Banpu FY23 & 4Q23 results

Investor and analyst update

29th February 2024

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01

Highlights

2023

BANPU

Banpu strategy: embracing a sustainable transformation

2000-2015
PHASE I
RELIABLE, AFFORDABLE ENERGY, APAC GROWTH

Coal

Power

Renewables

Diversification into international coal, power, and renewables

2016-2020
PHASE II
GREENER, SMARTER TRANSITION

Rapid portfolio transformation to lower-carbon asset mix with integrated value chain synergies

2021-2025
PHASE III
GREENER, SMARTER
FASTER

ACCELERATE
Greener, Smarter growth transitions

ANTIFRAGILE
Portfolio diversification for resilience

AUGMENTATION
Leverage Banpu's core competencies for new opportunities

Driving sustainable long-term value creation and strong cashflow generation, while accelerating portfolio transformation

Banpu 2023: highlights

ROBUST CASH FLOW GENERATION

$1,562 M
2023 EBITDA

$160 M
2023 NPAT

Strong contributions from Power business, while maintaining positive cashflow generation of Coal and Gas during volatile commodity price environment.

0.90x
2023 ND/E

ND/E maintained at same level with previous quarter

CAPITAL RAISING FOR GREENER, SMARTER TRANSITION

Successfully increased capital (Banpu-W5) to accelerate the Greener, Smarter progress and strengthen Banpu's capital structure

KEY FINANCIAL METRICS

RECOGNITION OF EXCELLENCE*

10 Consecutive years

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

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

A+ Credit rating

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

TRIS RATING
A Strategic Partner of S&P Global

TRIS 30 YEARS TOWARD THE NEXT DECADE OF SUSTAINABLE GROWTH

*Full ESG leadership and credit rating recognition can be found in the appendix

Future trends Ahead & Awards 2024

Banpu received two awards from the Future Trends Ahead & Awards 2024 hosted by Future Trends, a news and media provider focused on business, technology, and innovation.

"Corporate Transformation"

For demonstrating Banpu's transformation journey through its Greener, Smarter Business Transformation, organization-level Digital Transformation, and empowering People Transformation to drive future success.

"Leading of ESG"

For being a role model in creating sustainable business growth through Banpu's commitment to ESG practices and environmental stewardship in its business operations in Thailand and globally.

2023 achievements: enhancement of Greener, Smarter portfolio

EMBRACING A SUSTAINABLE TRANSFORMATION

By enhancing management strength, ensuring financial stability, and establishing a value-creating Greener, Smarter portfolio

1Q23

durapower

Durapower increase
to 65.1% stake
▲ *from 47.7%*

green Li-ion

Green Li-ion acquisition
4.51% stake

2Q23

evolt

EVOLT increase
to 23.81% stake
▲ *from 20%*

First Banpu battery farm
Iwate Tono battery farm
58 MWh

OYIKA

Oyika acquisition
14.2% stake →

3Q23

BANPU POWER

Significant expansion in US
Temple II acquisition
+755 MW

4Q23

SVOLT

SVOLT (Thailand) JV
40% stake

BKV

First Banpu CCUS* project
Barnett Zero CCUS project
First CO_2 injection

BEYOND GREEN

Beyond Green increase
to 39.18% stake
▲ *from 30%*

Oyika increase
to 15.91% stake

Note: *carbon capture, utilization and sequestration

02

Focus: Strategy 2024-25

BANPU

Banpu strategy: integrated growth platforms

BANPU

INTEGRATED ENERGY SOLUTIONS PROVIDER

Strong cashflow from **Energy Resources**	Stable cashflow from **Energy Generation**	Capture growth opportunities from **Banpu NEXT and CVC**

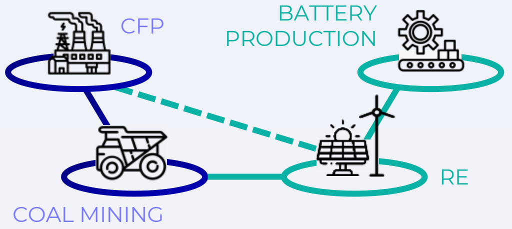
Banpu's Greener, Smarter transformation

Visionary leadership, agile teams	Digital Transformation-driven	Sustainability at the core
Passionate	Innovative	Committed

CREATING INTEGRATED GROWTH PLATFORMS IN CORE COUNTRIES

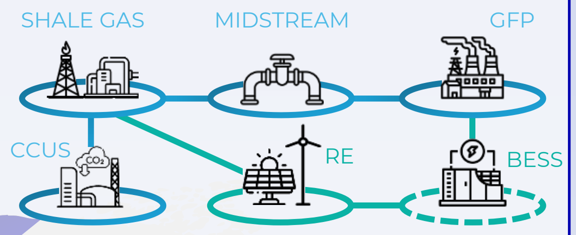
CHINA

Stable cashflows from mining and thermal power, with rapid growth in renewables and battery production



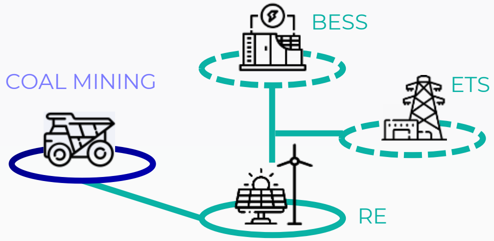
US

Integrated green gas value chain, from upstream production and CCUS to downstream gas-fired power



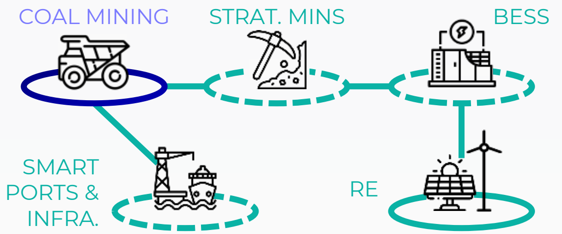
AUSTRALIA

Building on core experience to invest in clean energy businesses that are synergistic to existing operations



INDONESIA

Innovative platform strategy through optimization of current operations and synergistic investments



Greener, Smarter strategy: accelerated transformation progress

2015 // 2020 2021 2022 2023 2025 TARGETS

ENERGY RESOURCES

Gas Production (MMcfed)

2016
20
Marcellus Shale, Pennsylvania

700
Expansion to Barnett, Texas

2022
Top 20 producer in US
Integration to midstream through XTO acquisition

892

CCUS
First CCUS project in US

Integrated gas value chain

ENERGY GENERATION

Thermal capacity (GW)

2.1

2.4

2Q21
+73 MW
First in Japan, Nakoso IGCC

4Q21
+768 MW
First GFP in US
Temple I CCGT

3Q23
+755 MW
US expansion
Temple II CCGT

4.0

4.5 GW

Renewable capacity* (GW)

0.1
First solar project in Japan

0.5
Expansion to wind; Growth to Vietnam, China, and Thailand

2Q21
+167 MW
First Australia Solar

2021-2022
Acquisition and development of solar projects (incl. rooftops) in China, Vietnam, Japan, and Indonesia

0.9

1.6 GW

ENERGY TECHNOLOGY

Battery Production Capacity *(GWh)*

2018
durapower
47.7% acquisition

0.1

1
Banpu NEXT establishment

1Q23
green li-ion
4.51% stake
Battery recycling tech. provider

3Q23
BANPU NEXT x durapower
70% partner in DP NEXT
Battery production plant in Thailand (3Q24 COD)

4Q23
SVOLT
40% stake
Battery JV in Thailand

1

58 MWh
First battery farm in Japan *(under development)*

58 MWh

6 GWh

Note: *including rooftop and floating solar

Strategic investments to embrace sustainable transformation

Temple II
Gas-fired power plant expansion in the US

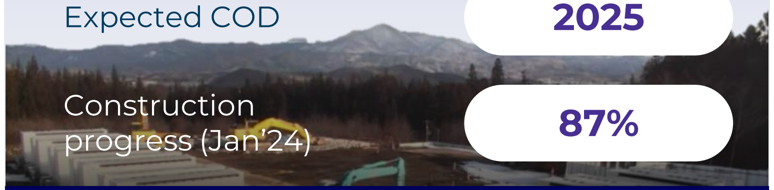
Acquisition (Jul'23)	US$460 M
Installed capacity	755 MW
Revenue (2023)	US$132 M

With robust performance and cash flow contribution, Temple II continues to strengthen Banpu's US electricity ecosystem and leverage synergies with Temple I for enhanced efficiency and increased profitability.

Texas, USA

Iwate Tono
Banpu's first battery farm

Installed capacity	58 MWh
Expected COD	2025
Construction progress (Jan'24)	87%



Iwate Prefecture, Japan

SVOLT
Battery and ESS value chain expansion

Total investment	c. US$20 M *(40% stake)*
Committed production capacity	2.0 GWh
COD	28 Feb 2024

Chonburi, Thailand

Barnett Zero
US gas value chain decarbonization

Project cost	c. US$34 M
First CO_2 injection	Nov. 2023
Annual CO_2 injection rate	210,000 tons

As one of the first CCUS projects in the US, Barnett Zero is a significant achievement in Banpu's mission to decarbonize, paving the way for upcoming projects in the pipeline.

