic meters

ENERGY DEMAND IN BANPU GEOGRAPHIES



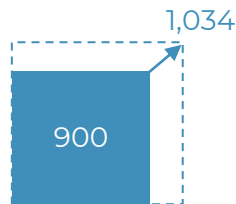
RENEWABLES

Unit: TWh



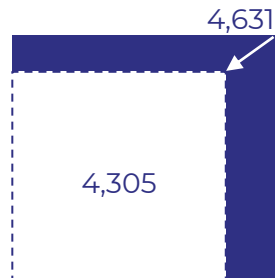
NATURAL GAS

Unit: Bcm*

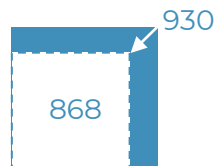
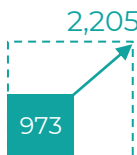


COAL

Unit: Mt



US



01

Digitalization

Digital transformation of industries and growth of data and cloud demand

02

Decarbonization

Ambitious net zero commitments, demand for cleaner baseload power

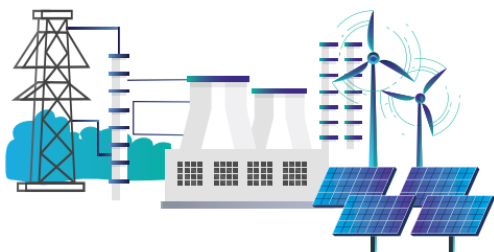
03

Decentralization

Liberalization of markets, direct access to consumers

Banpu strategy overview

1 OPERATIONAL INITIATIVES



Improve **Operating Profitability**

-  Enhancing Cash Generation across Operations
-  Efficiency Improvement across Assets
-  Capital Expenditure Rationalization

2 ACCRETIVE GROWTH



Expand **Value Structure**

-  High-growth New S-Curve Sectors
-  Synergistic with Existing Businesses

SUSTAINABLE MAXIMIZATION OF SHAREHOLDER VALUE



Future-proof portfolio that thrives and evolves through volatility and uncertainty

Banpu strategy: initiatives to achieve higher profitability

MINING



GAS



POWER



ENERGY TECH



2024-25 STRATEGY

Robust and Responsible Miner

Continuing to optimize production, decarbonize, and cut costs to **maximize value and cash flow from existing reserves, with a strategic focus on minerals and nature-based solutions.**

Integrated Green Gas Producer

Optimizing operations, reducing emissions through CCUS and **committed to achieving Net Zero for Scope 1 & 2 by the early 2030s.**

Thermal: Unique Baseload Power Portfolio

Balanced cashflow from **PPA-based assets** and capturing high upside potential of assets in **merchant markets.**

Renewable: Quality Green Megawatts

Emphasis on **strategic synergies of renewable energy and electricity trading** in key growth regions.

New S-curve in energy & beyond

Portfolio optimization focusing on **financial returns.**

Vertically-integrated battery player

Strengthen position and **build opportunities for revenue stacking** with energy trading.

KEY STRATEGIC FOCUS

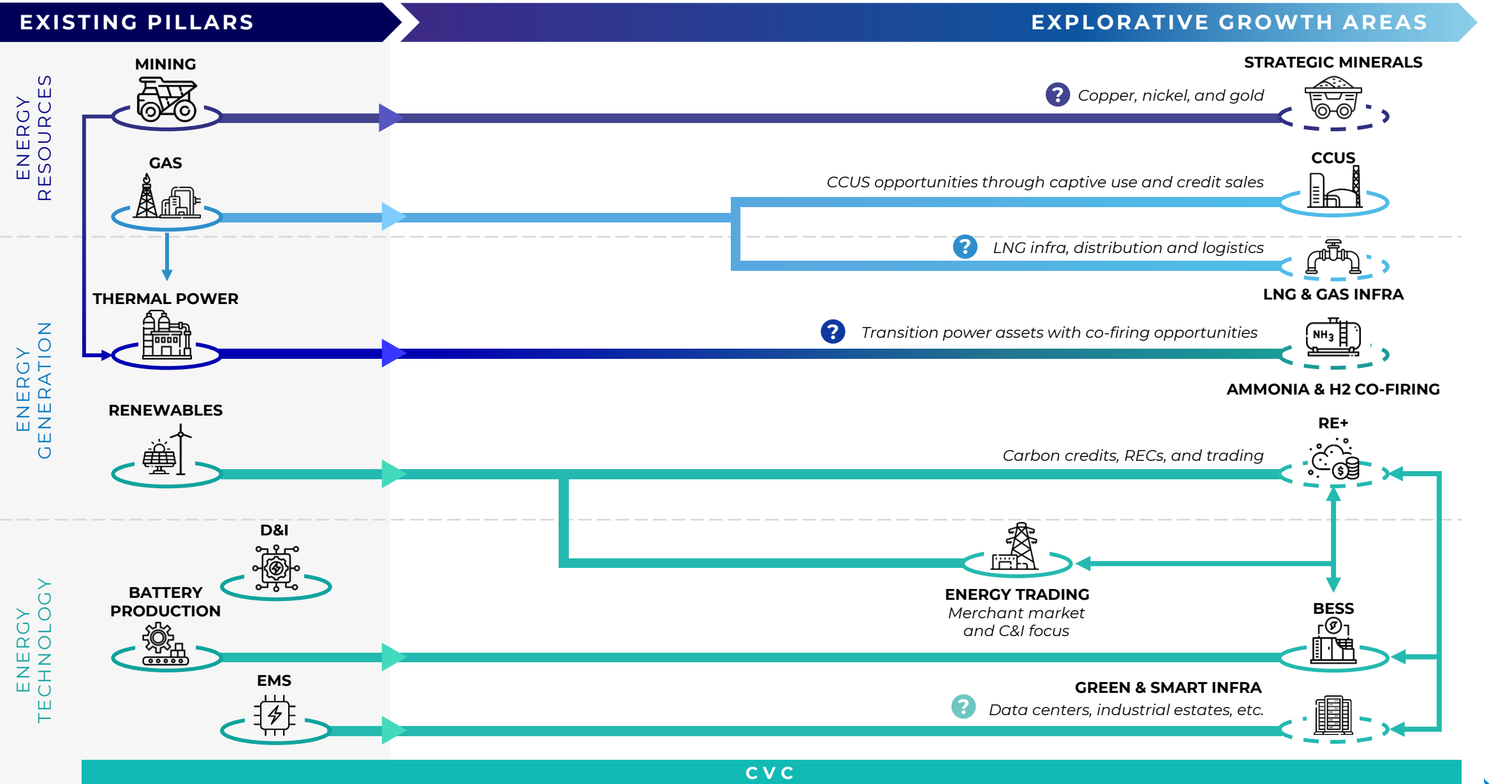
1 Diversified and integrated portfolio

2 Robust return from existing and new assets

3 Digitalization and Decarbonization

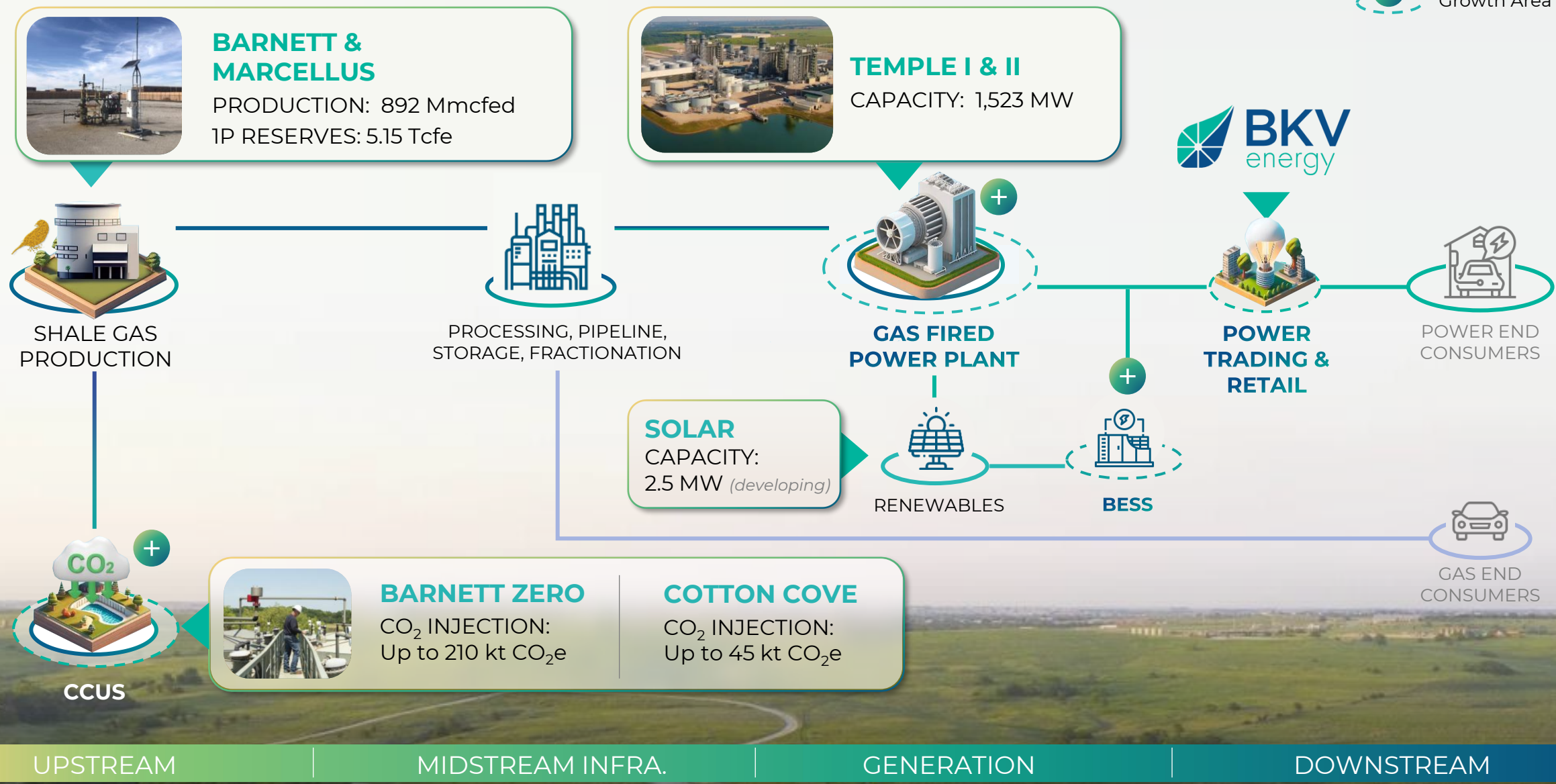


Banpu strategy: accretive growth to develop a future-proof portfolio



Banpu strategy: accretive growth across our US value chain (detailed)

 Growth Area



Accretive growth: CCUS progress and development

Barnett Zero

210,000 t



OPERATING

BARNETT ZERO
Up to 210,000 tons CO₂e
Est. avg. annual injection rate



- CO₂ sequestration from Barnett operations
- **One of the first commercial carbon sequestration wells** in the US
- **COD: 4Q23**

Cotton Cove

45,000 t



DEVELOPING

COTTON COVE
Up to 45,000 tons CO₂e
Est. avg. annual injection rate



- CO₂ sequestration from Barnett operations and utilization of BKV's midstream infrastructure
- **COD target: 4Q24**

GROWTH 2030s

30,000,000 tons CO₂e

Reviewing CCUS potential opportunities:

30 Mt CO₂e per year

Value creation from CCUS



Decarbonization



Additional revenue generation



Future synergies with power business

Additional projects
+26.5 million tons CO₂e



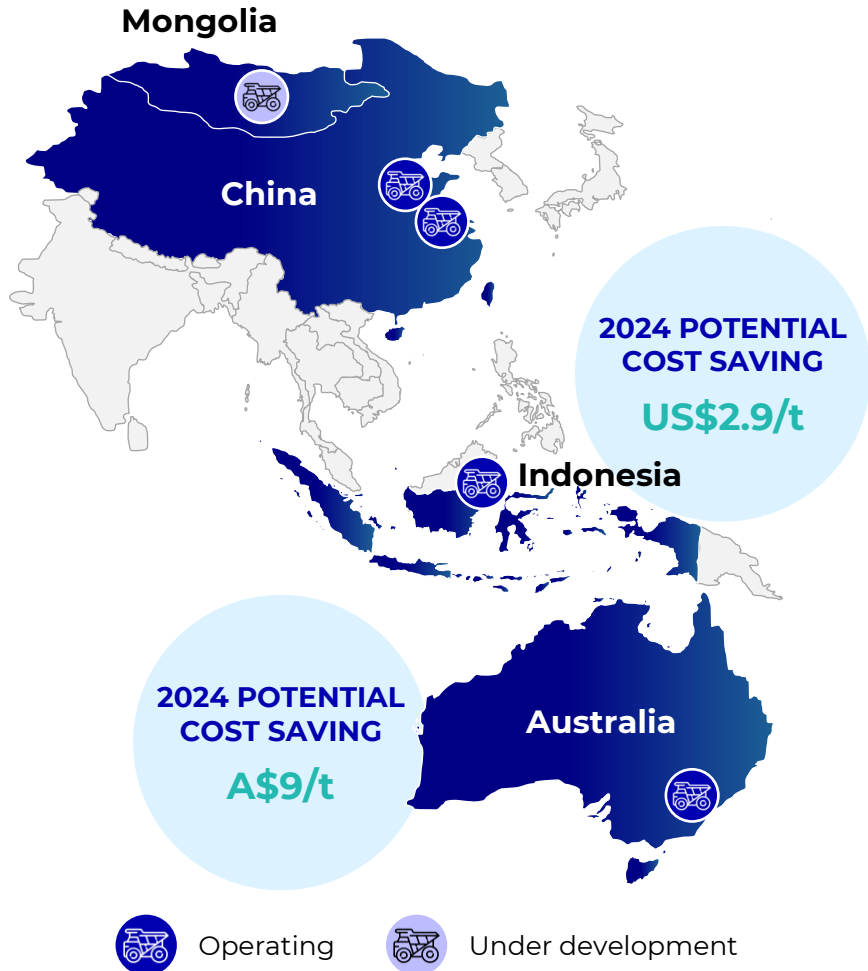


Q2

Operation Highlights

Mining: value creation and cost saving initiatives

Focus on enhancing production reliability, supply chain efficiency and pricing strategy across all operating countries



Supply chain optimization

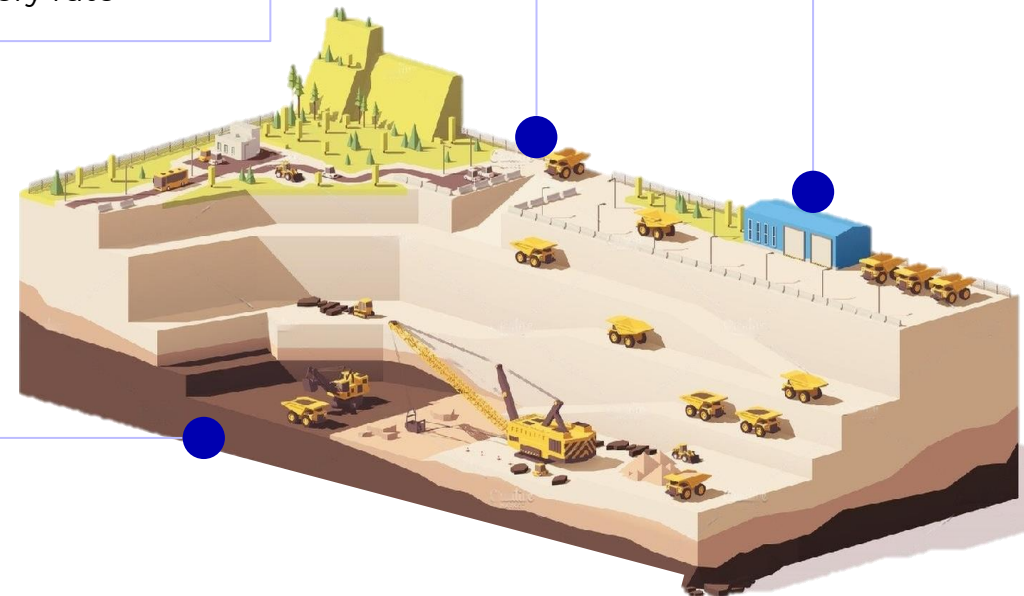
- Optimize hauling and barge utilization
- Efficient capital spending and optimize costs through strategic procurement
- Development of intelligent washery plant to increase clean coal recovery rate

Marketing initiatives

- Improve pricing strategy and initiatives on strategic blending
- Enhance ASP through balancing domestic/export sales strategies
- Secure guaranteed coal sales to combat volatile domestic coal prices

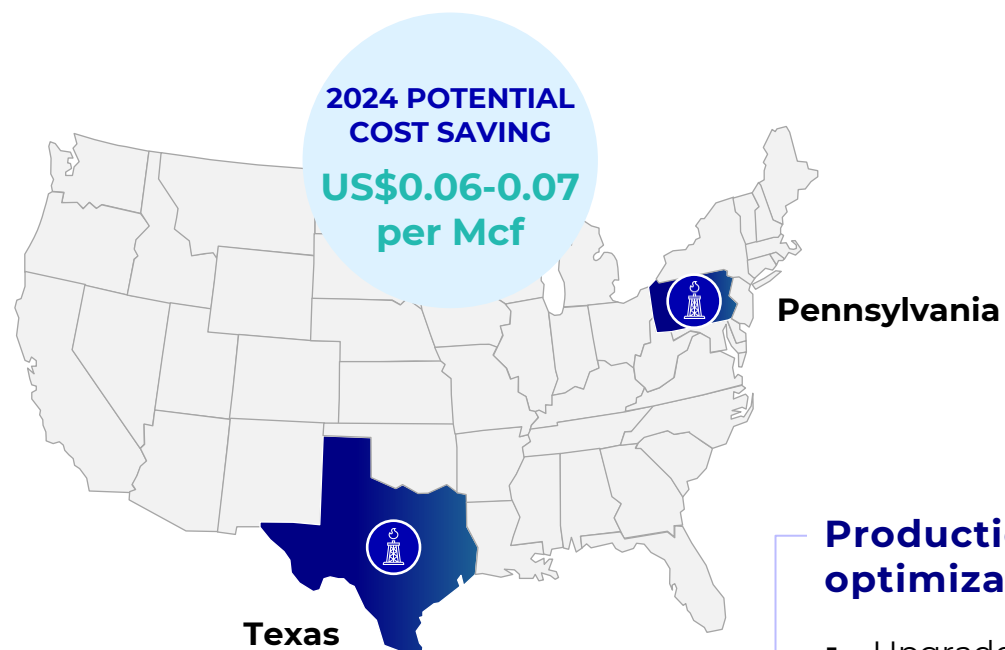
Production improvement

- Reduce overburden distance at mine sites
- Machinery optimization and digital solutions
- Optimize production schedules, equipment maintenance, and safety protocols