Texas, USA

Banpu road to 2030

WAY FORWARD 2024-25

BANPU 2030

ENERGY RESOURCES

Mining

Responsible Mining Operator

Continued production optimization, decarbonization, and cost reduction initiatives to **maximize value and cashflow generation of existing reserves with opportunities in strategic minerals and NBS*.**

Gas Extraction

Integrated Green Gas Producer

Sustainability-centric operations, reducing and offsetting of emissions from gas operations through CCUS with the **commitment to achieve Net Zero across Scope 1 & 2 by 2025.**

ENERGY GENERATION

Thermal Power

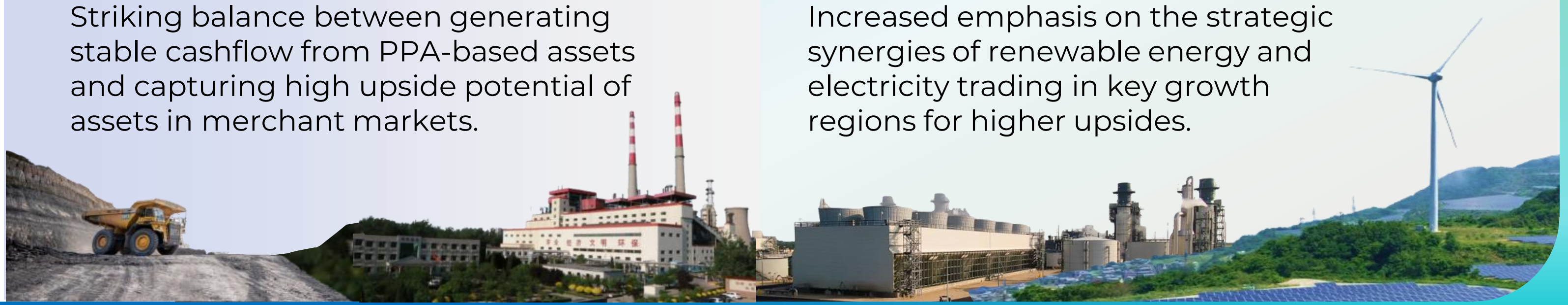
Unique Baseload Power Portfolio

Striking balance between generating stable cashflow from PPA-based assets and capturing high upside potential of assets in merchant markets.

Renewables

Quality green megawatts

Increased emphasis on the strategic synergies of renewable energy and electricity trading in key growth regions for higher upsides.



GREENER, SMARTER, FASTER, STRONGER

ENERGY TECH.

Net Zero Solution Provider

Investment portfolio

New S-curve in energy & beyond

Investment portfolio optimization, focusing on financial returns from existing and future investments.

Battery production and BESS

Vertically-integrated battery player

Strengthen position as an integrated battery player, expanding across the value chain from production to BESS deployment.

BUILDING AN ANTIFRAGILE PORTFOLIO

Transformation of core value

Accelerating sustainable energy transition to cleaner resources, generation, and energy technology.

Strengthening current and new integrated energy value chain across key countries, while integrating digital and AI technologies into all operations.

Sustainability-oriented growth

Focused on building an antifragile portfolio, lowering emissions, stronger returns, and strengthening portfolio resiliency and against disruptions and trends.

Note: *nature-based solutions

Banpu 2030: portfolio envisioned

Strengthening Banpu's cash position and balance sheet resilience

Focused strategy involving an integrated value chain in strategic countries

Driving initiatives for significant emission reduction and implementing AIoT* across all operations

BANPU ILLUSTRATIVE ENTERPRISE VALUE BREAKDOWN 2030

COAL-BASED

Responsible Operator

Lower exposure to coal-related businesses, focusing on extracting value from quality reserves and mines.

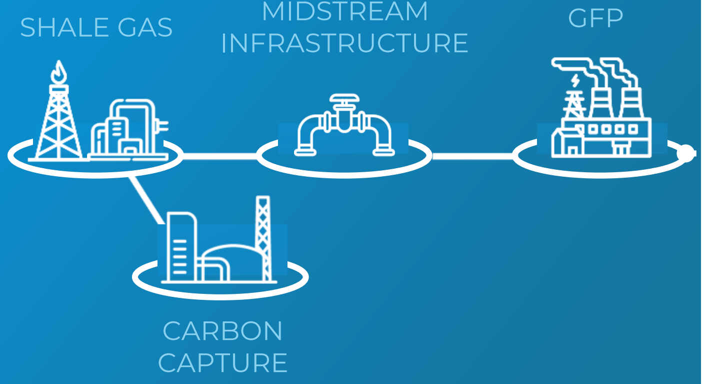
Aligning with global net zero ambitions, improving ESG while significantly reducing climate risks.

TRANSITION

Integrated Green Gas Producer

Just transition towards a lower carbon economy, focusing on sustainable operations across the gas value chain.

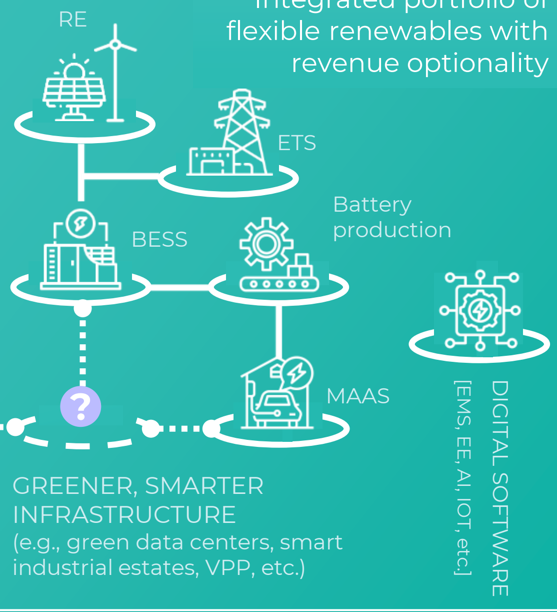
Banpu's important core cash flow generating businesses going forward as Banpu heads towards the future and lowers its reliance on carbon-intensive assets.



GREENER, SMARTER

Net Zero Solutions & Green Infrastructure

Integrated portfolio of flexible renewables with revenue optionality



- Strategic minerals
- Nature-based solutions

Support portfolio digitalization & decarbonization

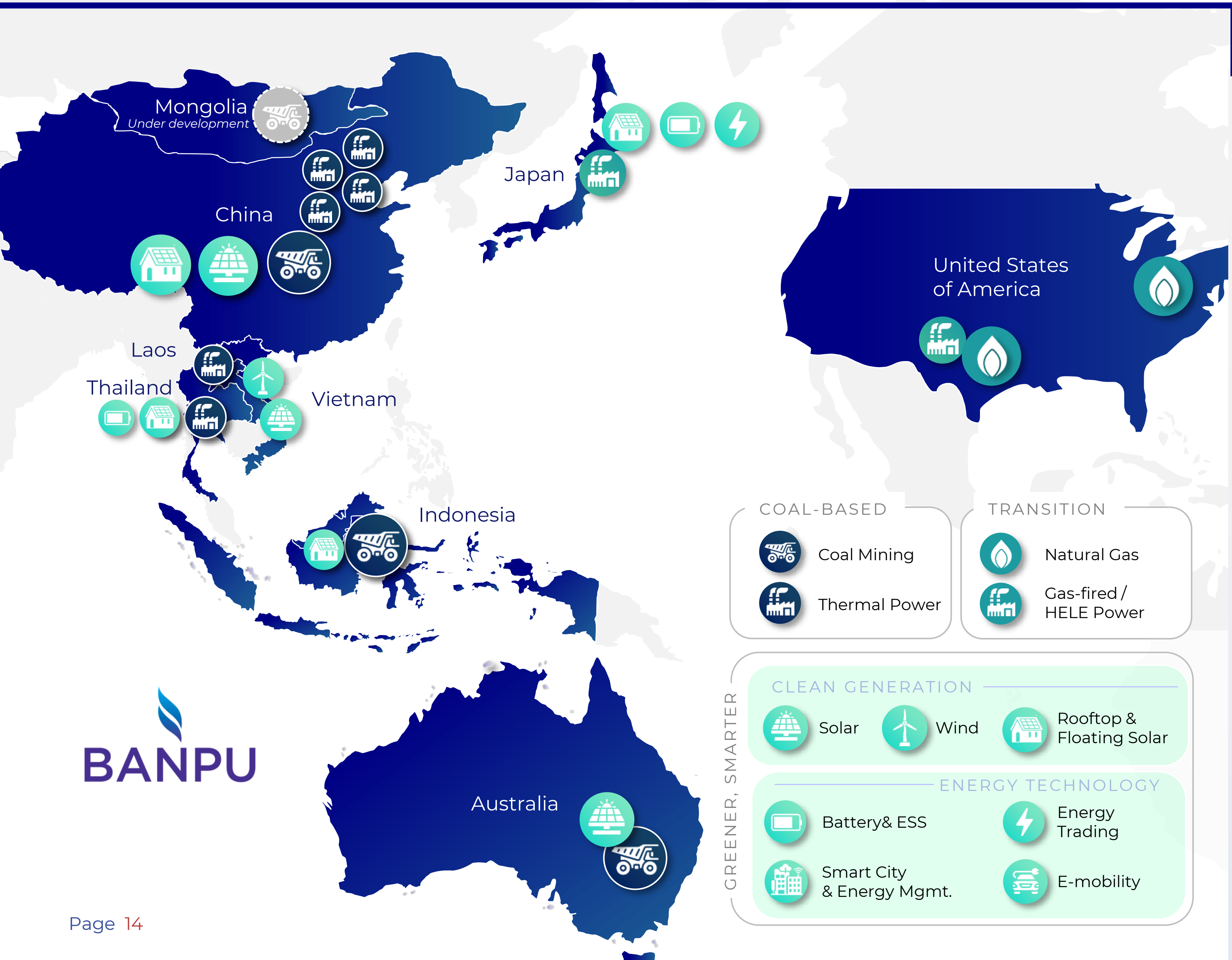
CVC Strategic investments for antifragile hedges, synergies with core businesses, and entry to new growth sectors

Note: *Artificial intelligence of things (AIoT)

03

Operation
Highlights

Banpu: diversified asset portfolio across the energy value chain



BANPU

BANPU OPERATION STRATEGY 2024

1. **COST SAVINGS INITIATIVES**
2. **OPERATIONAL EFFICIENCY & PRODUCTIVITY IMPROVEMENTS**
3. **ORGANIC DEVELOPMENT**

Banpu's asset portfolio is diversified along the energy value chain and spread across major economies and key growth economies...

...making Banpu well-positioned to respond to volatile macro-environments heading into 2024.