Gas: value creation and cost saving initiatives

Focus on increasing production through optimization, reducing cost through strategic initiatives and enhancing sustainability through CCUS projects



Shale gas asset

Cost reduction

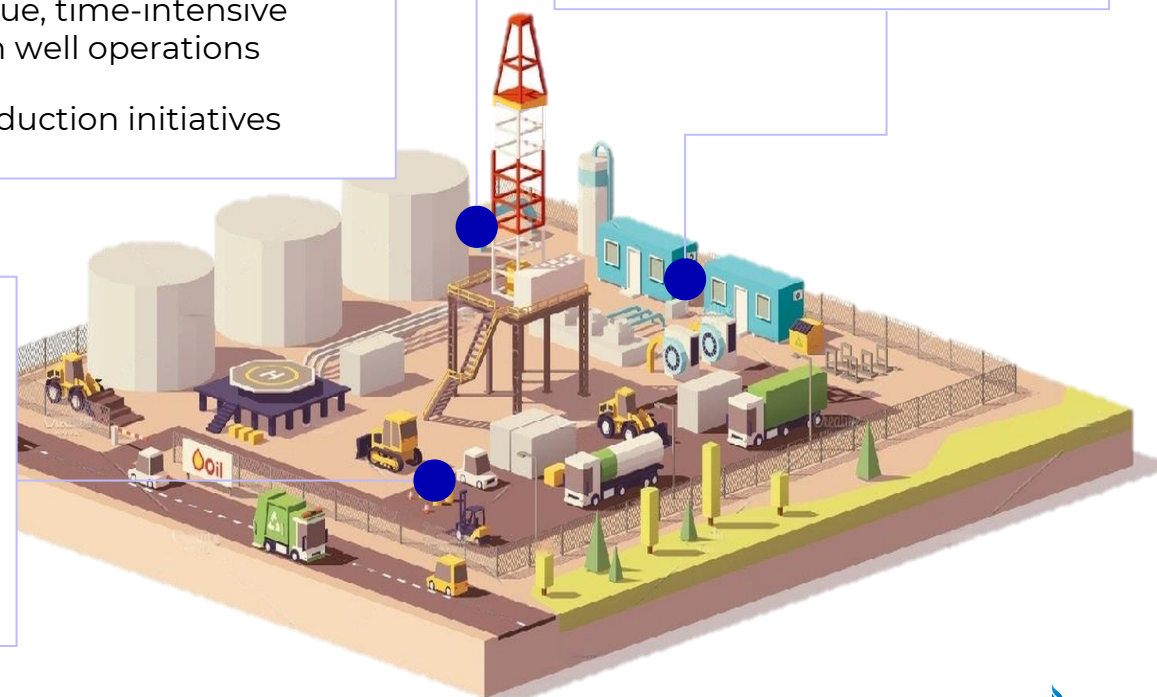
- 10 active LOE cost savings initiatives
- Profitability analysis in the current pricing environment resulted in shut-in of over 50 marginal wells
- Optimizing man-hours on low-value, time-intensive tasks in well operations
- G&A reduction initiatives

Production optimization

- Upgraded automated plungers with improved contaminant removal, resulting in about 50 MMcf increase in production in 1Q24

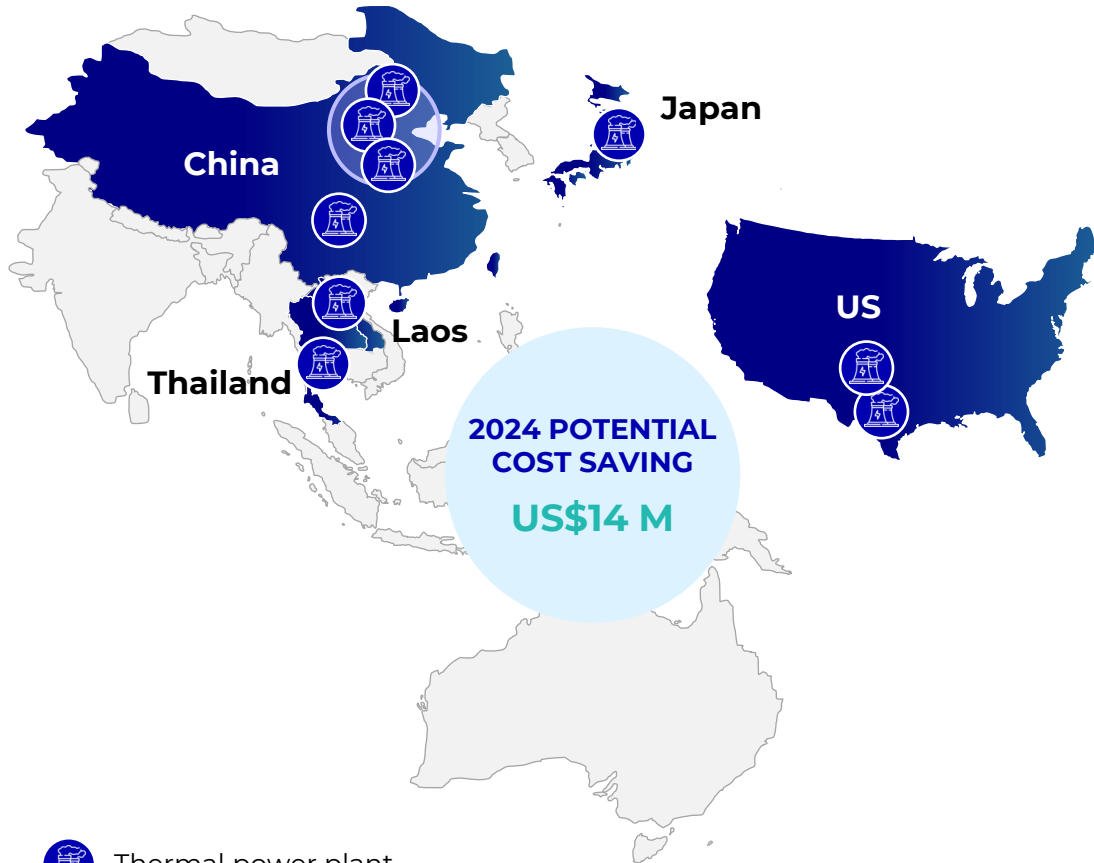
Sustainability

- Steady increase in injection rate at Barnett Zero CCUS project to more than 75% of the target by the end of 1Q24
- The first income tax benefit from Section 45Q tax credits from the US federal government is expected in 3Q24



Power: value creation and cost saving initiatives

Focus on increasing generation efficiency, securing price-competitive fuel supply and advancing operational sustainability



Value enhancement

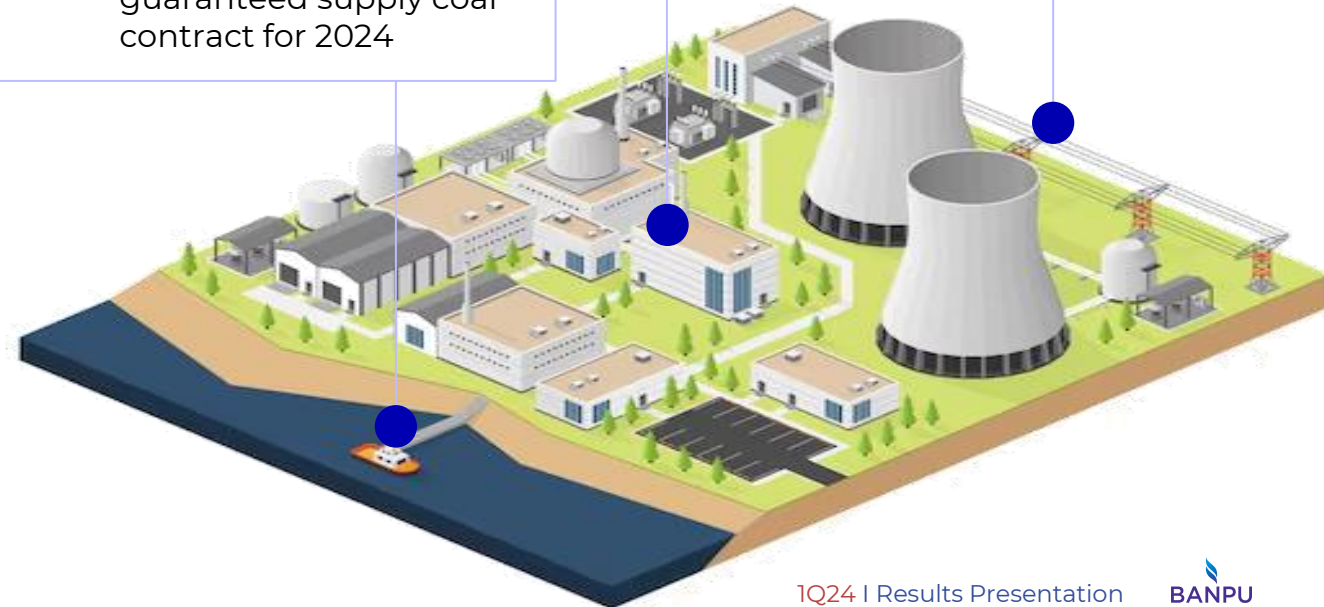
-  **CHP:** In testing stage for biomass co-firing at Zhengding (blending biomass material with coal for burning)

Fuel management

-  **CHP:** Centralized coal procurement initiative
-  **SLG:** Secured 2.7 Mt of guaranteed supply coal contract for 2024

Efficiency & reliability

-  **Temple I & II:** Robust winterization plan to reduce unplanned maintenance
-  **SLG:** Ongoing heat supply expansion, targeting completion in 2Q24



03

Energy Resources

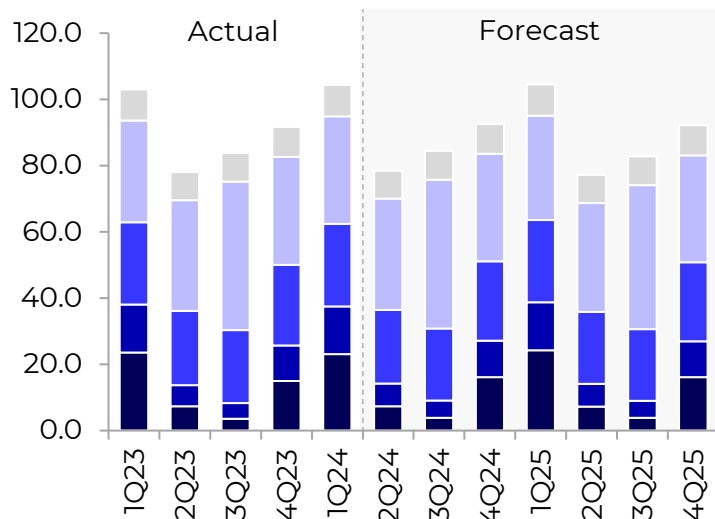


U.S. gas market update

US CONSUMPTION & PROJECTION

Unit: Bcf/d

■ Residential ■ Commercial ■ Industrial
■ Power ■ Other



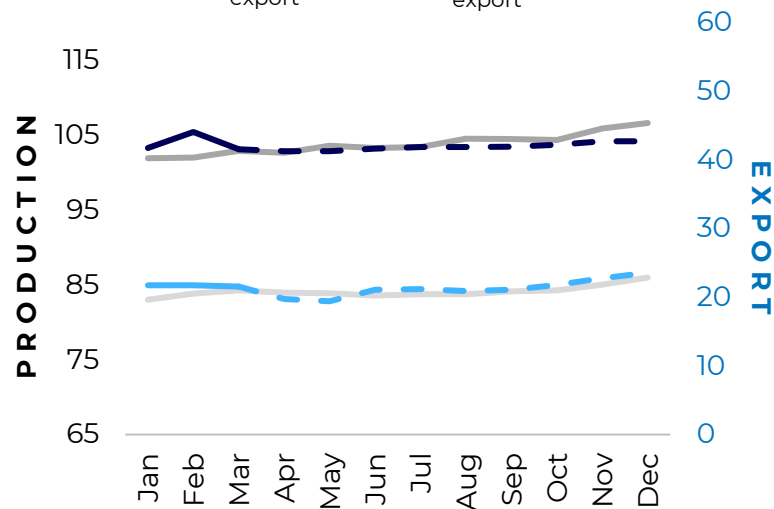
- US consumption averaged at 104 Bcf/d in 1Q24, up 14% from 4Q23, driven by increased residential and commercial winter demand, closely matching the levels observed during the same period last year.
- Consumption is projected to average at around 90 Bcf/d in 2024, representing a 1% increase from 2023.

Source: EIA Short-Term Energy Outlook (April 2024)

US NATURAL GAS PRODUCTION

Unit: Bcf/d

— 2023 actual production — 2024 forecasted production
— 2023 actual export — 2024 forecasted export

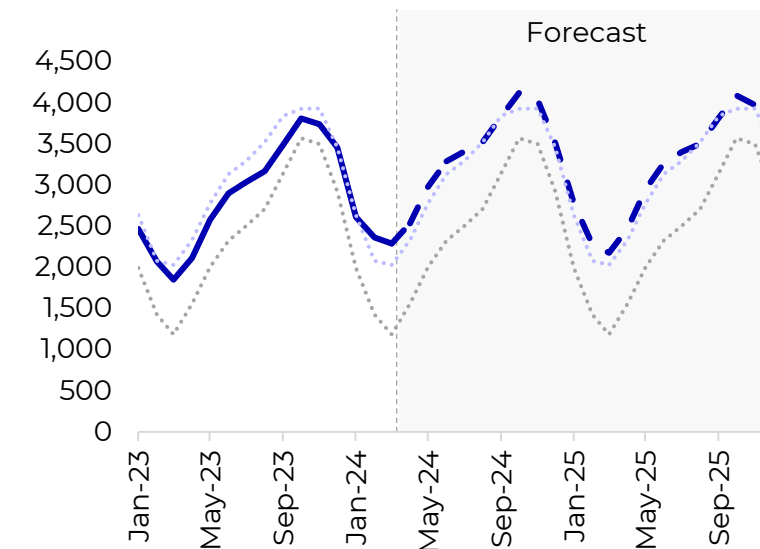


- US natural gas production reduced to 104 Bcf/d in 1Q24, declining by 2% QoQ and increasing by 2% YoY. This decline was primarily driven by recent production cuts by natural gas producers, partially offset increased associated gas production.
- US LNG exports averaged at 13 Bcf/d in 1Q24, indicating a 3% decrease QoQ but 10% increase YoY. One of the LNG processing plants experienced an outage due to the winter storm.

U.S. STORAGE LEVEL

Unit: Bcf

— Storage — 5yr - high — 5yr - low



- In March 2024, natural gas inventories reached 2.3 Tcf, exceeding the 5-year average by over 35% and surpassing the previous year by approximately 0.8 Tcf, due to the warmer-than-expected winter.
- EIA anticipates below-average natural gas injections from April to October 2024. Nevertheless, the surplus compared to the five-year average is projected to persist into 2024, thereby exerting pressure on gas prices.

U.S. gas: Expected gas prices to Recover by 2H24

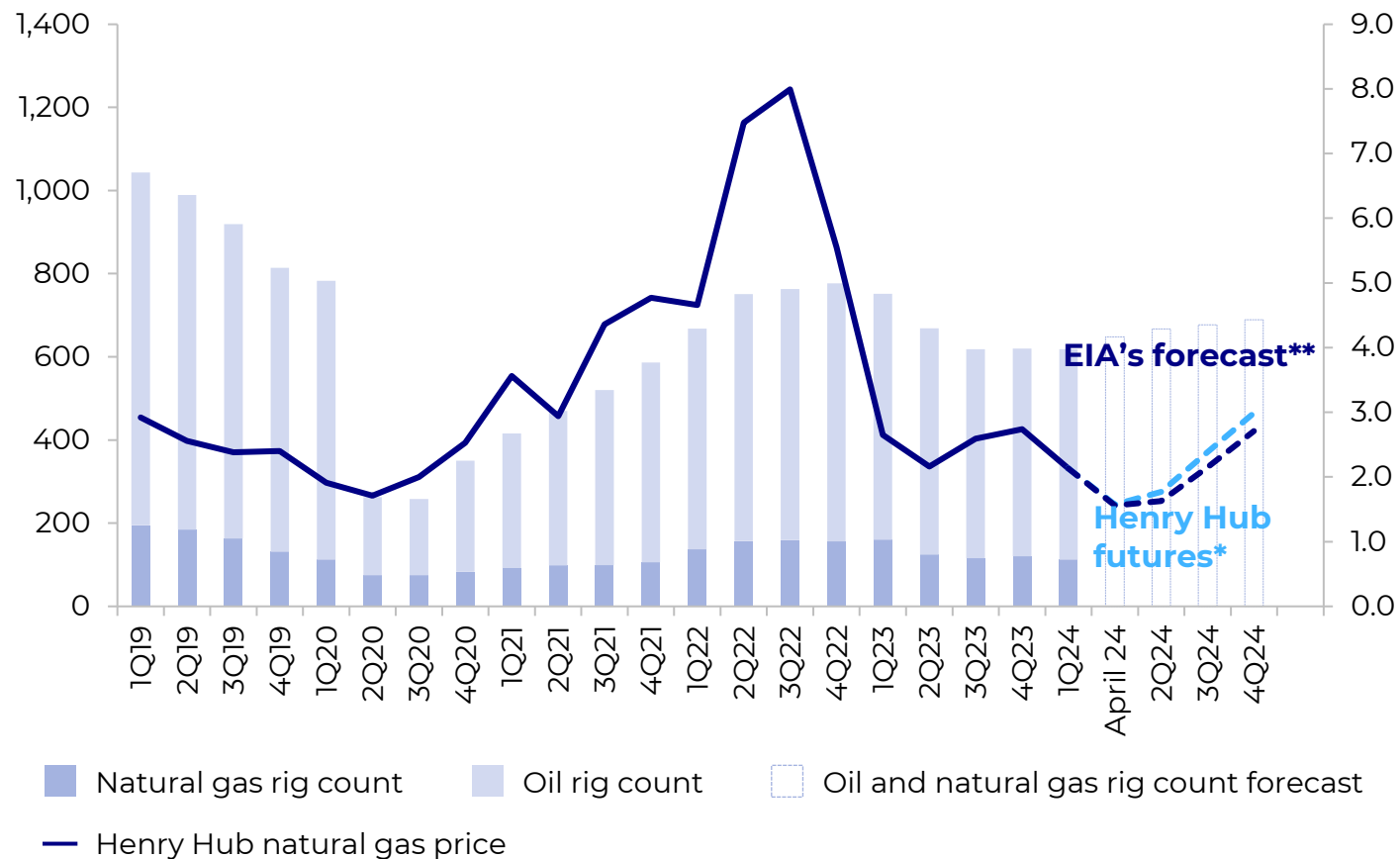
US RIG COUNT VS HENRY HUB PRICE

Us oil and natural gas rig count

Unit: rigs

Henry hub spot price

Unit: \$/MMBtu



COMMENTS

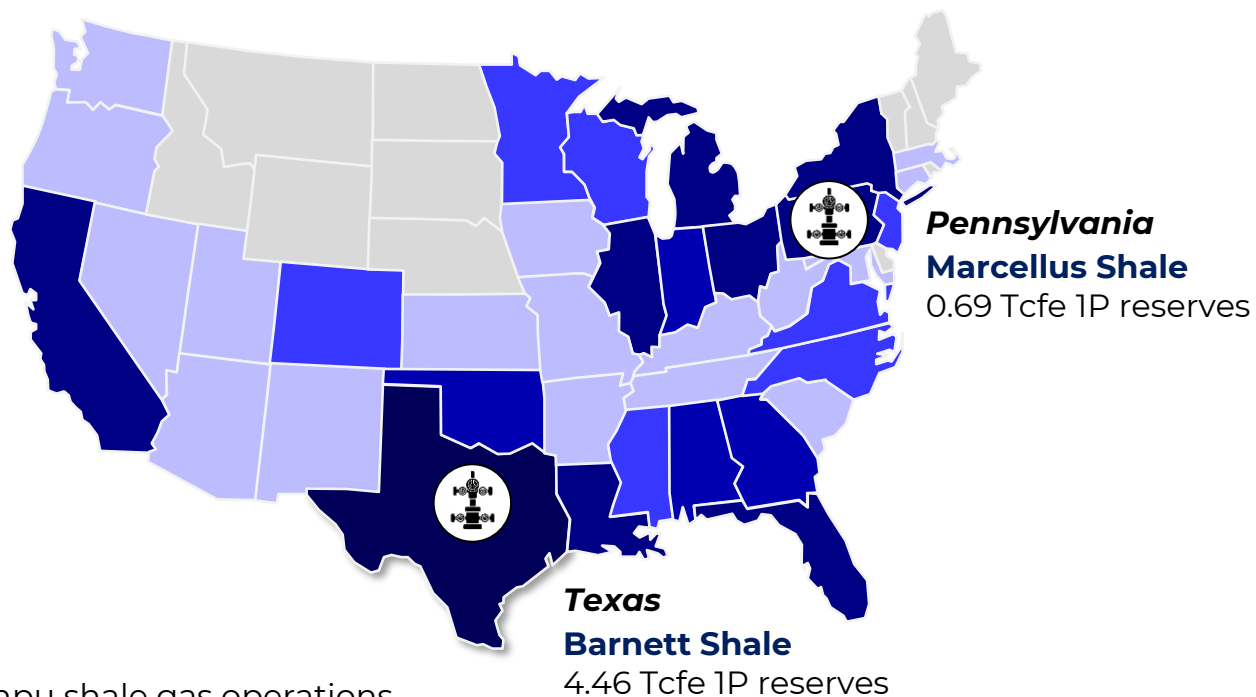
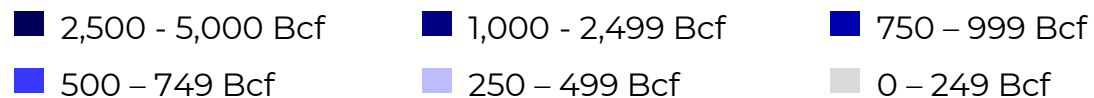
- Oil and gas rigs in 1Q24 remained consistent with 4Q23 but were approximately 18% lower than at the end of 2022.
- Price recovery in 2H24 is driven by improving supply-demand dynamic and a rise in export demand from new LNG projects.
- Forecasts indicate Henry Hub futures will rebound toward \$3.0/MMBtu by 2H24.

Note: *As of April 22nd, 2024; **Short-Term Energy Outlook (April 2024)

Source: EIA Short-Term Energy Outlook (April 2024), Baker Hughes US natural gas rotary rig count (April 2024)

Banpu Gas: 1Q24 highlights

US DRY GAS CONSUMPTION 2023 BY STATE*



Banpu shale gas operations

Average local price**

\$2.06/Mcfe -16% QoQ

Sales volume

75 Bcfe -3% QoQ

EBITDA***

\$25 M -46% QoQ

Notes: *As of (or, as applicable, for year end) December 31, 2023; ** Average local price = Henry Hub - basis differential; *** IFRS EBITDA. Significant differences between IFRS and BKV US GAAP EBITDAX include treatment of derivative gains and losses, depletion expense, accretion expense, stock compensation expense, BNAC expenses, equity income, and contingent consideration gains and losses for asset acquisitions

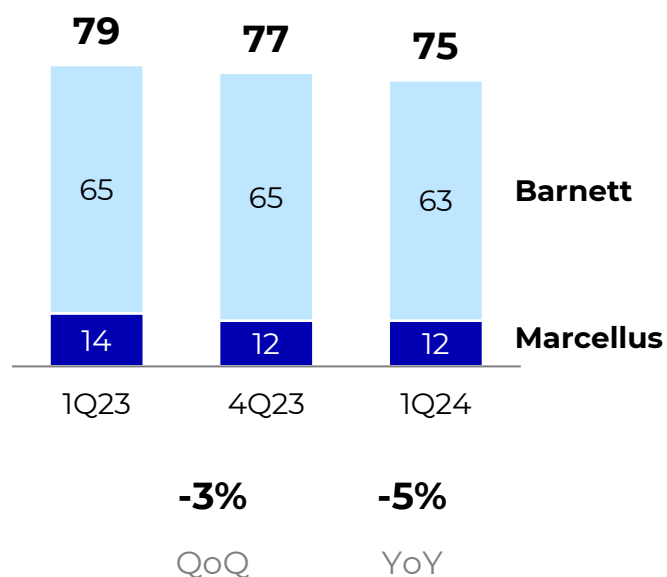
Source: EIA

Banpu Gas: 1Q24 performance

1Q24 EBITDA of \$25M characterizes our resiliency and ability to survive period of commodity volatility through positive cash flow generation.

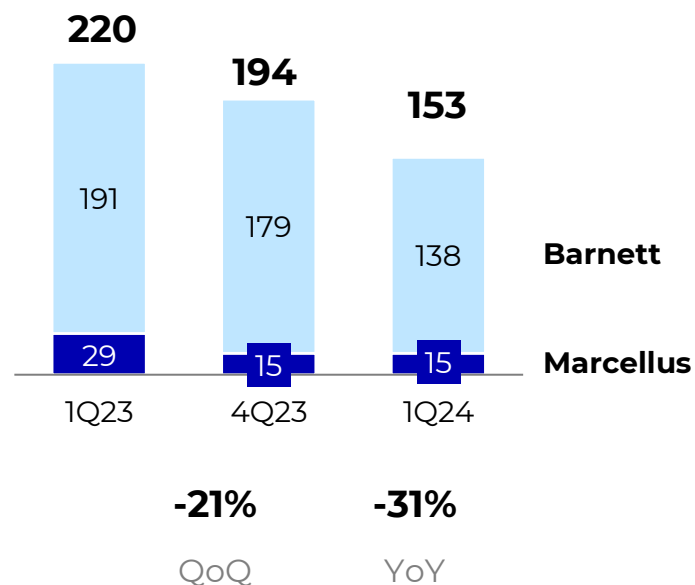
SALES VOLUMES

Unit: Bcfe*



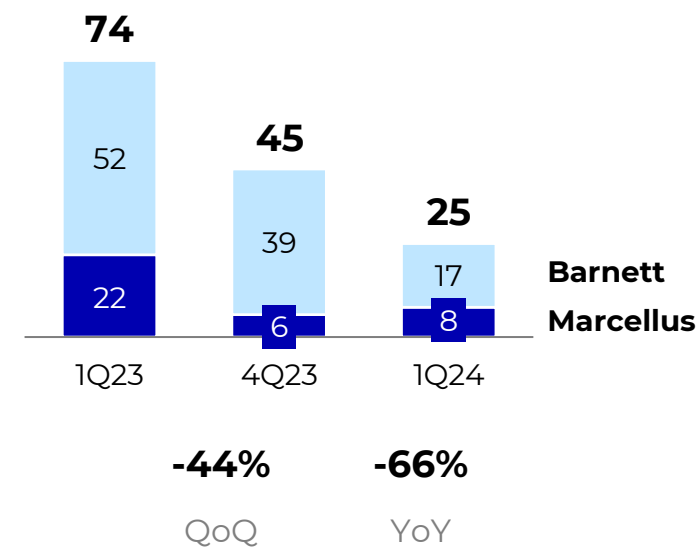
TOTAL REALIZED REVENUE**

Unit: US\$M



EBITDA***

Unit: US\$M

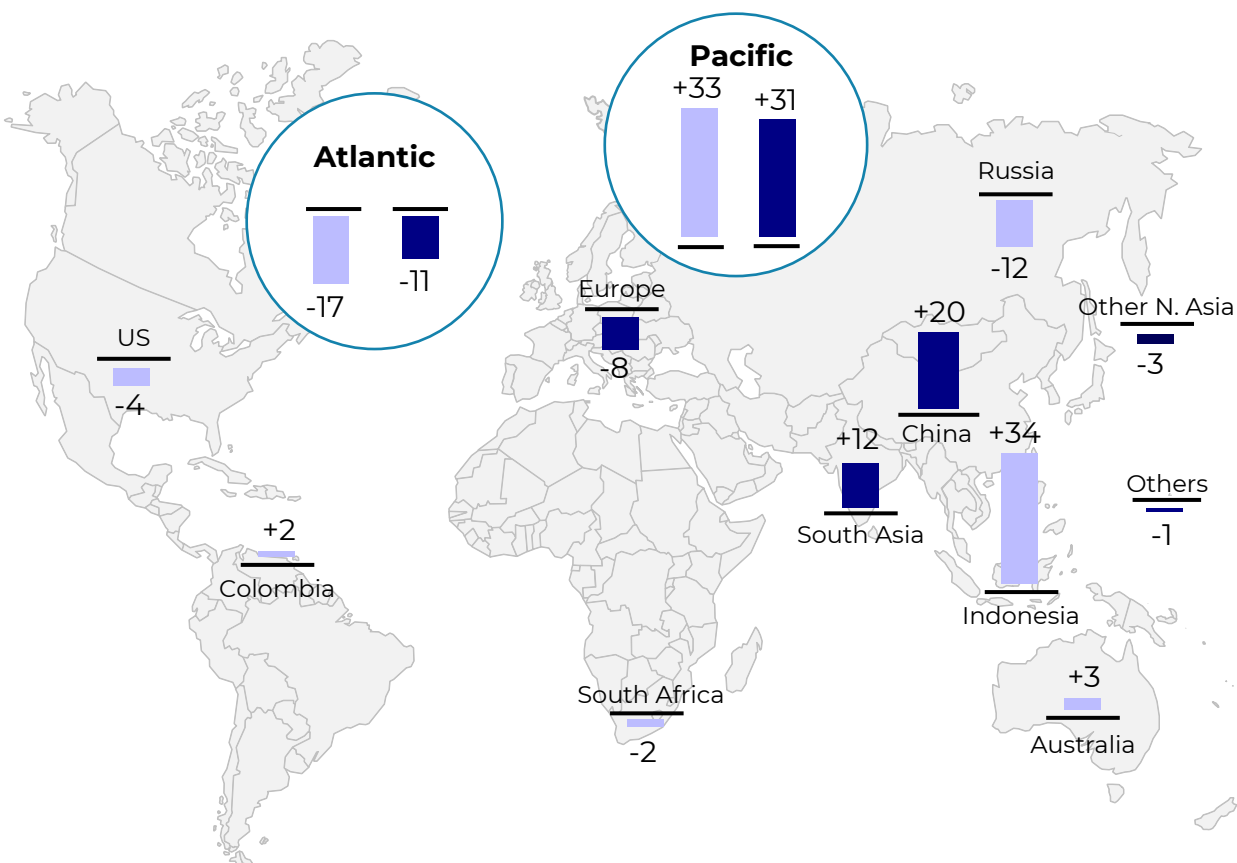


Note: *Bcfe = Billion cubic feet equivalent; **IFRS total realized revenue. Significant differences between IFRS and BKV total revenues and other operating income include net derivative gains and losses, marketing, non-operated midstream revenues, and others; ***IFRS EBITDA. Significant differences between IFRS and BKV US GAAP EBITDAX include treatment of derivative gains and losses, depletion expense, accretion expense, stock compensation expense, BNAC expenses, equity income, and contingent consideration gains and losses of asset acquisitions;

Global thermal coal market

COAL DEMAND AND SUPPLY CHANGE – 2024e VS 2023

Unit: Mt ■ Supply ■ Demand



Note: *JKT stands for Japan, South Korea and Taiwan

Demand trends

Seaborne thermal coal imports in JKT and Europe weakened due to the shoulder season and economic challenges. However, thermal coal prices have been supported by elevated geopolitical tensions.

- **China:** Domestic coal supply constraint persists while imported coal remains competitive in the coastal provinces. A predicted hot summer and positive economic outlook will support coal demand in 2H24.
- **India:** Strong economic growth and a harsher summer than usual increases power demand, resulting in higher coal-fired generation. Despite strong domestic coal supply, it still will not meet growing demand.
- **JKT:** Firm nuclear and renewable generation is expected to soften coal demand in this area.
- **Europe:** A weak economic outlook signals that energy demand from the key coal markets will remain low.

Supply trends

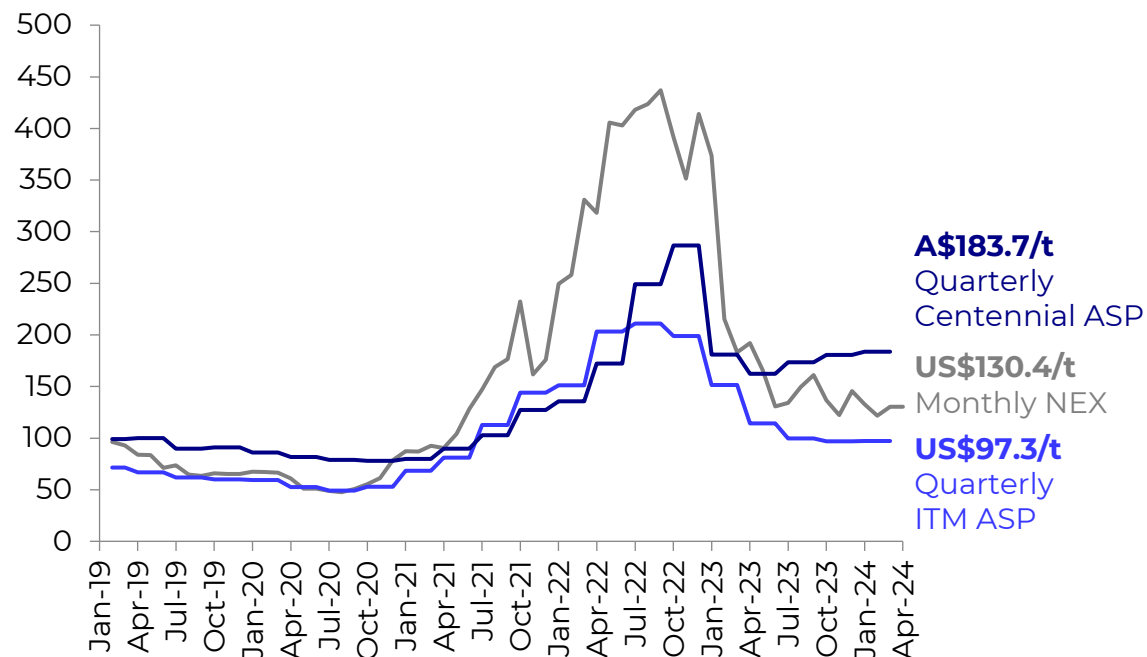
The market is turning to oversupply due to steady global thermal coal exports from key exporting countries, while Indonesia's exports are expected to grow significantly. Geopolitical unrest has minimal impact on the coal supply chain.

- **Indonesia:** Coal production remains strong and is tracking higher than before. Government has approved a significant increase in production targets from the previous year.
- **Australia:** Below-average rainfall forecasted during April-May will continue to support coal production and export.
- **Others:** Russian exports faced winter logistical constraints, and 2024 exports are expected to remain challenged by sanctions. Logistic constraints persist in South Africa, while Colombian producers are diverting coal to the Asian market to offset low European demand.

Banpu ASPs vs thermal coal benchmark prices

BANPU ASP VS BENCHMARK PRICES

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



COMMENTS

- The seaborne premium thermal coal market remained very stable throughout 1Q24, with the weekly GCNewc fluctuating between \$116-135 per ton.
- Similarly, the market for lower-quality thermal coal remained stable in 1Q24. ICI2 hovered between \$92-96.5 per ton, ICI3 within \$75-80 per ton, and ICI4 maintained a narrow range of \$55-58 per ton. Despite increased supply from Indonesia, robust import demand from China in 1Q24 provided significant support to the price levels of lower specification thermal coal market.
- We anticipate a continuation of steady growth in the global seaborne thermal market through 2024, with overall supply and demand dynamics expected to tighten, particularly for lower-mid calorific value (CV) coal due to strong demand from China and India.