EXTERNAL HEADWINDS

GEOPOLITICAL TENSION	SUPPLY CHAIN DISRUPTIONS & PRICE VOLATILITY
HIGH INTEREST RATE	UNCERTAIN ECONOMIC RECOVERY
CLIMATE CHANGE	UNPREDICTABLE CONDITIONS

Value creation and cost saving initiatives

		PRODUCTION IMPROVEMENT	SUPPLY CHAIN OPTIMIZATION	MARKETING INITIATIVES	2024 POTENTIAL COST SAVINGS
MINING	INDONESIA	**Optimizing mining sequences and minimizing fuel consumption**	**Enhance logistics efficiency & improving equipment management**	**Optimize contracts & product-market strategy for maximum value**	US$ **1.5-3.0** per ton
	AUSTRALIA	**Enhance Gross Margin through machinery optimization & digital solutions**	**Optimize costs through strategic procurement & capital allocation**	**Enhance ASP through balancing sales strategies**	A$ **11** per ton
	CHINA	**Enhance safety & efficiency with maintenance, speeding up longwall activation**	**Maximize clean coal recovery with washery plant project integration**	**Maximize ASP through blending market**	
		UPSTREAM DEVELOPMENT	GAS OPERATIONS	SUSTAINABILITY	
GAS		Maximize production & reserves with well reactivation & geological assessments	Reduce LOE with well shut-ins & water hauling optimization	Utilize Barnett Zero CCUS operations for related Net Zero initiatives	US$ **0.06-0.07** per mcf*
		FUEL MANAGEMENT	POWER DISPATCH CONSISTENCY & RELIABILITY	VALUE ENHANCEMENT	
POWER		Centralize coal procurement & inventory management for cost control	Enhancing plant reliability & output to minimize unplanned shutdown	Optimize hedging returns & explore cleaner fuel co-firing	US$ **14 M** savings

Note: *Million cubic feet; 2023 gas production is 313.73 Billion cubic feet (Bcf)

Indonesia coal showcase: operations initiatives

COST SAVING INITIATIVES IN INDONESIA

Increase production reliability and optimize mine plan

- Ensure periodic production plan to be able to meet annual target
- Optimize mining sequence to reduce hauling distance
- Improve revegetation activities by managing top-soil

Melak Mine Area Operational Cost Initiatives

- Enhance equipment and machinery rental (i.e., pump and auxiliary machine)
- Rehandling top-soil through direct spreading
- Maximization of solar PV at Bunyut mine to reduce fuel consumption in power generation, lowering both cost and emissions
- Hauling road maintenance optimization

Floating Loading Facility Cost Reduction

- Rearrangement of anchorage facility from Muara Berau to Muara Jawa

Note: *production figures represent the annual productions for the year 2023 on a 100% basis

US gas showcase: leveraging synergies across the value chain

Upstream production — Synergistic value creation from assets consolidation

Midstream infrastructure — Direct market access with capacity for additional third-party volumes

Power generation — Potential gas supply and upstream infrastructure synergies

End Consumers

BKV Reserves development

BKV Shale gas fracking

MARCELLUS
BARNETT

BKV Carbon Capture, Utilization and Sequestration

LOE* SAVING INITIATIVES

- Marginal shut-in well program to reduce water use
- In-house valve repair expertise development
- Water hauling automation system optimization

UPSTREAM INITIATIVES

- Optimization through management of geological structure
- Restimulation & re-frack program to reactivate dormant gas wells

Gas processing

Dry gas or Methane (C_1)

BKV Natural gas pipeline

Storage

HUB

Natural gas liquids (NGL) or wet gas

NGL Fractionation

TEMPLE I & II
BKV BANPU POWER
Gas-fired Power Plant

Renewables
+ ? BESS

Power retail & trading

Natural Gas, Liquefied Natural Gas

? Power End Consumers

Well-positioned to further explore potential energy-related downstream opportunities.

Gas End Consumers

COMMERCIAL AND RESIDENTIAL
- Fuel
- Heating
- Cooking

INDUSTRIALS
- Petrochemicals

NET ZERO INITIATIVES – CARBON CAPTURE

- Optimize benefits from **Barnett Zero's** commercial operations
- Government incentives such as US$85 per ton of carbon stored
- Opportunity to sell carbon-free gas at a premium price (10-20% increase)
- Pursuing 12 commercially viable CCUS projects in the pipeline**

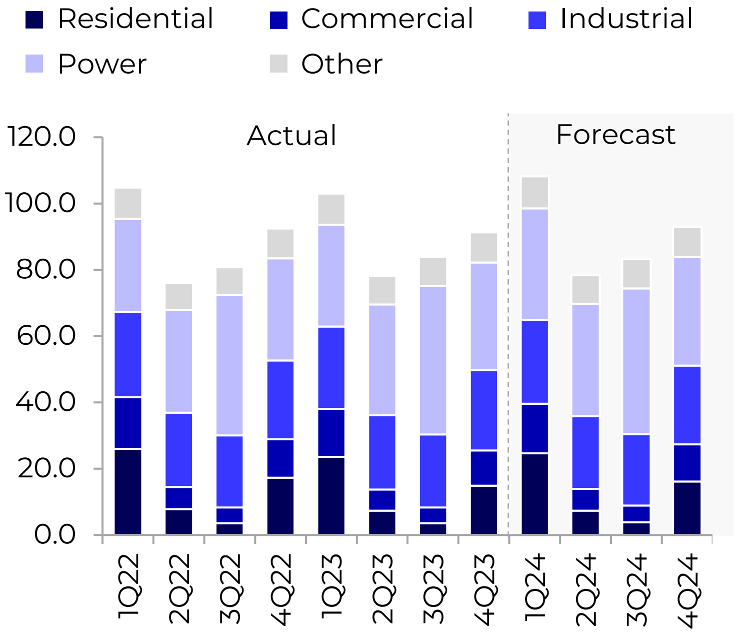
Note: *Lease operating expenses, ** BKV CORPORATION FORM S-1, January 12th, 2024

04 Energy Resources

U.S. gas market update

US CONSUMPTION & PROJECTION

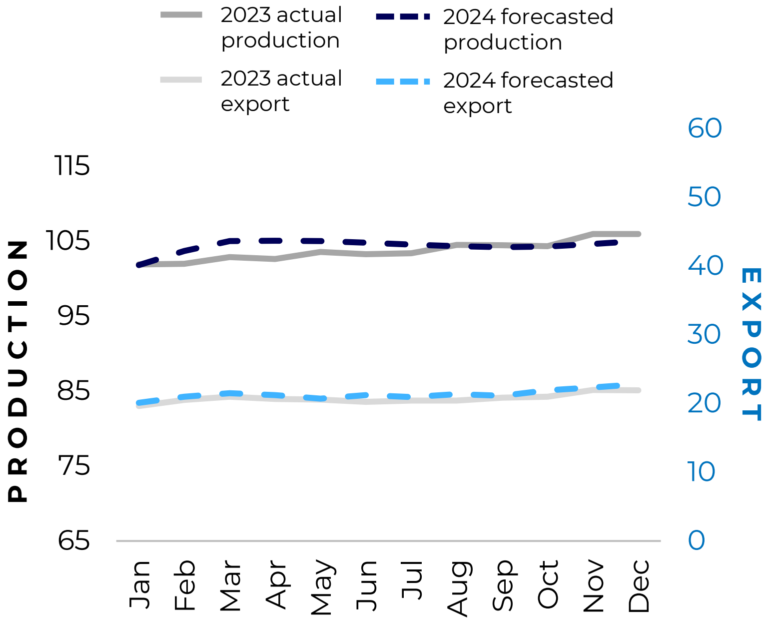
Unit: Bcf/d



- Consumption in the US averaged at 91 Bcf/d in 4Q23, up 9% from 3Q23. Residential and commercial demand surged with heightened space heating requirements, as the winter season approached.
- Consumption is forecasted to average at around 91 Bcf/d in 2024, 2% higher than in 2023.

US NATURAL GAS PRODUCTION

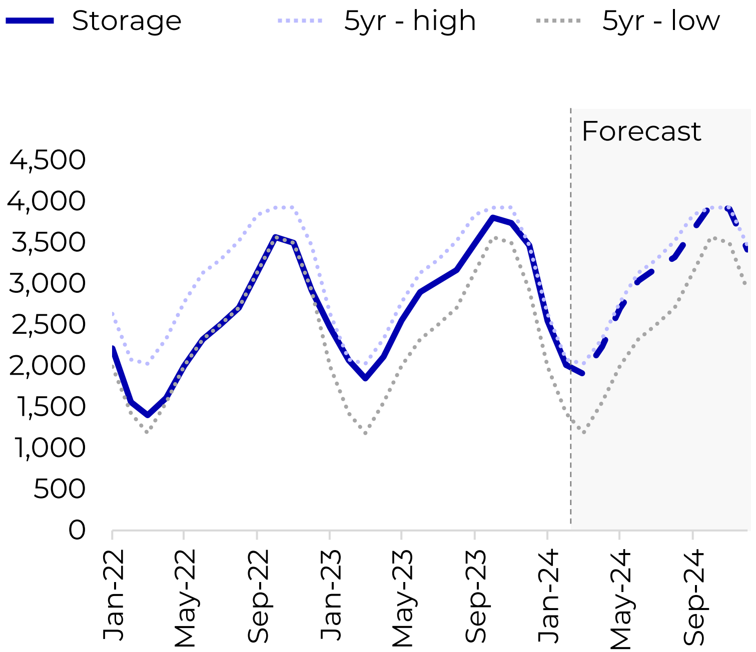
Unit: Bcf/d



- US natural gas production reached 105 Bcf/d in 4Q23, increasing by 1% QoQ and 4% YoY, driven by Haynesville production and associated gas from productive Permian Basin oil wells, partially offset by declining rig counts since 2023.
- US LNG exports averaged 13 Bcf/d in 4Q23, increasing by 12% QoQ and 23% YoY. LNG processing plants are back online after planned maintenance in the last quarter.