NEX** (10 May 2024)

US\$148.7/t

ITM ASP* (1Q24)

US\$97.3/t

+0.3% QoQ

CEY ASP (1Q24)

A\$183.7/t

+2% QoQ

ASP domestic (1Q24)

A\$178.7/t

+21% QoQ

ASP export (1Q24)

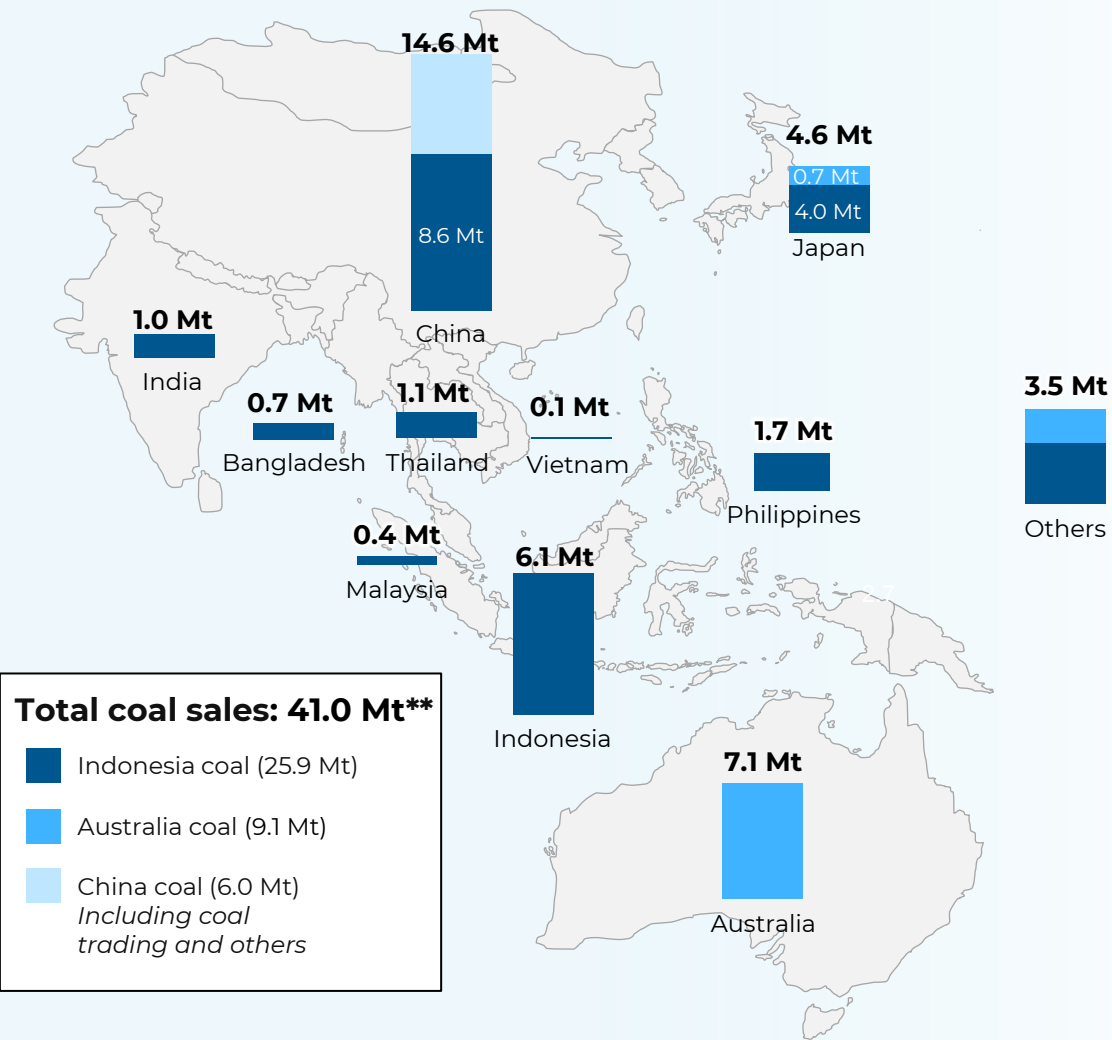
A\$202.9/t

-18% QoQ

Note: *Includes post shipment price adjustments as well as traded coal. CEY sales volume 4Q23 : 67% domestic & 33% export, 3Q23 : 76% domestic & 24% export; **The Newcastle Export Index (NEX)

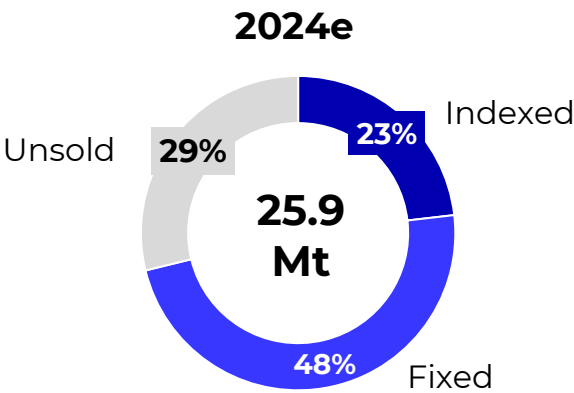
Banpu Mining: group coal sales and pricing status 2024e

2024e COAL SALES SOURCE* – DESTINATION ANALYSIS

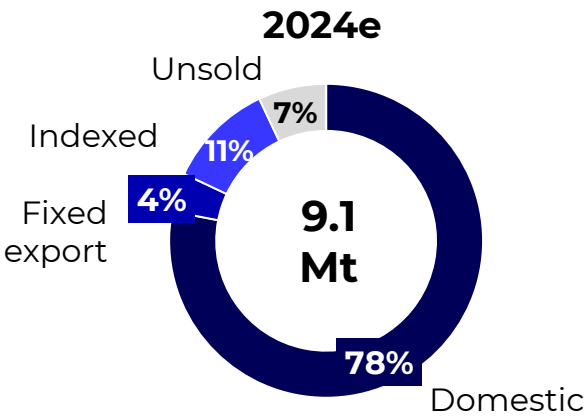


COAL SALES*** PRICING STATUS

Indonesia



Australia



Notes:

*Sales from Indonesia are included on 100% basis, sales from Australia and China are included on equity basis. Excluding Mongolia coal;

Illustrative target; Includes coal sales from domestic production in China; * Target sales; Coal sales includes third-party sourced coal

Banpu Mining: 1Q24 highlights



Production volume

8.5 Mt +8% QoQ

Sales volume

8.8 Mt -15% QoQ

EBITDA

\$181 M +4% QoQ

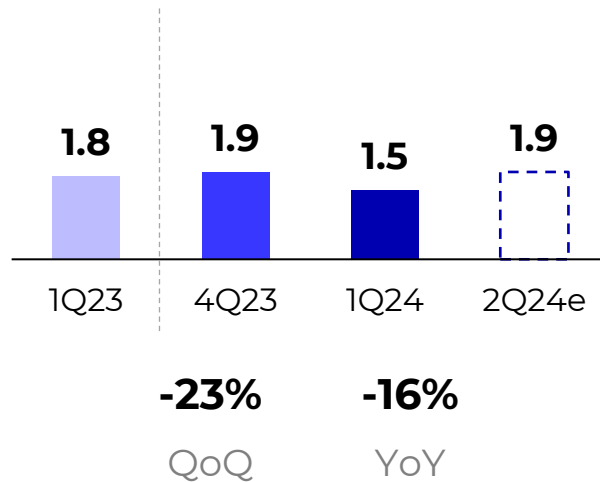
Note: Coal reserves at end 2023 and based on 100% basis. CV figures are air-dried basis

Banpu Mining: operational summary

ROM PRODUCTION AND KEY UPDATES (Mt)

Australia Coal

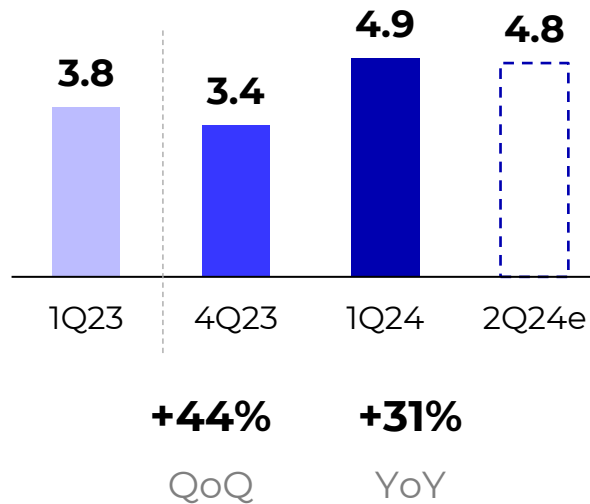
2024 target: 8.2 Mt



- Airly, Mandalong and Myuna delivered planned production targets.
- Springvale underwent longwall relocation for the majority of the March quarter, with production now ahead of budget in 2Q24.
- Clarence's production was impacted by a predicted major fault zone intersected earlier than planned with recovery tonnes now well advanced in 2Q24.
- 2Q24 production is forecasted at 1.9 Mt.

Indonesia coal

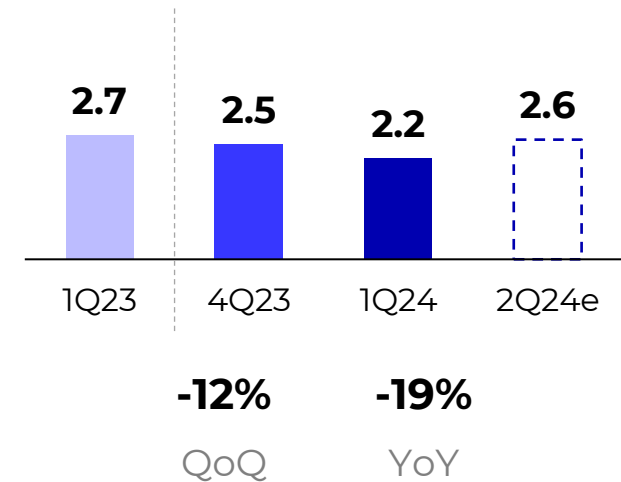
2024 target: 19.5-20.2 Mt



- 1Q24 production reached 4.9 Mt, exceeding the target of 4.6 Mt, driven by robust production performance at the Indominco sites, while production at other mine sites aligned with the target.
- 2Q24 production is set at 4.8 Mt with higher contribution expected from the Melak Cluster which will commence initial coal production this year.

China Coal

2024 target: 8.7 Mt

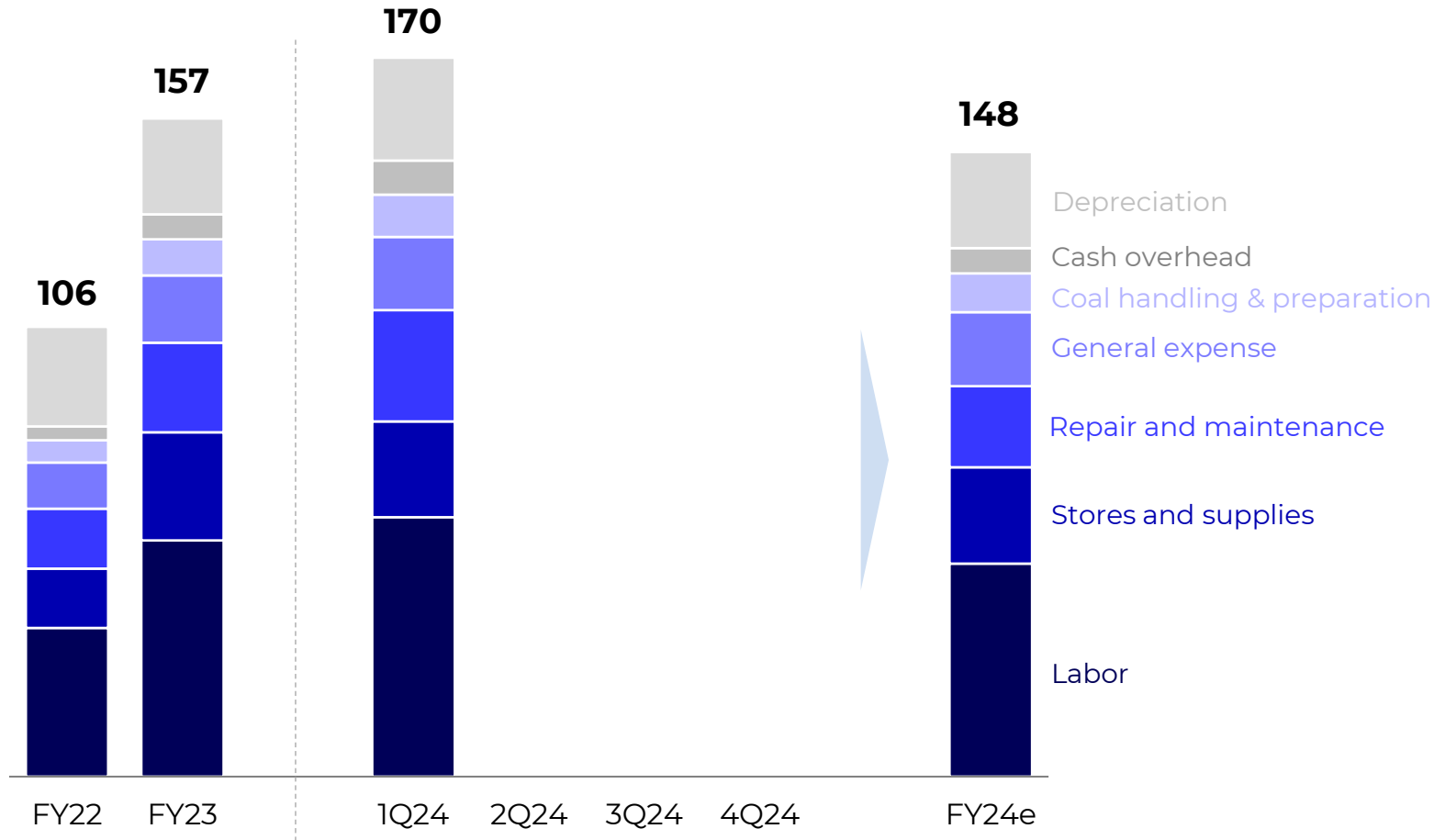


- Gaohe: Annual production in 2024 decreased from 9.6 Mt to 8.7Mt due to the adjusted Shanxi policy. Implementation of backfilling and intelligent tech for efficient Longwall panel mining
- Hebi: Continued retreat mining at LTCC3205 in 1Q24. Focused on enhancing efficiency in UG roadway development, pre-degas construction, LW panel operation, and cost management

Banpu Mining: average production cost breakdown – Australia

AVERAGE PRODUCTION COST BREAKDOWN, AUSTRALIA

A\$/t



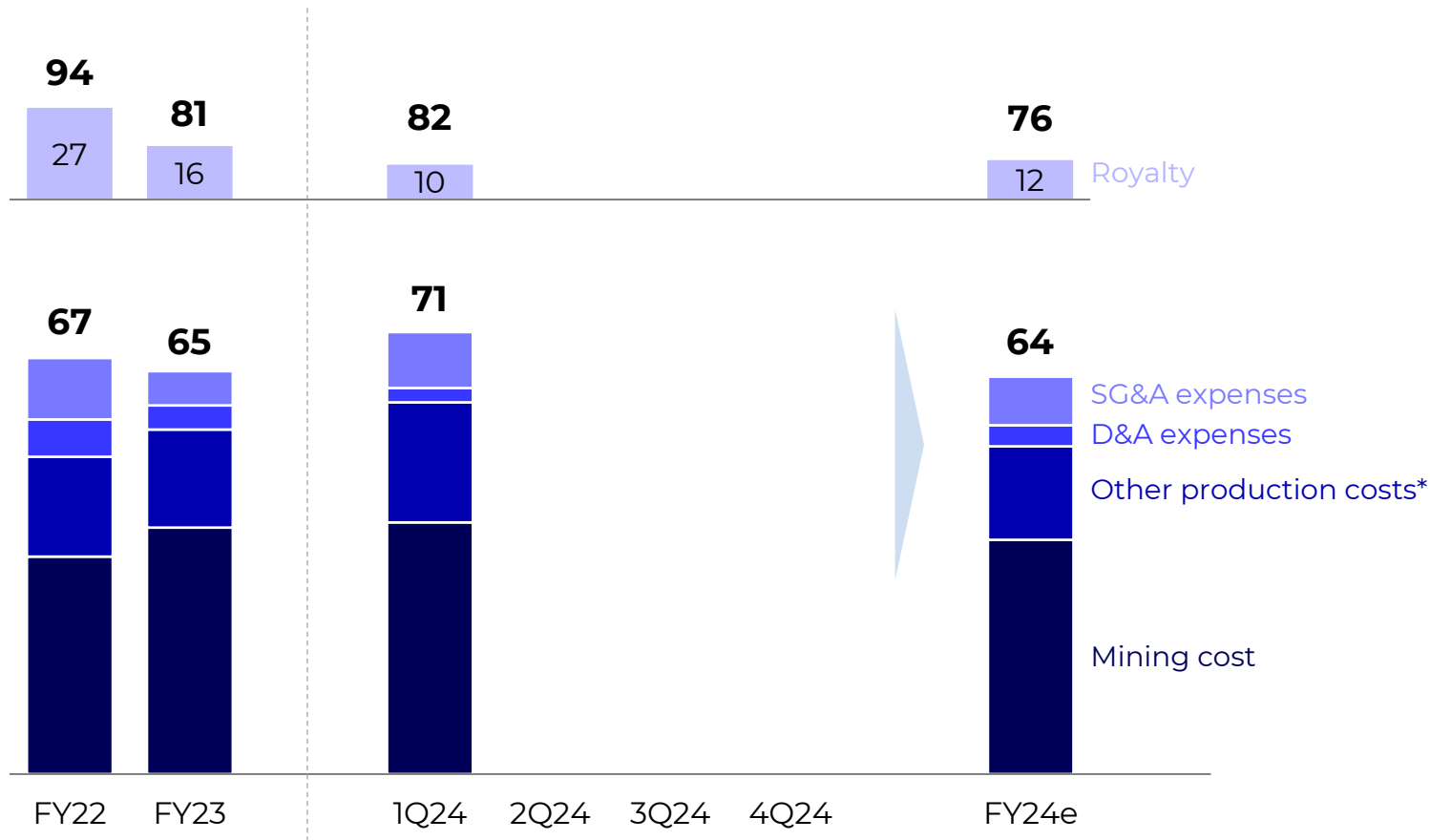
- Production for 1Q24 decreased by 23% compared to 4Q23, leading to an increase of A\$13/t in unit costs.
- Restructuring of corporate and regional offices in 1Q24, supporting an ongoing 23% saving in corporate labor costs.
- Full year forecast production costs expected to decrease by \$9/t compared to FY23. Total COGS for 1Q24 down \$23m against budget.
- A balanced approach to capital allocation remains a key focus with YTD capex spend running A\$30 M below budget.
- Strategic procurement project is well advanced with key major suppliers with cost reductions in strata products and electricity costs.