U.S. STORAGE LEVEL

Unit: Bcf

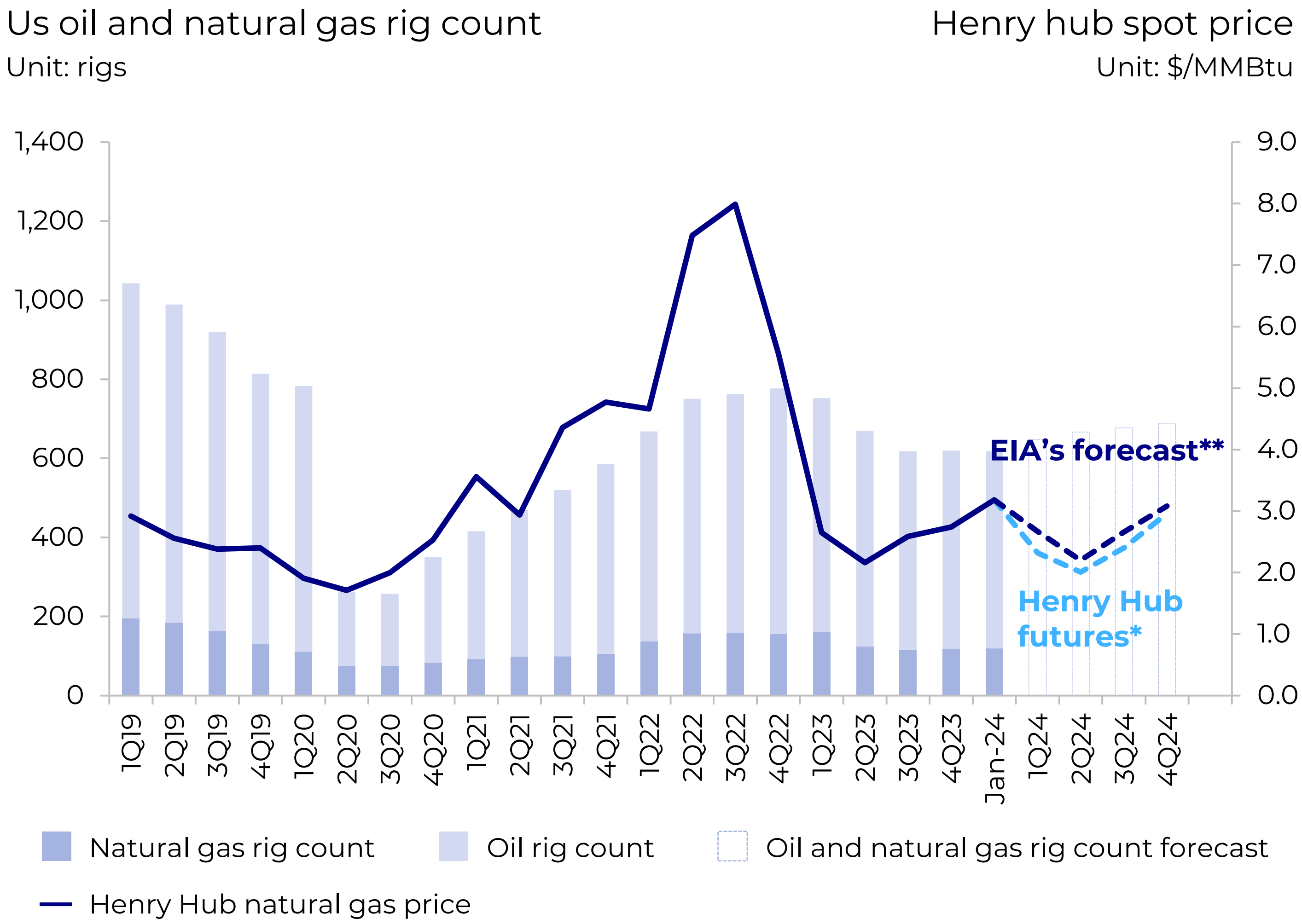


- Natural gas inventories in December 2023 reached 3.5 Tcf, 8% higher than the 5-year average and around 0.5 Tcf higher YoY , due to the warm start to this winter.
- EIA expects this surplus above the five-year average to continue into 2024, exerting pressure on gas prices.

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

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

US RIG COUNT VS HENRY HUB PRICE



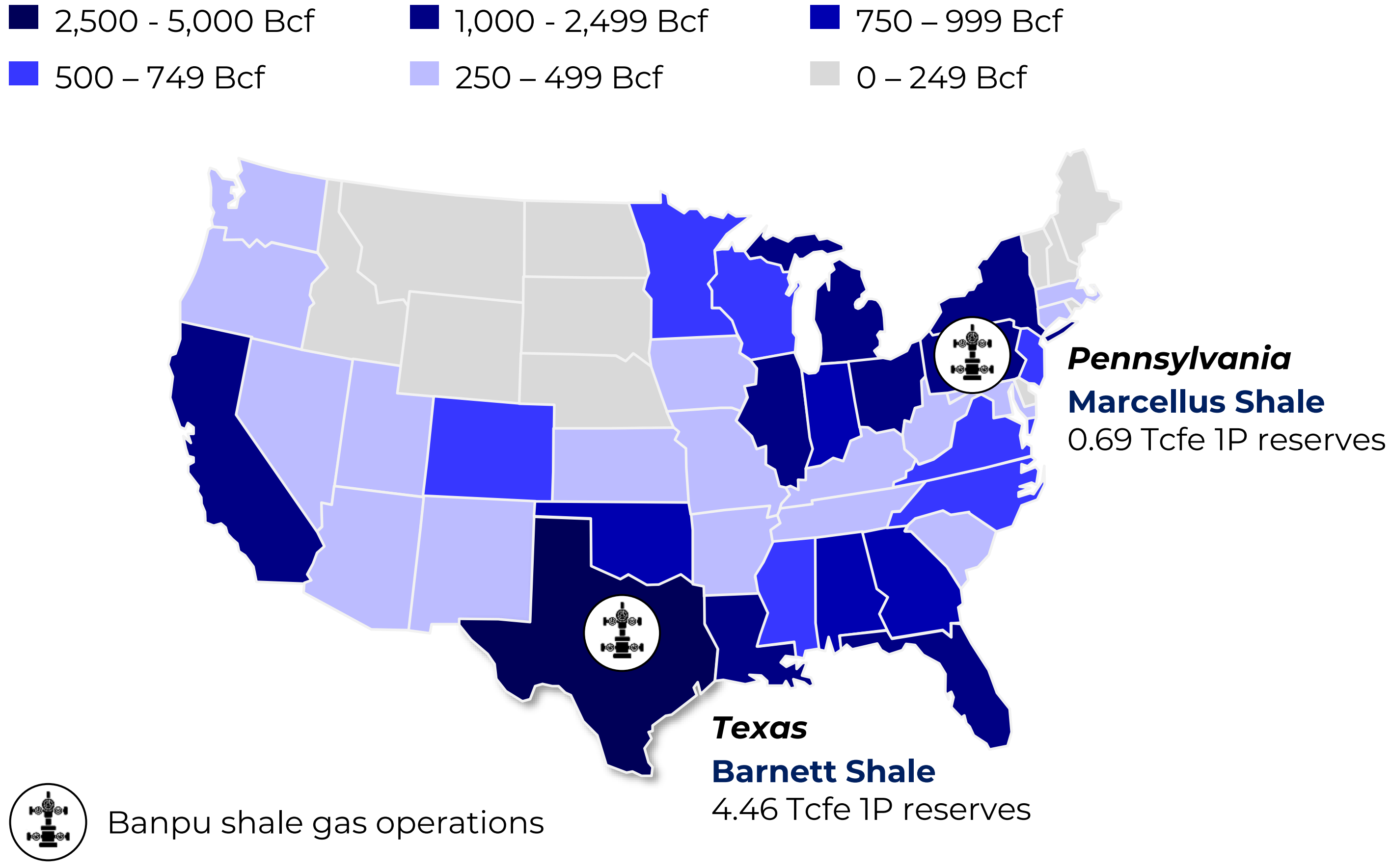
COMMENTS

- Natural gas prices rebounded in 4Q23, with robust residential and commercial demand at the start of the winter season, balanced by elevated inventory levels and record-high gas production.
- Oil and gas rigs in 4Q23 remained consistent with 3Q23 but were approximately 20% lower than at the end of 2022.
- Forecasts indicate Henry Hub futures will stay below $3.0/MMBtu in 1Q24 due to the current milder-than-expected winter pattern.

Note: *As of February 12th, 2024; **Short-Term Energy Outlook (February 2024)
Source: EIA Short-Term Energy Outlook (February 2024), Baker Hughes US natural gas rotary rig count (February 2024)

Banpu Gas: 2023 highlights

US DRY GAS CONSUMPTION 2022 BY STATE*



Average local price**

$2.41/Mcfe -60% YoY

Sales volume

314 Bcfe 12% YoY

EBITDA***

$162 M -85% YoY

Notes: *As of (or, as applicable, for year end) December 31, 2022; ** 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

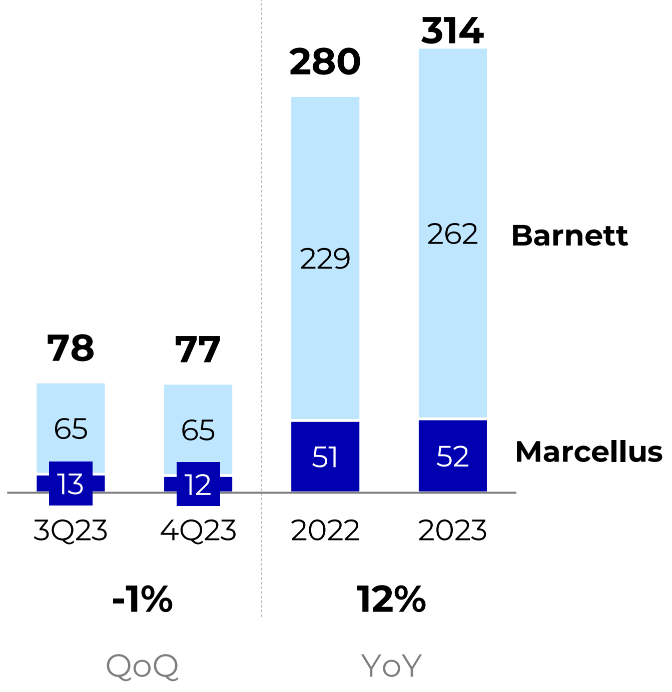
Source: EIA

Banpu Gas: 4Q23 and FY23 performance

4Q23 EBITDA of $45 M characterizes our resiliency and ability to survive period of commodity volatility through positive cash flow generation.