Note: These figures do not include selling, distribution and royalty costs; based on 'sold' production

Banpu Mining: average total cost breakdown – Indonesia

AVERAGE PRODUCTION COST BREAKDOWN, INDONESIA

US\$/t



- Average total cost excluding royalty in 1Q24 is \$71/t, slightly lower than 1Q23 cost at \$72/t (-2% YoY).
- Average total cost for FY24 excluding royalty is expected to be at the level of \$64/t, slightly lower than FY23 (-1% YoY).
- Royalty for FY24 is expected to be decreased to \$12/t from \$16/t in FY23 (-27% YoY), leading to expected FY24 average total cost at \$76/t.

Note: *Including repair and maintenance, salaries and allowances, inventory adjustment, others etc.

04

Energy Generation

Banpu Energy Generation: 4,908 MW committed capacity

8 countries

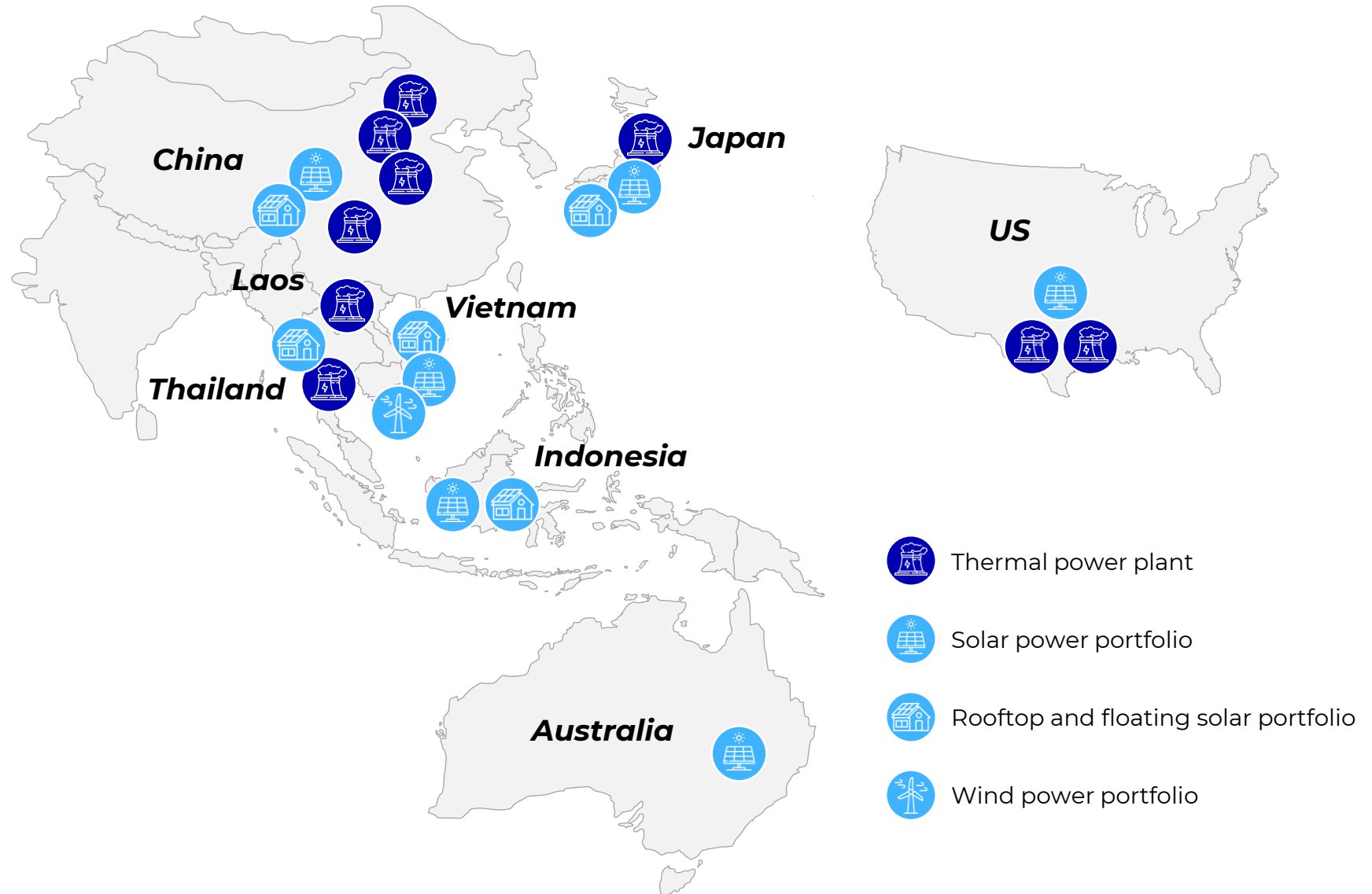
operations across
the Pacific Rim

4,008 MW

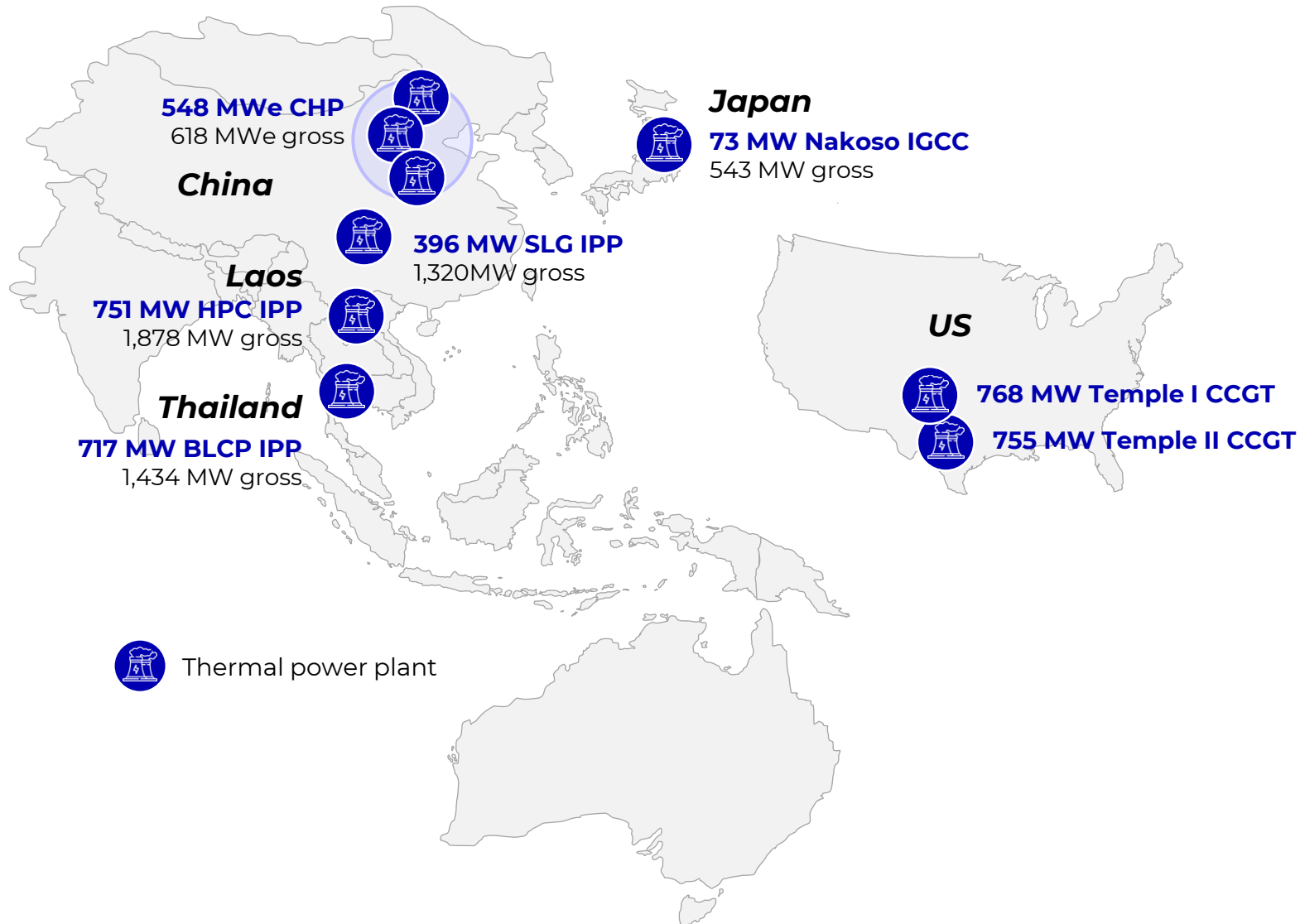
committed thermal
equity capacity

900 MW

committed renewables
equity capacity



Banpu Thermal Power: 1Q24 highlights



Note: MWe is MW equivalent

EBITDA

\$51 M

+129% QoQ

Achieved EAF

75%

at HPC

90%

at BLCP

94%

at Temple I & II

28%

at Nakoso

Thermal Power: 1Q24 updates



HPC

Reported EAF of 75% due to major inspections of Unit 3, which was completed as planned.

75%	EAF* (-21% YoY)
THB 4.6 bn	Revenue
THB 2.5 bn	EBITDA
THB 0.7 bn	Share of profit



BLCP

Completed minor inspection for Unit 1 as planned and operated with high EAF. Operating profit increased YoY, but net profit was impacted by loss on FX due to THB depreciation.

90%	EAF (+4% YoY)
THB 4.3 bn	Revenue
THB 0.6 bn	EBITDA
(THB 0.2 bn)	Share of loss



SLG

Improved performance YoY due to increased power sales driven by higher demand.

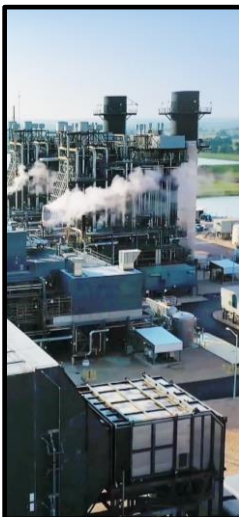
1,410 GWh	Net power sold (+5% YoY)
RMB 6 M	Share of profit



China CHP

Higher power and steam sold together with lower coal costs, contributed to a higher margin and profit improvements.

RMB 465 M	Revenue
RMB 112 M	EBITDA
RMB 66 M	Share of profit



Temple I & II***

Higher margin YoY contributed by higher spark spread, despite milder weather during the winter season.

94%	EAF (-1% YoY)
1,657 GWh	Net generation
USD 96 M	Revenue
(USD 6 M)	Share of loss**



Nakoso IGCC

Achieved commercial COD on 16th Mar 2024.

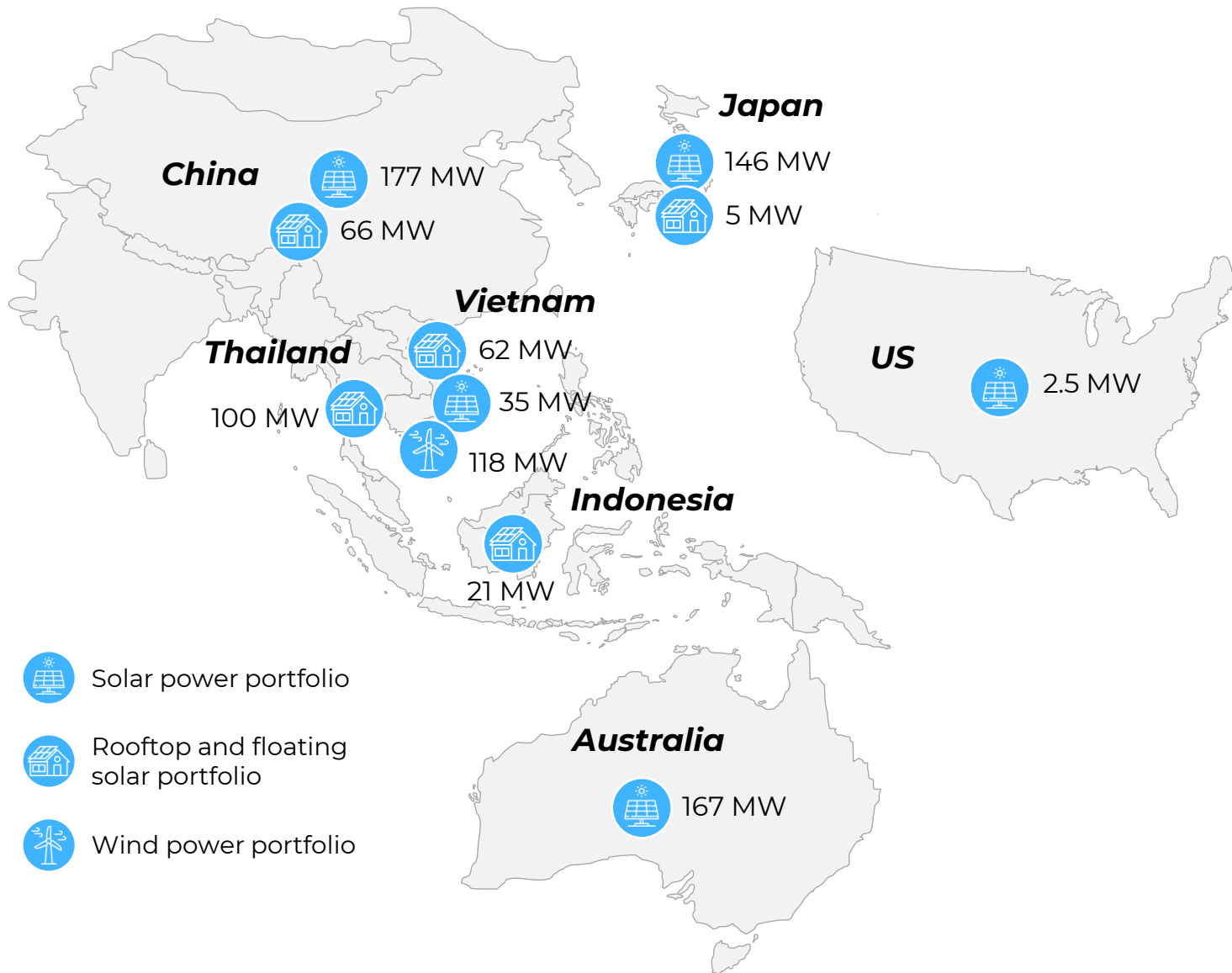
28%	EAF
290 GWh	Net generation
(THB 49 M)	Share of loss

Note: : *Equivalent Availability Factor (EAF) is a percentage of a given operating period in which a generating unit is available without any planned and unplanned shutdown or deratings

** Includes USD 6 M of gain on derivatives

*** Recognized Temple II since July 2023

Banpu Renewable Power: diversified Asia-Pacific portfolio



900 MW

committed renewables capacity across Asia-Pacific

Committed capacity

528 MW

solar power

254 MW

rooftop and floating solar

118 MW

wind power

Renewable Power: 1Q24 updates



China Solar

Lower power sold due to the curtailment of all solar farms and lower irradiation

12%	Avg. capacity factor
47 GWh	Power sold (-7% YoY)
RMB 30 M	EBITDA
RMB 8 M	Profit contribution



Japan Solar

Slightly increased power sold YoY contributed by more favorable irradiation on average.

10%	Avg. capacity factor
43 GWh	Power sold (+1% YoY)
JPY 233 M	Cash distribution



Vietnam Wind

El Wind Mui Dinh

33%	Avg. capacity factor
27 GWh	Power sold (-21% YoY)
(USD 0.3 M)	Share of loss



Australia Solar

Lower power sold due to curtailment and unfavorable weather condition.

24%	Avg. capacity factor
66 GWh	Power sold (-0.1% YoY)
(AUD 4.5 M)	Share of loss*



Vietnam Solar

Nhon Hai Solar demonstrated a consistent capacity factor and power sold.

18%	Avg. capacity factor
13 GWh	Power sold (+14% YoY)
USD 0.3 M	Share of profit (+USD 0.3 M YoY)

Vietnam Wind

Vin Chau project

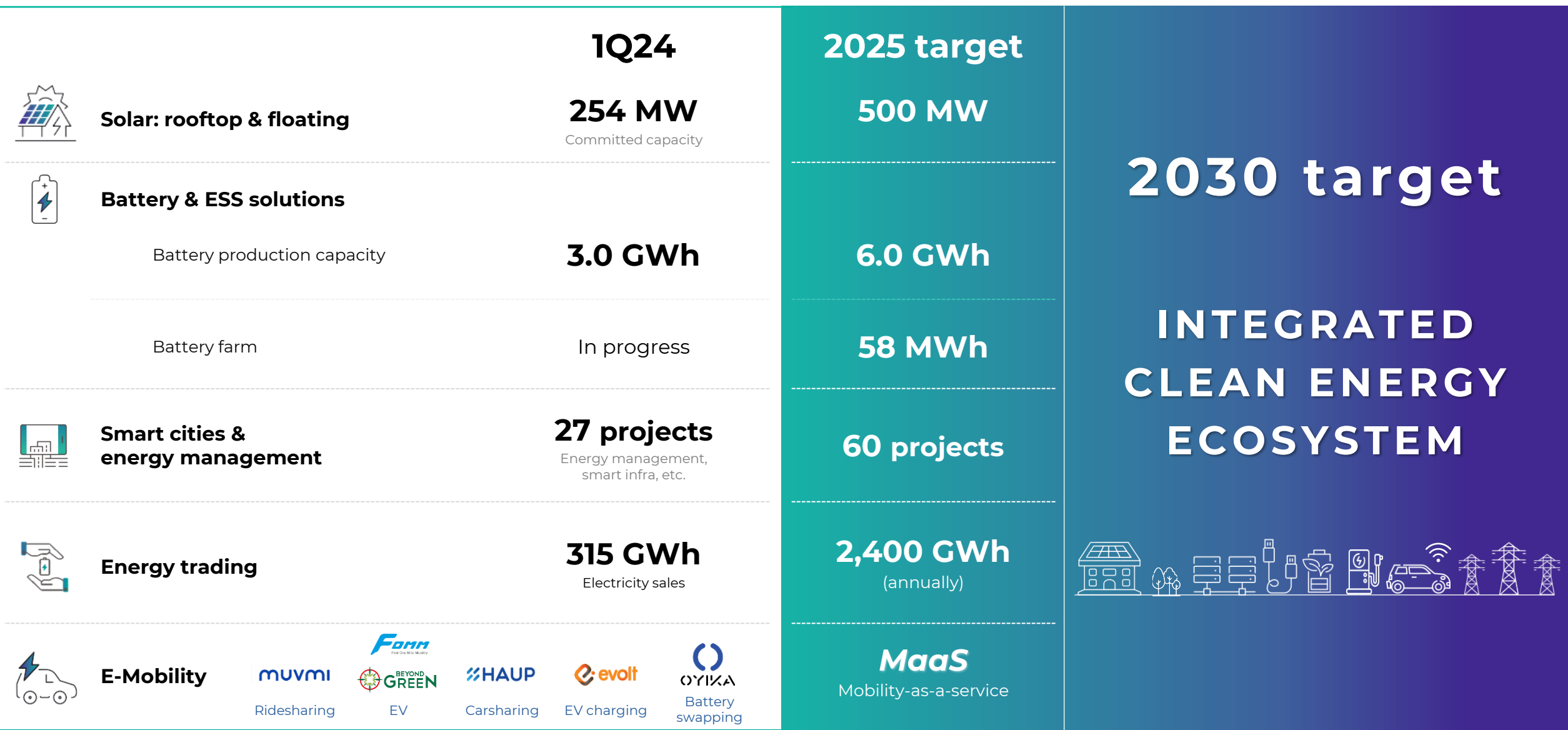
- Completed construction and commissioning activities
- On process of COD documentation with the relevant authorities

Note: Banpu has 100% shareholding in Banpu NEXT

*Includes AUD 5.7 M of loss on derivatives

Energy Technology

Energy technology: current position and future targets



Energy technology: 1Q24 rooftop and floating solar updates



Solar: rooftop & floating

ACCELERATING DEVELOPMENTS ACROSS BANPU GEOGRAPHIES

THAILAND

100 MW

Total committed capacity

- New contract signing with Kornthai and NR Instand Produce for a total capacity of 1.3 MW in 1Q24.
- New commercial operations with Benjaphanpong and PMC LABEL Phase II for a total capacity of 1.2 MW.

CHINA

66 MW

Total committed capacity

- Committed capacity of solar rooftop project at Zhengding CHP, with a current operating capacity is 13.6 MW.

VIETNAM

62 MW

Total committed and potential project capacity

- Committed capacity of solar rooftop project for Solar ESCO, with a current operating capacity of 13.3 MW.

INDONESIA

28 MW*

Total committed capacity

- IBP has signed additional solar rooftop PPA of 5 MW in 1Q24.
- Currently, the total installed capacity is approximately 6 MW.

Energy technology: 1Q24 battery and ESS solutions updates



Battery & ESS solutions

COMMENCEMENT OF COMMERCIAL OPERATIONS OF BANPU NEXT AND SVOLT ENERGY (THAILAND)'S BATTERY PACK FACTORY



28th Feb. 2024

Factory SOP

2.0 GWh

Committed production capacity

60,000 units

Annual production output

FACTORY PROGRESS

- Completed commissioning in December 2023 and official start of production (SOP) on 28 February 2024.
- Main customers are Great Wall Motor (GWM) and Hozon (for NETA). Revenue has been recognized since January 2024.

BANPU NEXT AND SVOLT ENERGY (THAILAND) SIGN A NEW STRATEGIC COOPERATION FOR THE DEVELOPMENT OF ENERGY STORAGE AND RELATED BATTERY BUSINESSES

The upgraded strategic partnership will extend across the battery value chain, from upstream cell production to downstream segments such as energy storage systems, while promoting circular economy through the exploration of battery recycling.

'Become a leading lithium-ion battery player in Thailand and Southeast Asia'



Battery cells

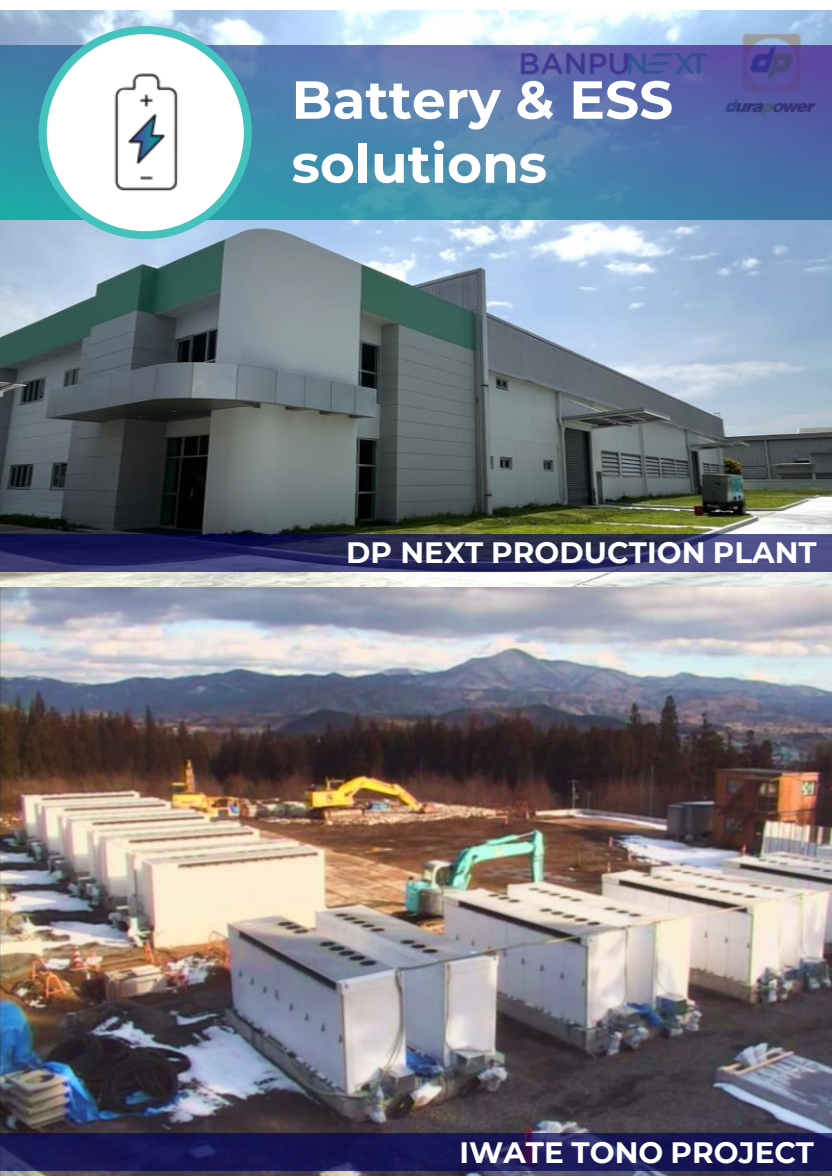


Energy storage systems



Battery recycling

Energy technology: 1Q24 battery and ESS solutions updates (cont'd)



DP NEXT PRODUCTION PLANT (AMATA CITY, CHONBURI)



1.0 GWh

Production capacity

3Q24

Expected COD

80% completed

Steel construction progress, wall mounting, installations and decoration, pending machine installation

70%

Banpu NEXT shareholding

3 customers

For battery supply and subsequent purchase orders



Banpu NEXT partnered with Durapower to deliver DP NEXT Production Plant's first battery pack to Thailand's largest bus operator, Cherdchai Motor Sales

429 kWh li-ion NMC

Battery pack

12 units

Initial delivery

IWATE TONO PROJECT



75%

BJP shareholding

2Q25

Expected COD

88%

Construction progress

PROJECT UPDATES

Phase 2 of the construction of extra-high voltage electric equipment and the substation was resumed on schedule since March.

Energy technology: 1Q24 energy management update



District Cooling System

DISTRICT COOLING SYSTEM AT GOVERNMENT CENTER ZONE C (BANGKOK) THROUGH BANPU NEXT AND SP GROUP'S JV

THB 460 M

Capex exclude VAT
(100% basis)

12,600 RT*

Chilled water
management capacity

Design, Build, Operate

With 20-year contract

51%

Banpu Next EcoServe
shareholding, 49% SP
Group of Singapore

4Q24

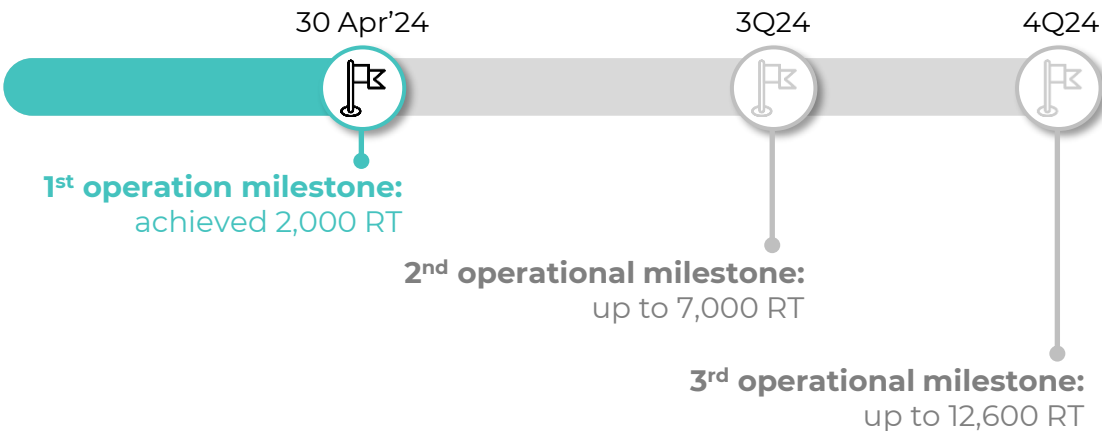
Expected full operation

80%

Construction
progress (Mar. 31st)



PROJECT UPDATES



Energy technology: ‘Infinite Cafe powered by Banpu NEXT’



InfiniteCafe
POWERED BY BANPUNEXT

100% Clean Energy Pop-Up Cafe

Outdoor Zone Chamchuri Square

BANPUNEXT x CRAZE CAFE

Everyday Cup to Net-Zero

INFINITE CAFE POWERED BY BANPU NEXT PHASE #2
IS SET TO RETURN IN COLLABORATION WITH CRAZE CAFE
@CHAMCHURI SQUARE



“Everyday Cup to Net-Zero”

Banpu NEXT expands the Infinite Model to create a **100% clean energy pop-up cafe** where Net-Zero solutions are implemented, **turning from a showcase to a revenue-sharing model**. This initiative aims to make our everyday cup greener and drive us towards a Net-Zero society.

SMART ENERGY SOLUTIONS



Smart energy

100% off-grid solar system and batteries to ensure stable usage



Smart operation & digital platform

Display real-time energy usage data and total CO₂ savings from clean energy and beverage consumption



Smart waste management

Digital platform for waste management to ensure efficient and appropriate waste processing



Smart mobility by muvmi

Ride-sharing for a greener journey to the cafe through MuvMi electric tuk-tuk services