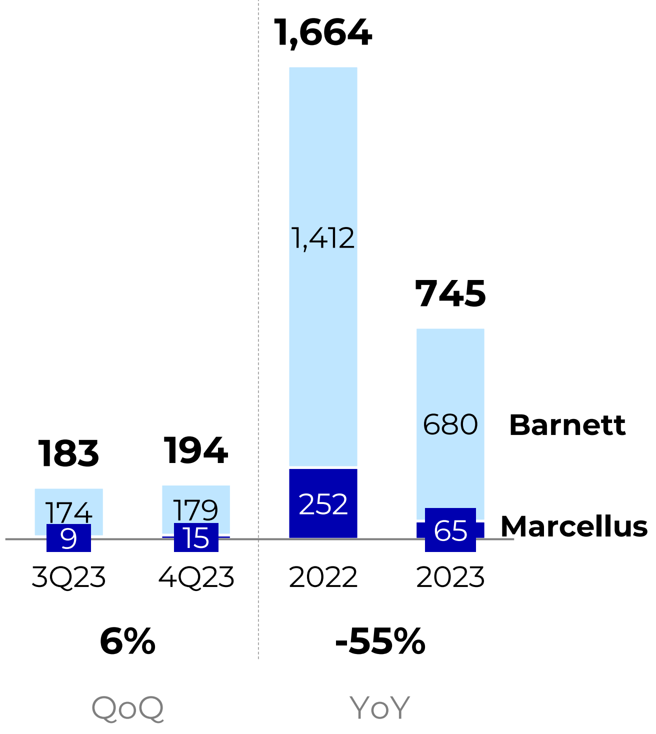
SALES VOLUMES

Unit: Bcfe*



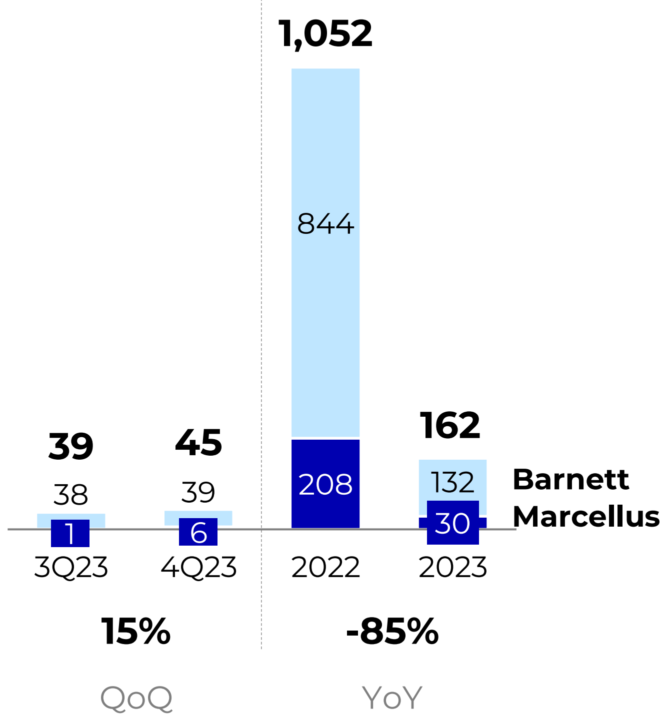
TOTAL REALIZED REVENUE**

Unit: US$M



EBITDA***

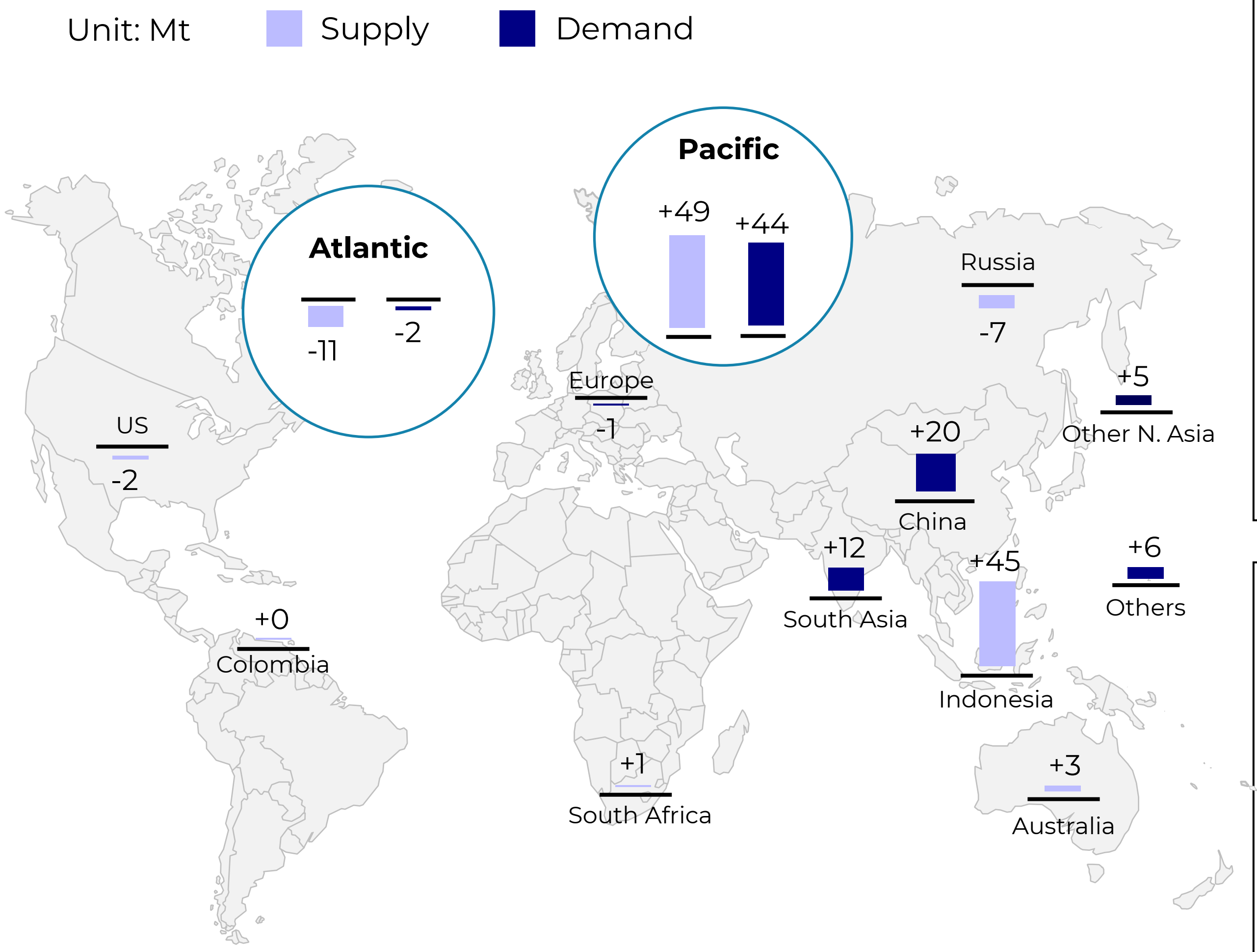
Unit: US$M



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



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

Demand trends

Seaborne thermal coal imports are expected to reach a new record in 2024, driven by robust demand from China, South Asia, and Southeast Asia. Asia's coal-fired generation capacity is on the rise, surpassing a decline in Europe. Safety concerns present uncertainty over China's domestic coal production.

- **China:** In coastal areas, imported coal is expected to stay competitive amid uncertain domestic supply. The forecast suggests prolonged support for coal burn due to an amplified El Niño influence.
- **India:** Persistent reliance on coal for power and non-power sectors is anticipated. Strong economic growth, a forecast of low hydro output, and domestic coal production lagging overall demand will drive robust imported coal demand.
- **JKT:** Additional coal-fired capacity will support coal burn in 2024, remaining competitive against gas. However, downside risks include increased nuclear generation and economic uncertainty.
- **Europe:** Weak coal market fundamentals, rising renewable output and low gas prices are expected to weigh on coal burn. The coal phase-out plan is likely to regain momentum.

Supply trends

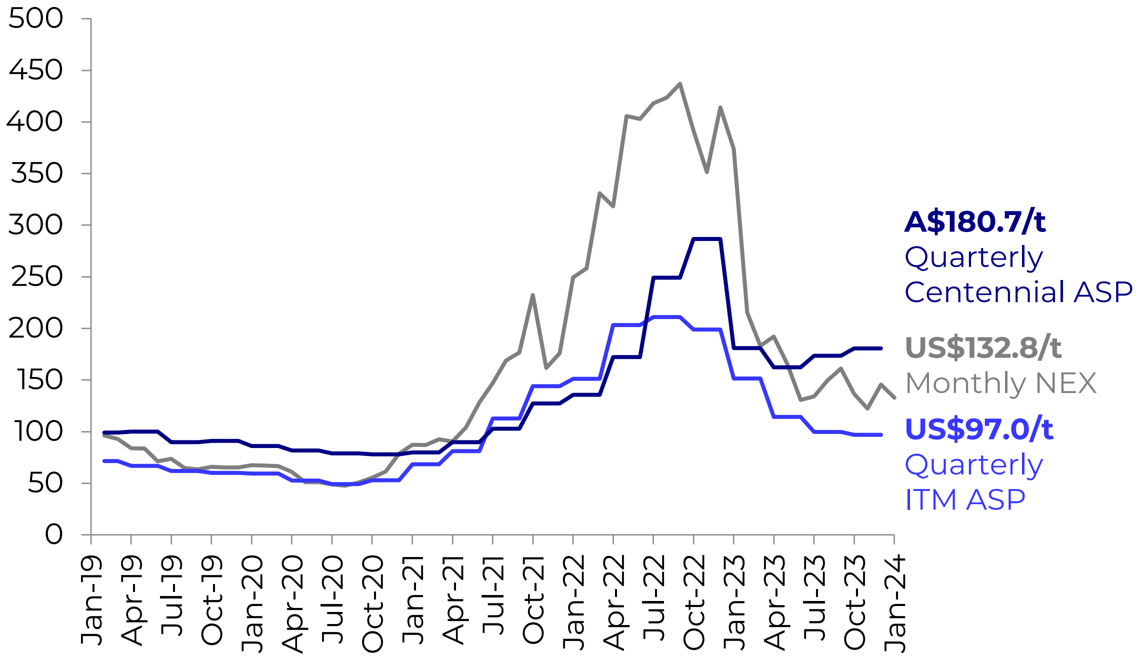
Global thermal coal supply is projected to surpass demand, primarily driven by Indonesia's robust production. The El Niño-induced drought is expected to persist, providing ongoing support to coal production.