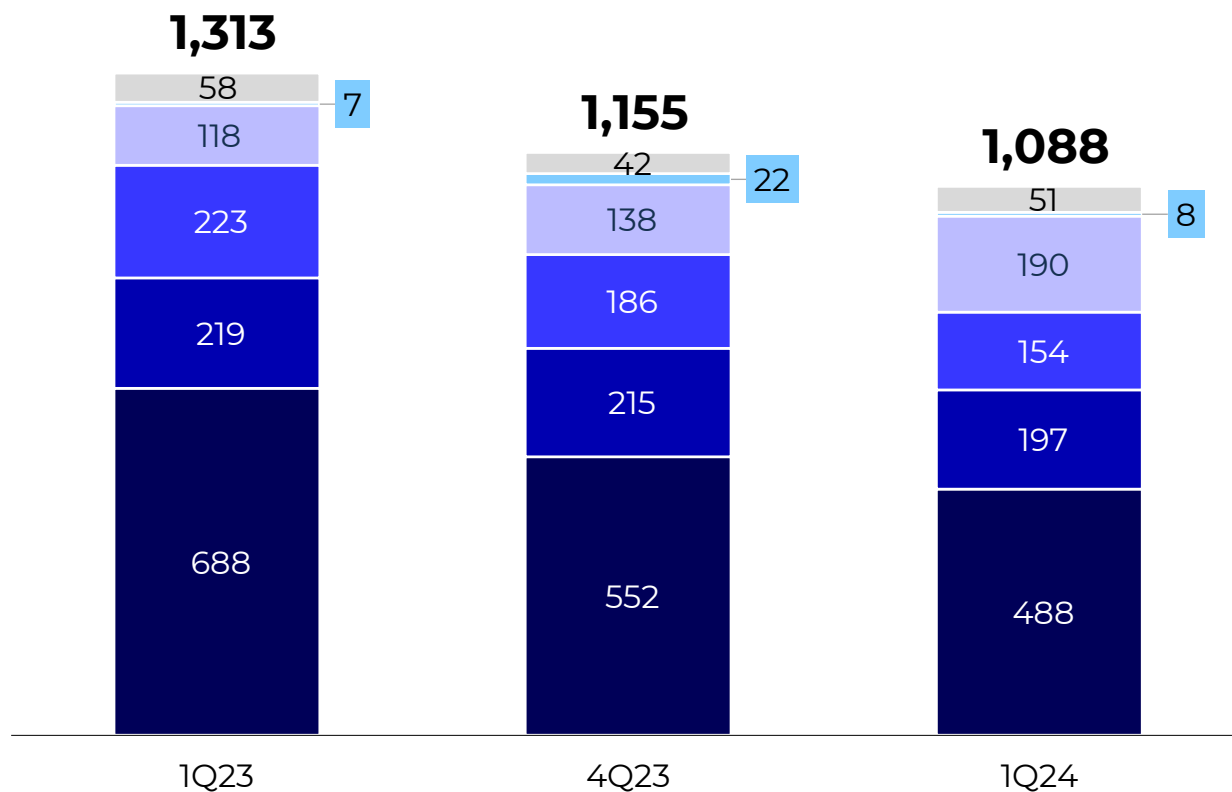
06

Financial Summary

Banpu consolidated sales revenues – 1Q24

Consolidated sales revenue, by quarter

USD million



-6% QoQ

-17% YoY

Others*

+23% QoQ

-13% YoY

Energy technology

-61% QoQ

+17% YoY

Power

+37% QoQ

+62% YoY

Gas

-17% QoQ

-31% YoY

Coal Australia

-9% QoQ

-10% YoY

Coal Indonesia

-11% QoQ

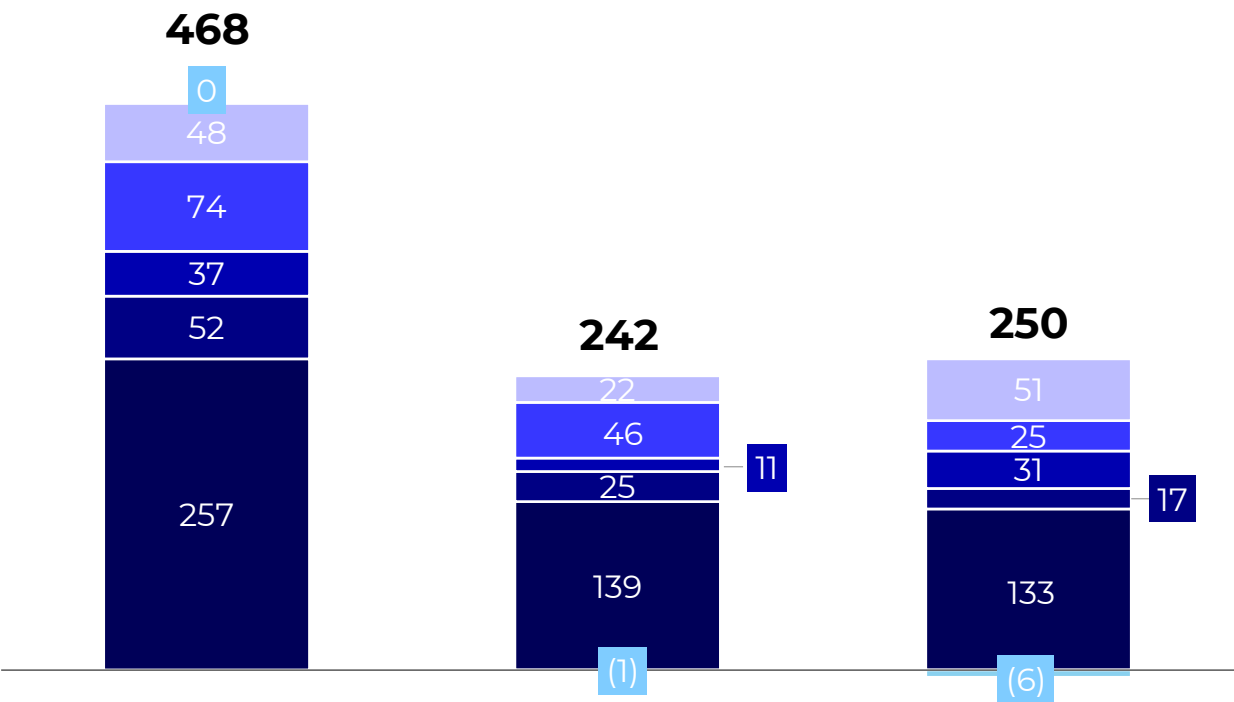
-29% YoY

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

Banpu consolidated EBITDA– 1Q24

Consolidated EBITDA, by quarter

USD million



+4% QoQ

-46% YoY

Energy technology

n.a. QoQ

n.a. YoY

Power

+129% QoQ

+5% YoY

Gas

-46% QoQ

-67% YoY

Coal Australia

+177% QoQ

-15% YoY

Coal China

-32% QoQ

-68% YoY

Coal Indonesia

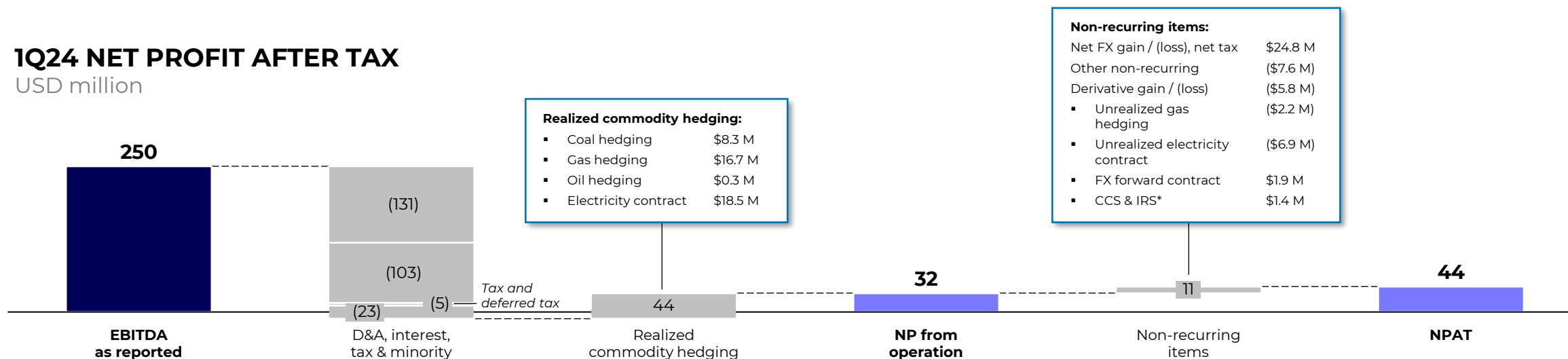
-4% QoQ

-48% YoY

Banpu consolidated NPAT – 1Q24

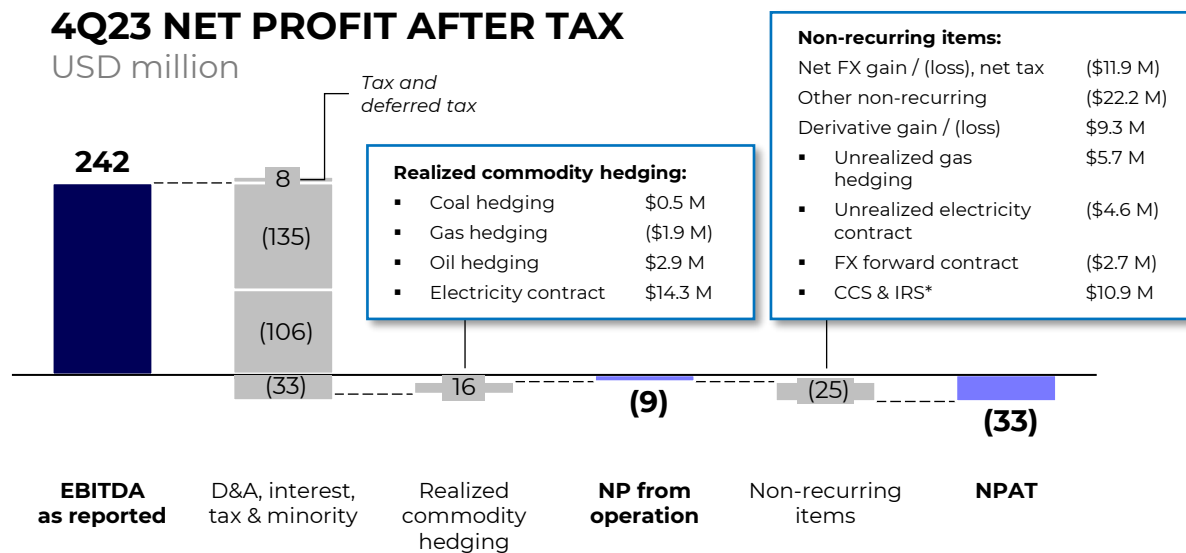
1Q24 NET PROFIT AFTER TAX

USD million



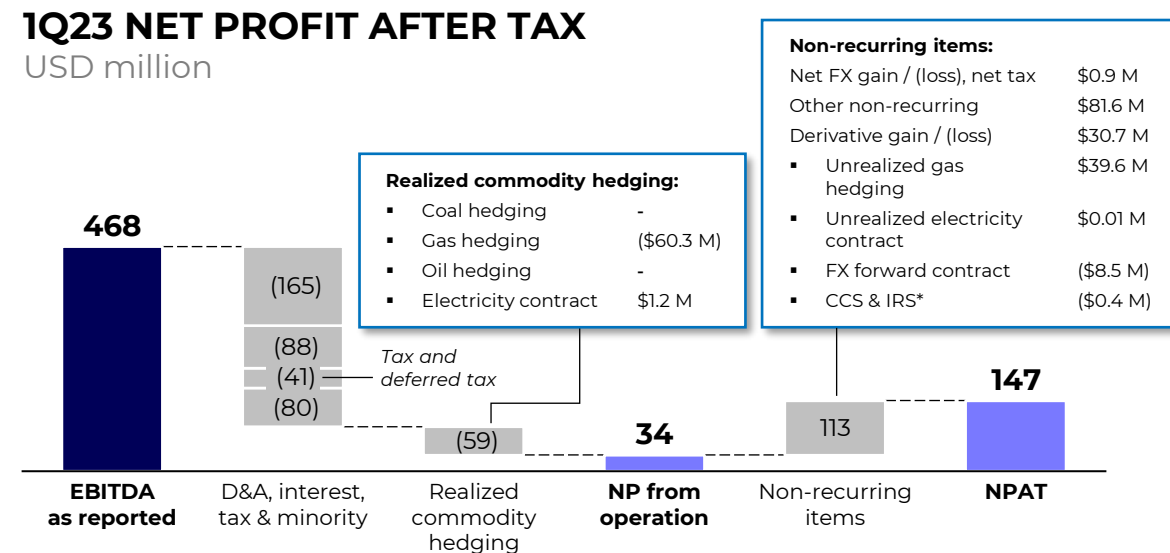
4Q23 NET PROFIT AFTER TAX

USD million



1Q23 NET PROFIT AFTER TAX

USD million



Appendix

Banpu: ESG leadership and credit rating recognition

BANPU ESG RATINGS



A

rating for three consecutive years for demonstrating resiliency towards long-term ESG risks and excellent risk management and mitigation relative to peers.

Member of
**Dow Jones
Sustainability Indices**
Powered by the S&P Global CSA

**Awarded
since 2014**

Recognized as a constituent of DJSI for conducting business with the highest ESG standards.



**Awarded
since 2015**

Recognized in THSI for sustainable operations and responsible investment principles.



**Honor
since 2018**

Highest distinction in SET's Sustainability Excellence Award for at least 4 consecutive years.



AAA

rating awarded by the SET ESG Ratings for strong ESG disclosures, including environmental management practices and interactions with key stakeholders.



5 stars & 5 coins

for the CGR Checklist 2023 from the Thai Institute of Directors Association (IOD) and the AGM Checklist 2023 from the Thai Investors Association (TIA), respectively.



**Sustainability
Disclosure
Award 2022**

from Thaipat Institute for consistent and excellent conduct of ESG principles.



**ASEAN
Asset Class**

Awarded in 2021 ASEAN Corporate Governance Scorecard for excellent corporate governance.

CREDIT RATINGS



**Best Public Company of the
Year 2023 in the SET & Best
Company of the Year 2023
in the Resources Industry**

Awarded by Money & Banking Magazine for Banpu's exceptional ability to effectively manage business and organization.



A+ Credit rating

with a **'stable'** outlook on the company and senior unsecured debentures reflecting the company's stable business growth.

Banpu: ESG recognition across the subsidiaries



Responsibly Sourced Gas (RSG) Gold Rating Certification

BKV's NEPA wells and facilities were awarded with TrustWell Gold accreditation for operational excellence, safety, and environmental stewardship, allowing BKV to market and sell certified RSG to the market.

Gold accreditation is awarded to top 25% most responsible gas operators by Project Canary, a leading and widely regarded 3rd party certification company.

The certification was awarded to 100% of BKV's NEPA production and a portion of BKV's Barnet production in 2022.



Best Non-Financial Sector Award

Awarded at the 14th IICD Award in 2023 for the continued commitment and performance towards corporate governance.



Platinum Plus & Green Elite Awards

Awarded at the 2023 Corporate Emission Transparency Awards for transparency and consistency in emission reporting.



Golden Trophy

Awarded at the TOP CSR Awards 2023 after maintaining the 5-Star Trophy for three consecutive years, along with a TOP Leader on CSR Commitment awarded to Mr. Mulianto, President Director at ITM.



ESG EXCELLENCE

Established ESG Committee in March 2023 to supervise ESG targets and performance



5th Year
Listed on THSI



Commended Sustainability Award
Awarded by SET in 2023



AAA rating
Awarded by SET ESG Ratings



5 Stars & 5 Coins
Awarded by IOD and TIA



ASEAN Asset Class
from 2021 ASEAN Corporate Governance Scorecard

Banpu ESG: environmental stewardship and commitment to the SDGs

SUSTAINABLE DEVELOPMENT GOALS

2030

BANPU COMMITMENT

In accordance with the UN Sustainable Development Goals (SDGs), Banpu has integrated 7 goals with commitment to long-term targets.



Banpu: 'integrated energy solutions' 2024

ENERGY RESOURCES

Shale Gas



830 MMcfed*
Net production

ENERGY GENERATION

Renewable Power



646 MW
Committed capacity

ENERGY TECHNOLOGY

Rooftop & Floating Solar



254 MW
Committed capacity

Mining



41.0 Mt
Coal sales

Thermal Power



4,008 MW
Committed capacity

Clean Energy Tech



3.0 GWh (100% basis)
Li-ion batteries



E-mobility services
E-mobility solutions



Smart Cities &
Energy Management



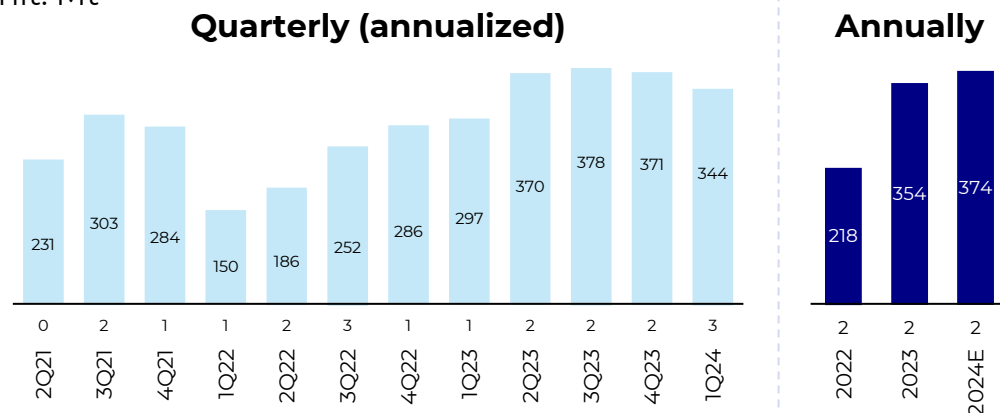
315 GWh*
Electricity trading

Note: *As of March 31, 2024

China: favourable import/domestic arbitrage supports imports

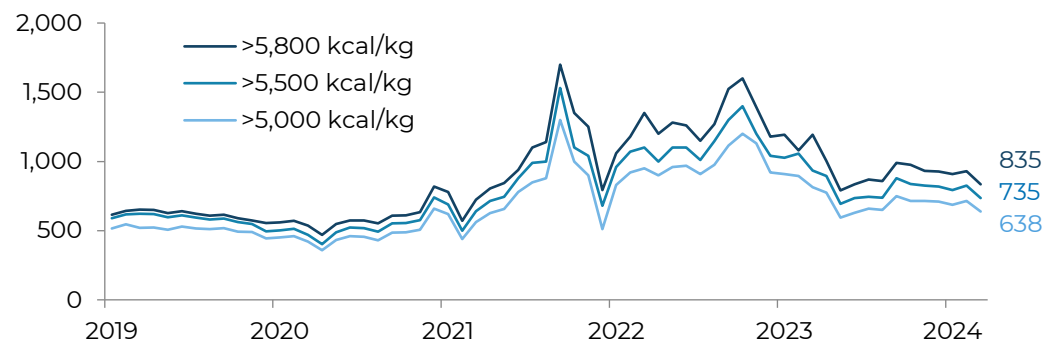
CHINA THERMAL COAL IMPORTS/EXPORTS*

Unit: Mt



CHINA DOMESTIC COAL PRICES

Unit: RMB/t



Note: *Includes lignite but excludes anthracite imports/exports

Source: www.sxcoal.com/cn (15th April 2024), Banpu MS&L

1Q24

- China registered GDP growth of 5.3% YoY in 1Q24, primarily driven by better-than-expected industrial activity.
- QHD prices slumped in 1Q24 due to sluggish demand and flood of coal imports.
- Overall thermal power output over January-March rose by 6.6% YoY to 1,603TWh.
- China consumed 1.17 bn t of all types of coal in 1Q24, steadied year on year, versus 4% growth in the same period of last year. Domestic coal production reached 1.11 bn t in 1Q24, down from 1.15 bn t over the same period in 2023.
- Thermal coal imports were 86 Mt in 1Q24, 16% higher from 1Q23 despite weak economic performance and high inventory. The increase in imports partly supplemented a decline in domestic coal output, while seaborne coal prices were relatively competitive for coastal provinces.
- The State Council revised coal mine safety regulations, commencing on 1 May 2024, which emphasises safety over production. This resulted in lower production in 1Q24.
- China to resume import tariff for coal in 2024 but unlikely to affect imports from Indonesia and Australia due to FTA.

OUTLOOK

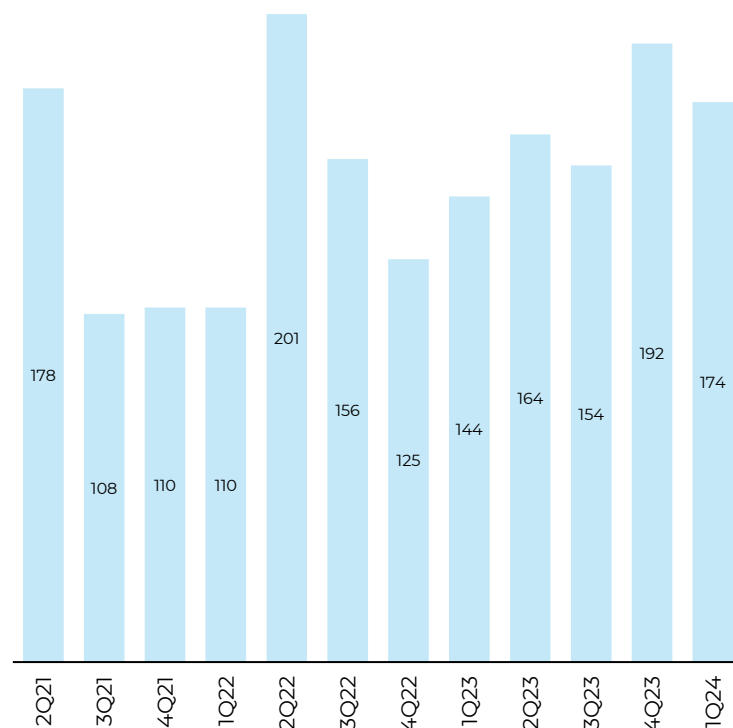
- GDP growth in the 2Q24 is expected to slowdown, due to the construction sector and cement output acting as a drag on China's economic development and coal demand
- Coal demand will continue weakness in 2Q24 as there is no fundamental changes.
- Stricter safety controls will continue limiting output, with provinces announcing production cuts. However, we expect overall production will continue to grow, although at a slower rate, as the government has changed its coal production strategy from "increasing" in 2023 to "stabilizing" in 2024.
- Seaborne thermal coal import is projected to remain strong as import/domestic price arbitrage is likely to persist, despite some narrowing down in late March, as we expected seaborne prices will decline to attract Chinese buyers.

India: strong economic activity increases power consumption

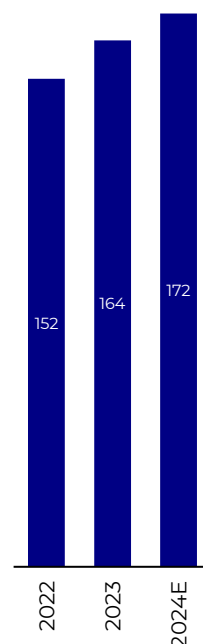
INDIA THERMAL COAL IMPORTS*

Unit: Mt

Quarterly (annualized)



Annually



Note: *Includes lignite grade imports

Source: Commodity Insights, Banpu MS&L

1Q24

- Increased government spending coupled with growing consumption helped sustain economic growth.
- The total electricity generation for 1Q24 was 376 TWh, up by 6.2% YoY, and up 3.4% from 4Q23, due to robust economic growth.
- Imported coal-fired generation contributed 327 TWh in 1Q24, rising 9.5% YoY due to low hydro output.
- Domestic thermal coal production registered a robust growth of 10.7% YoY in 1Q24, reaching 294 Mt. Healthy growth of domestic coal supply helped to build stocks at power plants and curb import demand.
- Thermal coal imports in 1Q24 were 43.4 Mt, increasing 20% YoY but decreasing 9% from 4Q23.
- Thermal coal imports from South Africa and Australia rose strongly in 1Q24 due to competitive price against other origins. Russia lost market share in India in 1Q24 due to their supply constraints.