- **Indonesia:** Exports are expected to grow further in 2024, driven by strong demand and a significant production forecast. Key miners are eager to expand output and increase market share.
- **Australia:** Anticipated marginal growth in thermal coal exports in 2024. New supply faces challenges due to rising costs and labour shortages.
- **Others:** Russian coal producers are diverting coal to Asia by offering significant discounts to gain market share. Logistic constraints continue to impact South Africa, Colombia, and the US, leading to coal diversion to Asia amid declining European demand.

Banpu ASPs vs thermal coal benchmark prices

BANPU ASP VS BENCHMARK PRICES

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



COMMENTS

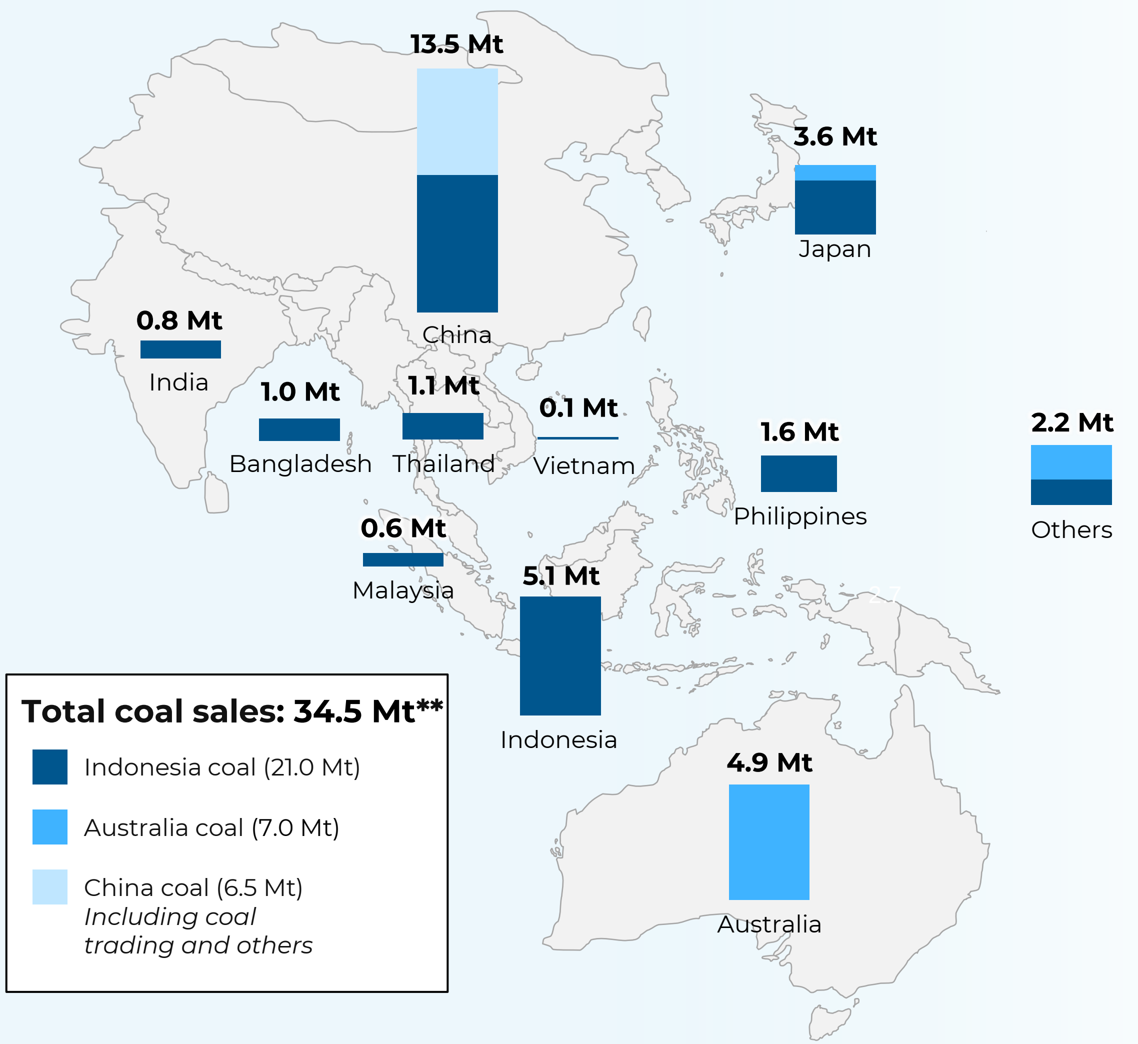
- The seaborne premium thermal coal market remained stable throughout 4Q23, with the weekly GCNewc fluctuating within a narrow range of $120-150 per ton.
- Similarly, the market for lower-quality thermal coal remained stable in 4Q23. ICI2 hovered between $92-97 per ton, ICI3 within $79-83 per ton, and ICI4 maintained a narrow range of $57-62 per ton. Despite increased supply from Indonesia, robust import demand from China in 4Q23 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** (23 February 2024)	ITM ASP* (4Q23)	CEY ASP (4Q23)	ASP domestic (4Q23)	ASP export (4Q23)
US$124.9/t	**US$97.0/t**	**A$180.7/t**	**A$148.3/t**	**A$247.5/t**
	-3% QoQ	+4% QoQ	+3% QoQ	-7% 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 2023

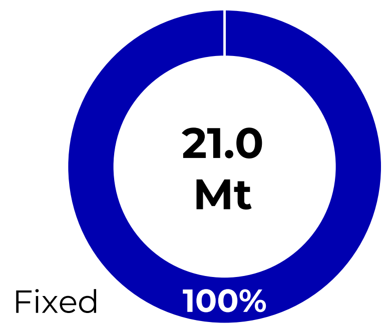
2023 COAL SALES SOURCE* – DESTINATION ANALYSIS



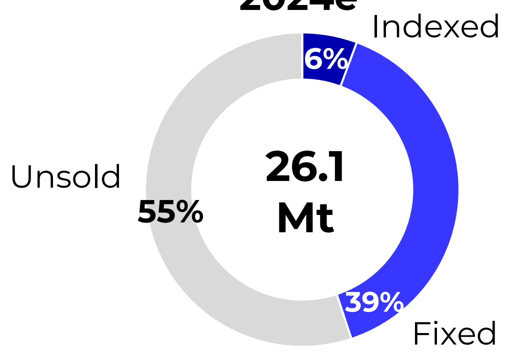
COAL SALES*** PRICING STATUS

Indonesia

2023

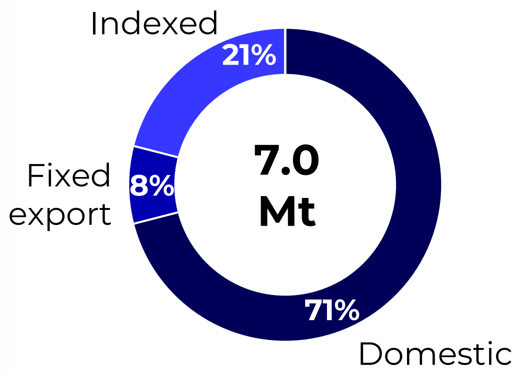


2024e

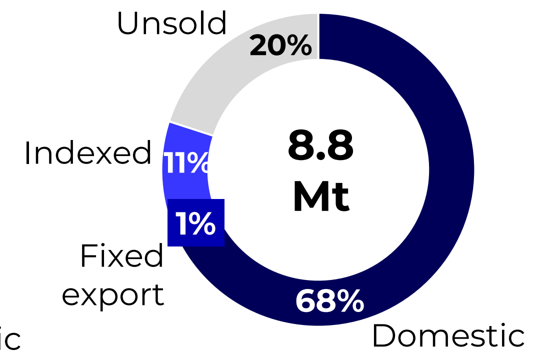


Australia

2023



2024e



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: 2023 highlights

Production volume

34.7 Mt -2% YoY

Sales volume

40.3 Mt -2% YoY

EBITDA

$914 M -66% YoY

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

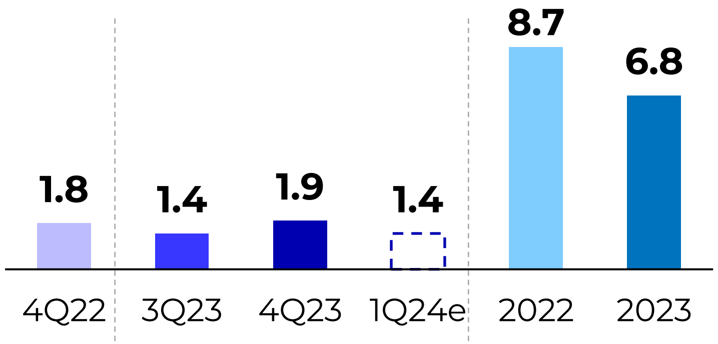
Banpu Mining: operational summary

ROM PRODUCTION AND KEY UPDATES

Unit: Mt

Australia Coal

2024 target: 8.0 Mt

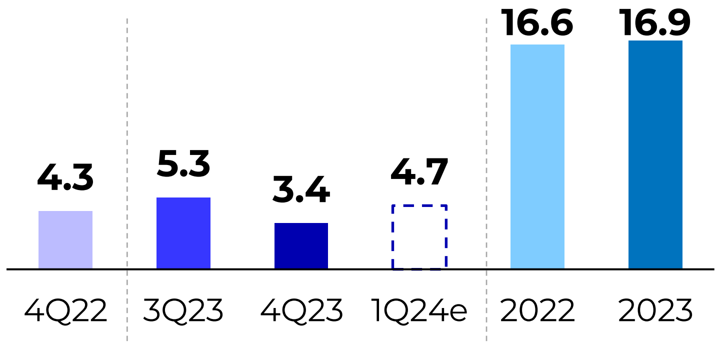


36%	6%	-22%
QoQ	YoY	YoY

- Q4 production achieved the 1.9 Mt target with both Longwall mines operating at full capacity.
- Mandalong's new low-height Longwall continues to deliver enhanced productivity rates.
- Airly increased tonnes through a new roster and higher resourcing.
- 1Q24 production is projected at 1.4 Mt as Springvale is in relocation mode.