OUTLOOK

- Indian electricity demand will remain strong in 2Q24 as India enters the summer season. India is likely to witness harsher summers than usual, along with continued economic growth.
- Industrial demand is also expected to remain robust amid strong economic activity.
- Domestic coal supply will continue to grow strongly due to improved weather conditions but will remain unable to meet growing demand for coal.
- The Indian government has extended imported coal plants to operate at full capacity until 15th October, raising the validity from 30th June, to avoid electricity shortages. Coal imports are expected to remain strong.
- Coal imports for blending are expected to increase in the coming months following the Indian government's extension of the mandate for all power generation companies to import 6% of their coal requirement until June.

Coal quarterly output summary

AUSTRALIA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON EQUITY BASIS					
Mines	CV (kcal/kg)	3Q23	4Q23	1Q24	2Q24e
Western operations		0.9	1.1	0.6	1.3
Springvale	6,700	0.5	0.6	0.2	0.9
Clarence	6,700	0.3	0.3	0.2	0.3
Airly	6,700	0.1	0.2	0.2	0.1
Northern operations		0.5	0.8	0.8	0.6
Mandalong	6,700	0.2	0.5	0.6	0.4
Myuna	6,700	0.3	0.3	0.2	0.2
Total Australia Coal		1.4	1.9	1.4	1.9

INDONESIA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON 100% BASIS									
Mines	CV (kcal/kg)	3Q23		4Q23		1Q24		2Q24e	
		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	1.7	13.9	1.5	14.3	1.8	13.8	1.7	14.3
Trubaindo	6,550 – 6,700	1.0	13.1	0.4	23.1	0.8	13.3	0.7	12.1
Bharinto		2.3	9.7	1.3	13.4	2.2	7.3	2.1	6.3
Jorong	5,300	0.2	10.4	0.1	11.0	0.1	4.2	0.1	15.5
Graha Panca Karsa	3,600 – 3,800	--	--	--	--	0.03	16.3	0.2	6.2
Total Indonesia Coal		5.3	11.7	3.4	15.0	4.9	10.6	4.8	10.3

CHINA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON 100% BASIS					
Mines	CV (kcal/kg)	3Q23	4Q23	1Q24	2Q24e
Gaohe	4,500 – 6,800	2.6	2.3	1.9	2.3
Hebi	5,050 – 6,800	0.4	0.2	0.3	0.3
Total China Coal		3.0	2.5	2.2	2.6

Note: CV figures are air-dried basis

FX impact analysis guidance on P&L

CURRENCY EXPOSURE	NPAT IMPACT 1Q24 (US\$M)	APPROXIMATE FX EXPOSURE (US\$M)		NPAT 5% SENSITIVITY 2Q24 (US\$M)	
		Net liability	Net asset	Assuming 5% depreciation of local currencies against USD	
Banpu: AUD asset, THB bond, and others	94.3	-1,800	400	THB	88
				AUD	-18
ITMG: IDR asset and liabilities	-8.0		220	IDR	-11
BPA: USD asset	1.0		5	AUD	0.2
Net	87.3			Net	59

▪ BOT lower 2024 GDP at 2.6% and forecast 2025 at 3.0%

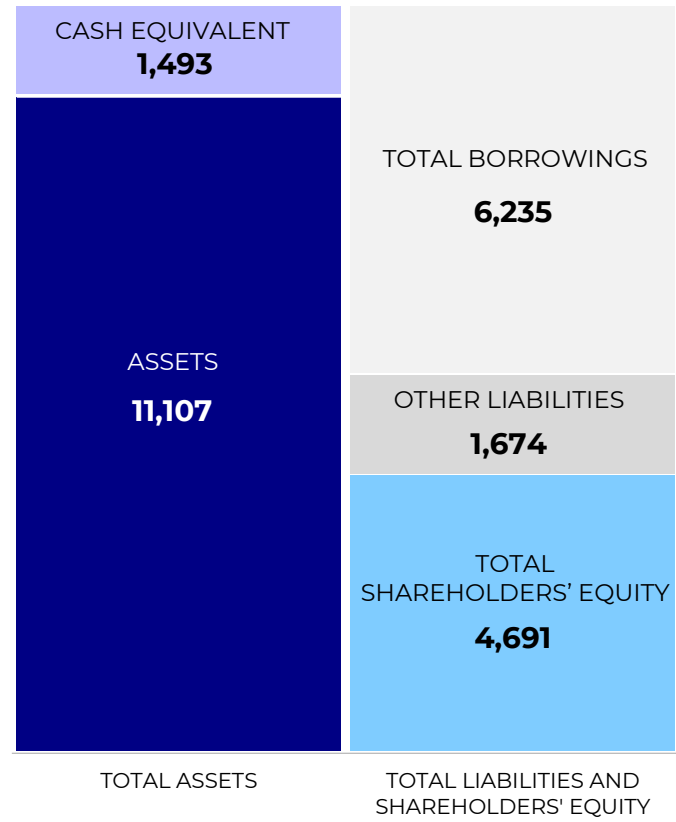
▪ BI forecast 2024 GDP to 4.7-5.5%

▪ RBA lower 2024 GDP at 1.4% and forecast 2025 at 2.2%

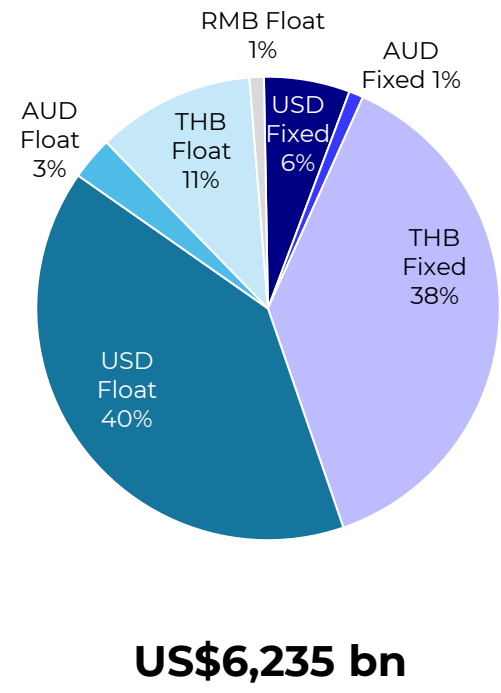
Banpu consolidated balance sheet – 1Q24

1Q24 CONSOLIDATED FINANCIAL POSITION

USD million



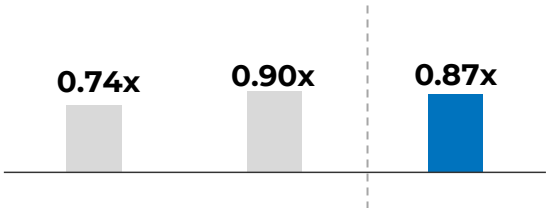
DEBT FX STRUCTURE



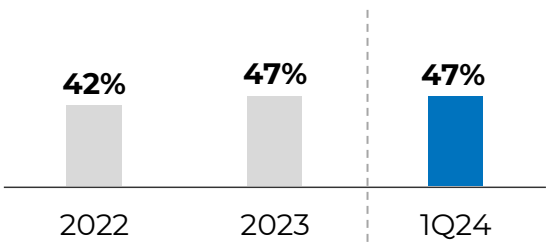
Total gross debt (31st March 2024)

GEARING RATIOS

Net debt / Equity* (x)



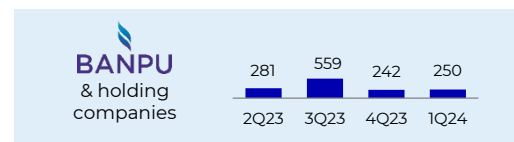
Net market gearing** (%)



Note: *Net debt to book value of shareholders' equity; **Net debt to enterprise value (enterprise value = net debt + book value of shareholders' equity)

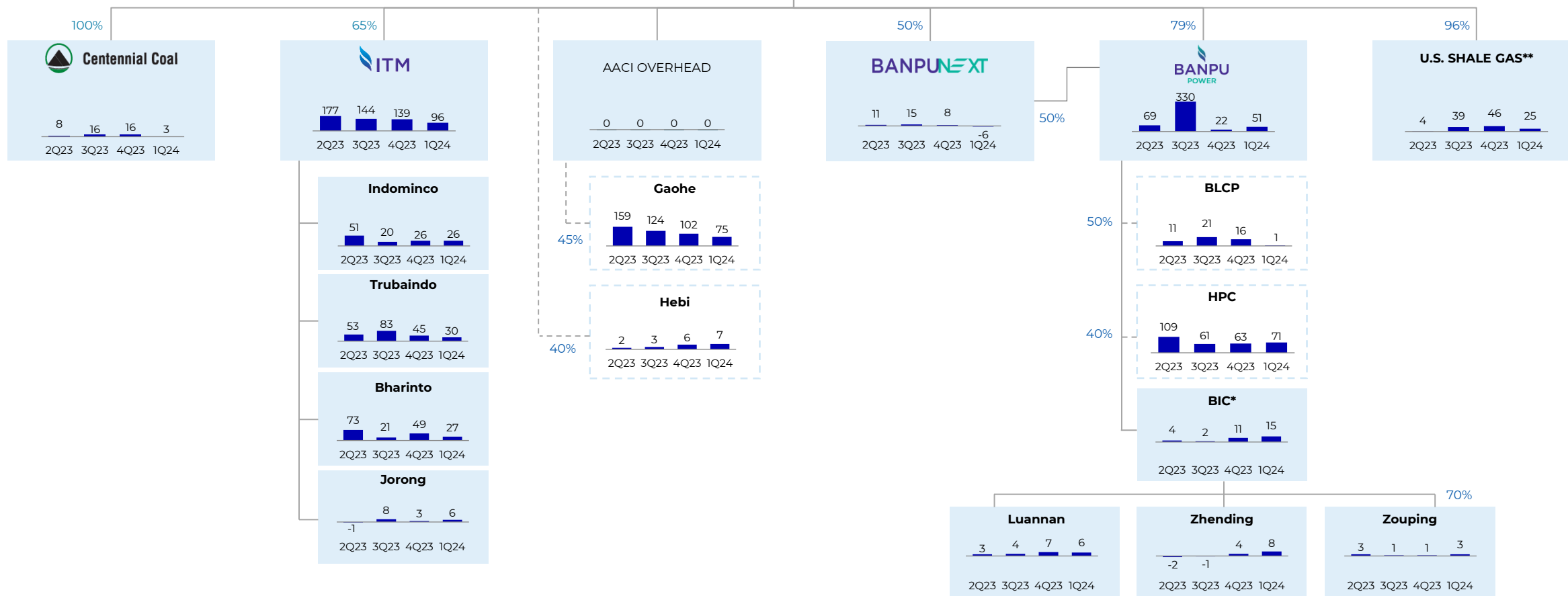
Banpu group EBITDA breakdown

USD million



Consolidated

Not consolidated



Note: all ownership 100% unless otherwise shown

*Banpu Investment China

**IFRS EBITDA. Significant differences between IFRS and BKV US GAAP EBITDAX include treatment of derivative gains and losses, depletion expense, accretion expense, stock compensation expense, BNAC expenses, equity income, and contingent consideration gains and losses of asset acquisitions

Banpu group net debt breakdown



Note: All ownership 100% unless otherwise shown; *Banpu Investment China

Banpu consolidated: operating profit

USD million	1Q24	4Q23	1Q23	QoQ%	YoY%
Total sales revenues*	1,088	1,155	1,313	-6%	-17%
Sales revenue – Coal**	702	791	945	-11%	-26%
Sales revenue – Gas	154	186	223	-17%	-31%
Sales revenue – Power	190	138	118	37%	62%
Sales revenue – Energy Technology	8	22	7	-61%	17%
Cost of sales	(890)	(932)	(873)		
Gross profit*	198	223	441	-11%	-55%
Gross profit – Coal**	181	214	401	-16%	-55%
Gross profit – Gas	-9	11	33	n.a.	n.a.
Gross profit – Power	26	10	6	146%	353%
Gross profit – Energy Technology	3	8	1	-67%	200%
Gross profit margin (GPM)	18%	19%	34%		
<i>GPM – Coal</i>	<i>26%</i>	<i>27%</i>	<i>42%</i>		
<i>GPM – Gas</i>	<i>-6</i>	<i>6</i>	<i>15%</i>		
<i>GPM – Power</i>	<i>14%</i>	<i>8%</i>	<i>5%</i>		
<i>GPM – Energy Technology</i>	<i>32%</i>	<i>37%</i>	<i>12%</i>		

Note: *Including other businesses; **Including coal trading

Banpu consolidated: operating profit

USD million	1Q24	4Q23	1Q23	QoQ%	YoY%
Gross profit	198	223	441	-11%	-55%
GPM	18%	19%	34%		
SG&A	(114)	(120)	(120)		
Royalty	(64)	(79)	(125)		
Income from associates	31	50	84		
Other income and Dividend	76	44	30		
Mining property	(7)	(10)	(7)		
EBIT	119	107	303	11%	-61%
EBIT – Coal	117	116	253	1%	-54%
EBIT – Gas	(22)	(8)	17	167%	n.a.
EBIT – Power	36	5	37	611%	-3%
EBIT – Energy Technology	(12)	(6)	(4)	100%	213%
EBITDA	250	242	468	4%	-46%
EBITDA – Coal	181	175	346	4%	-48%
EBITDA – Gas	25	46	74	-46%	-67%
EBITDA – Power	51	22	48	130%	5%
EBITDA – Energy Technology	(6)	(1)	(0)	n.a.	n.a.

Banpu consolidated: net profit

USD million	1Q24	4Q23	1Q23	QoQ%	YoY%
EBIT	119	107	303	11%	-61%
Interest expenses	(101)	(103)	(86)		
Financial expenses	(2)	(3)	(2)		
Income tax (core business)	(19)	(30)	(51)		
Minorities	(23)	(33)	(80)		
Net profit before extra items	(26)	(63)	83	n.a.	n.a.
Non-recurring items*	(8)	(22)	(82)		
Gain (Loss) on Derivatives Transactions	38	25	(27)		
Income tax (non - core business)	(1)	(2)	(2)		
Deferred tax income (expenses)	(48)	118	27		
Net profit before FX	(44)	57	162	n.a.	n.a.
FX translation	87	(90)	(14)		
Net Profit	44	(33)	147	n.a.	-70%
EPS (US\$/share)	0.004	(0.005)	0.017		

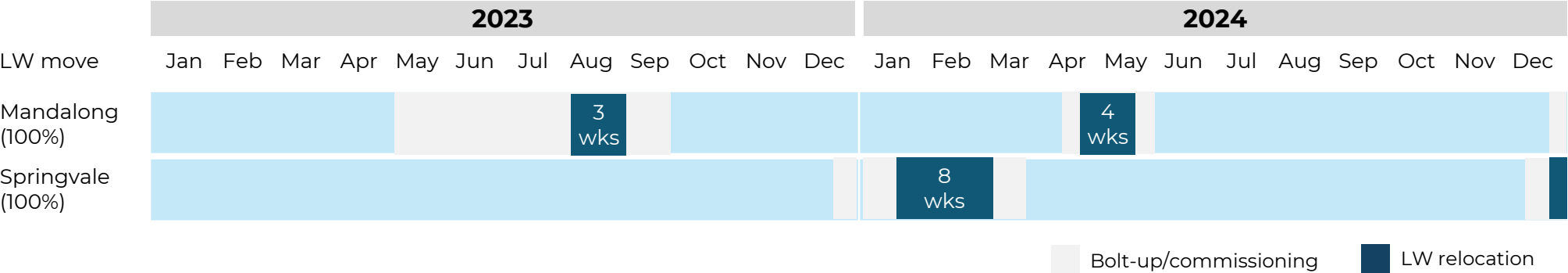
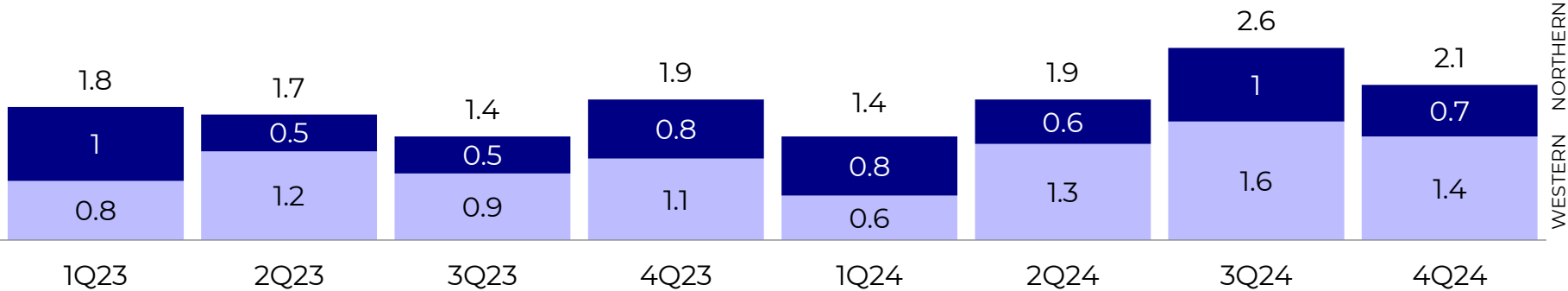
Note: *Income from non-core assets and other non-operating expenses

Centennial: income statement

USD million	1Q24	4Q23	1Q23	QoQ%	YoY%
Sales volume (Mt)	1.6	1.8	1.8	-10%	-7%
Sales revenue	196.9	215.5	219.4	-9%	-10%
Cost of Sales	(188.2)	(206.1)	(207.8)		
Gross profit	8.7	9.4	11.6	-7%	-25%
GPM	4%	4%	5%		
SG&A	(15.8)	(22.8)	(28.6)		
Royalty	(12.3)	(12.4)	(13.1)		
Other income	1.7	1.0	1.9		
Other expenses	-	-	-		
EBIT	(17.7)	(24.8)	(28.2)	n.a.	n.a.
Interest expenses	(10.3)	(10.1)	(8.0)		
Financial expenses	(1.6)	(3.5)	(1.6)		
Gain (loss) on exchange rate	1.1	(5.2)	0.8		
Gain (loss) on derivative	(3.2)	(3.8)	(3.1)		
Corporate income tax	0.0	0.0	0.0		
Deferred tax income	9.5	15.3	12.0		
Net Profit	(22.1)	(32.1)	(28.1)	n.a.	n.a.

Australia coal: quarterly equity rom output

Total equity ROM (Mt)



Note: Production generally responds to the timing of longwall changeovers (i.e., lower production results during a longwall changeover period)



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