Indonesia coal

2024 target: 19.5-20.2 Mt

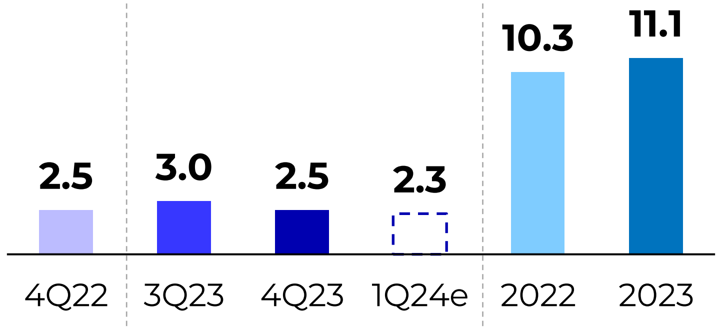


-35%	-21%	1%
QoQ	YoY	YoY

- Production in 4Q23 reached 3.4 Mt, as planned. The total production for 2023 amounted to 16.9 Mt, slightly surpassing that of 2022.
- As a result of mine sequence preparation in 4Q23, production in 1Q24e is targeted at 4.7 Mt, following an increase in production within the Melak cluster.

China Coal

2024 target: 10.8 Mt



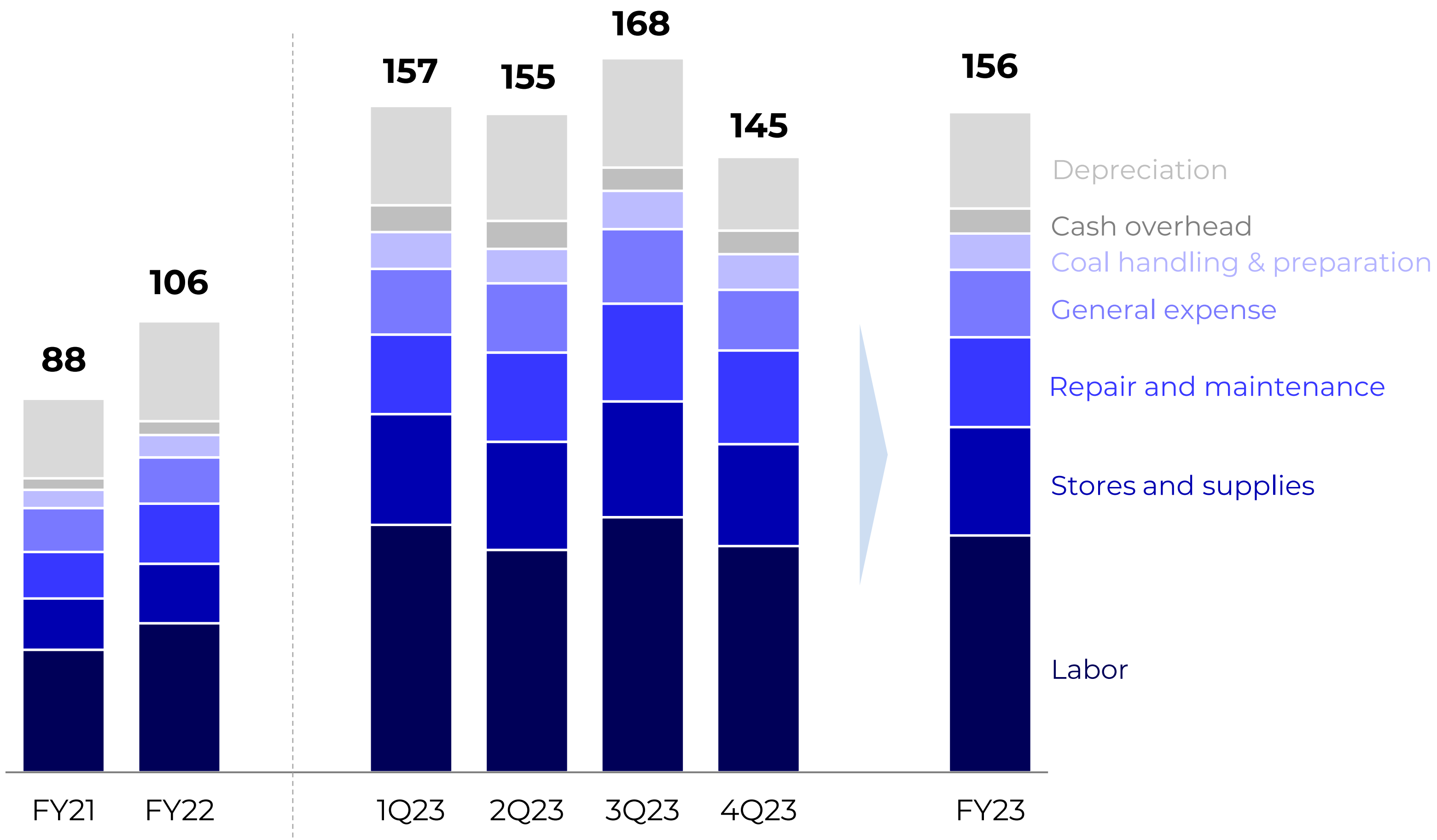
-17%	0%	8%
QoQ	YoY	YoY

- Gaohe: Continued retreat mining at longwall panels using backfilling and smart technology. The coal price remained stable in 4Q23 due to balanced supply-demand dynamics.
- Hebi: Retreat mining at LTCC3110 occurred from October-November 2, 2023. A test run commenced, and retreat mining of LTCC3205 continued in 4Q23. Operational cost control persisted through improved efficiency in underground roadway development, longwall operations, and pre-degas hole building.

Note: Based on 100% basis

Banpu Mining: average production cost breakdown – Australia

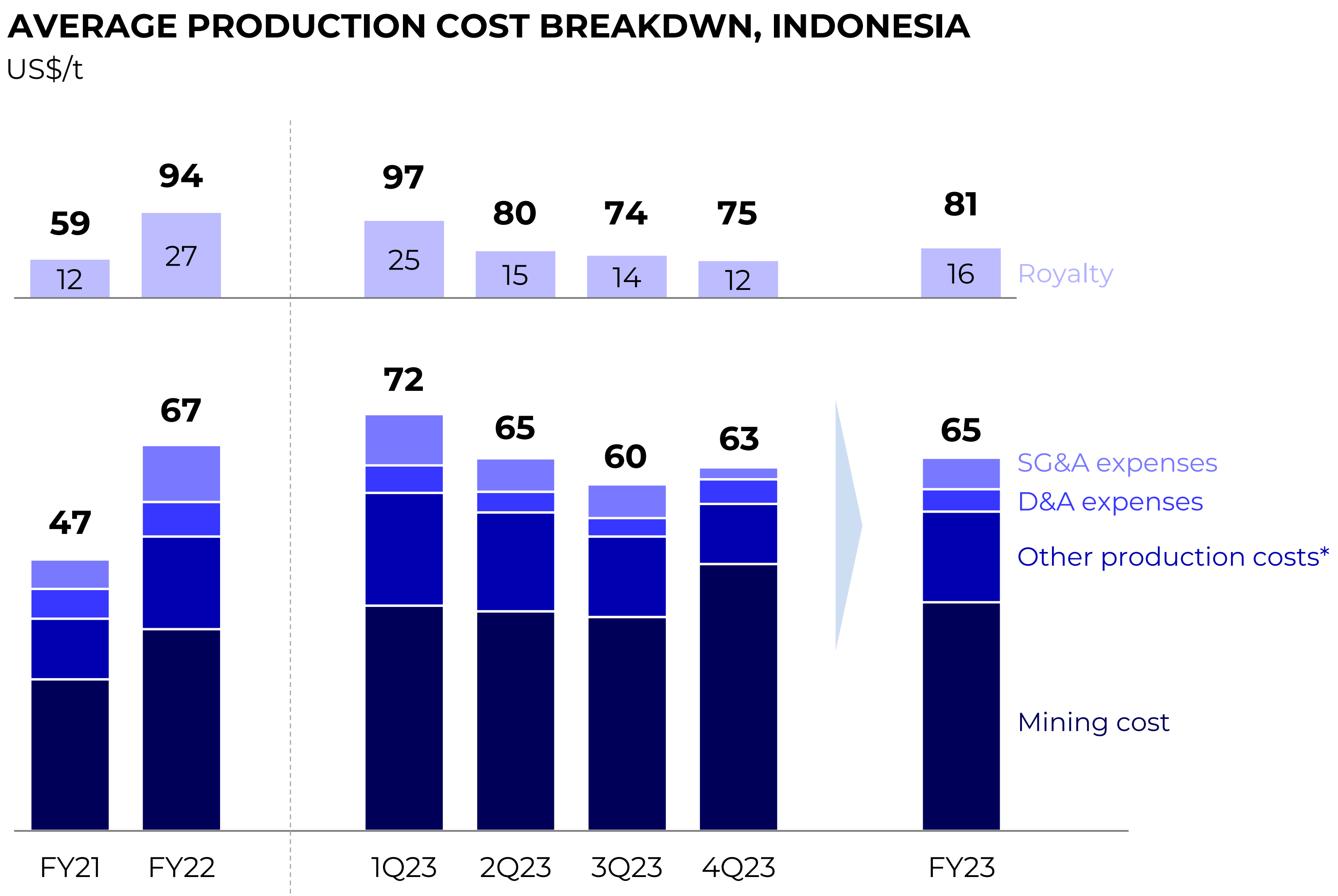
AVERAGE PRODUCTION COST BREAKDWN, AUSTRALIA
A$/t



- Production for 4Q23 increased by 35% compared to 3Q23, leading to a reduction of A$23/t in unit costs.
- Cost-cutting measures remain in place for operating expenses at all sites.
- A balanced approach to capital allocation continues to be a key focus.
- Strategic procurement project is underway to identify cost saving opportunities with major suppliers.

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

Banpu Mining: average total cost breakdown – Indonesia



- Total cost, excluding royalty, increased from $60/t in 3Q23 to $63/ton in 4Q23 (5% QoQ) mainly due to lower production which leads to higher cost/unit.
- Average total cost for FY23 excluding royalty, was recorded at $65/t, lower than the total cost in FY22 at $67/t (-3%YoY).
- 4Q23 royalty decreased from $14/t in the previous quarter to $12/t (-13% QoQ), which is aligned with the decreasing of coal benchmark prices.

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

05

Energy Generation

BANPU

Banpu Energy Generation: 4,878 MW committed capacity

8 countries

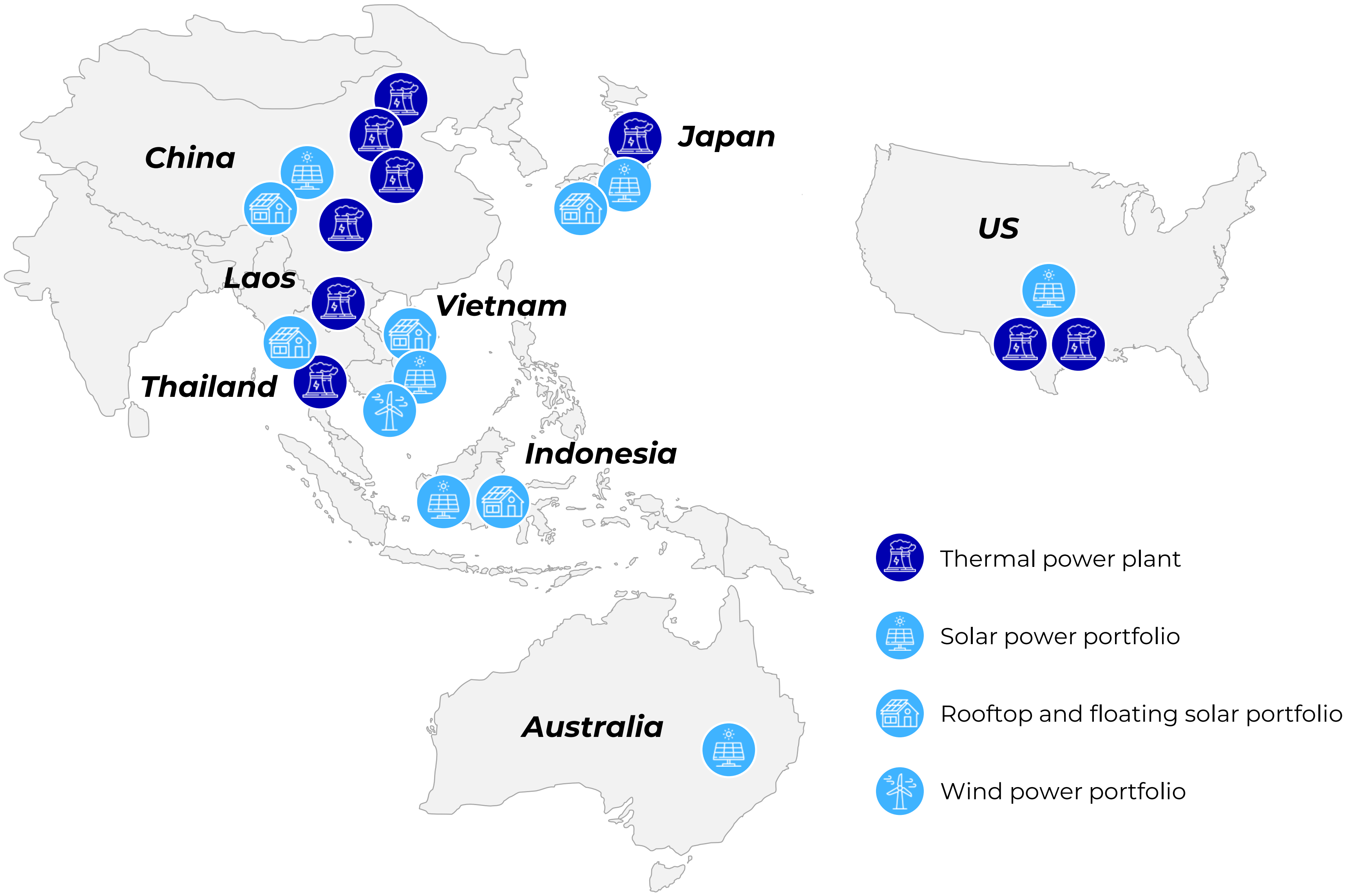
operations across the Pacific Rim

4,008 MW

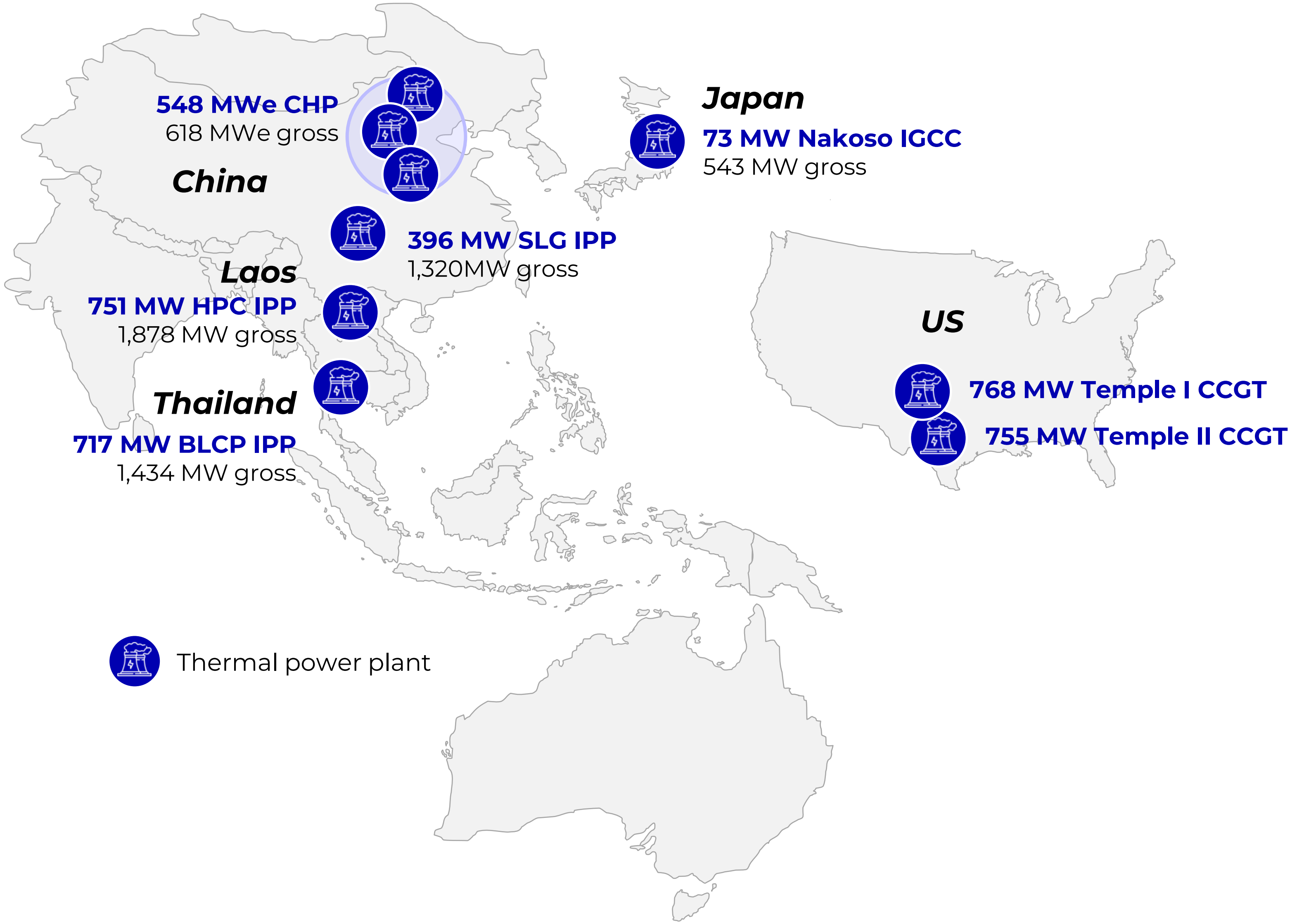
committed thermal equity capacity

870 MW

committed renewables equity capacity



Banpu Thermal Power: 2023 highlights



EBITDA

$482 M +108% YoY

Achieved EAF

84.9% at HPC

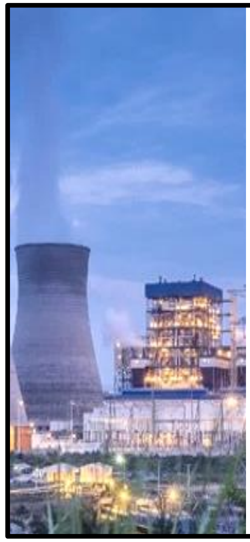
87.9% at BLCP

83% at Temple I & II

n.a. at Nakoso

Note: MWe is MW equivalent

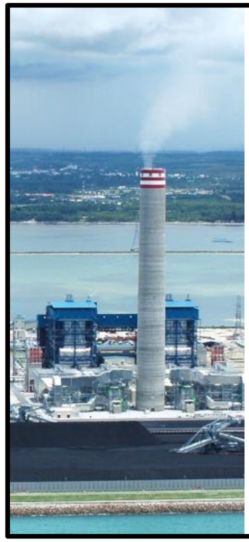
Thermal Power: 2023 updates



HPC

Completed CAH with smooth and efficient operations; high EAF performance in 2023.

84.9%	EAF* -1% YoY
THB 21.5 bn	Revenue -2% YoY
THB 12.0 bn	EBITDA -4% YoY
THB 3.0 bn	Share of profit -18% YoY



BLCP

Completed CAH and benefit from operate outside CAH, with excellent operational management, avoiding unplanned outages.

87.9%	EAF +1% YoY
THB 17.9 bn	Revenue +5% YoY
THB 3.6 bn	EBITDA +17% YoY
THB 1.1 bn	Share of profit +82% YoY

SLG

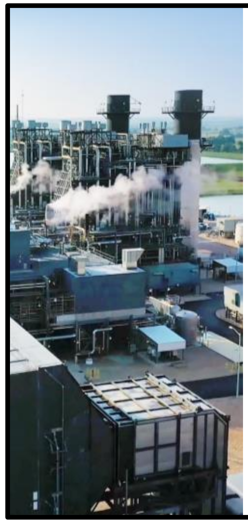
Improved performance was driven by an increase in power sold due to higher demand and lower coal prices. Furthermore, the replacement of the USD loan with a domestic loan in Sept. 2023, resulted in reduced interest expenses.

5,317 GWh	Net power sold +20% YoY
RMB 21 M	Share of profit +RMB 93 M YoY

China CHP

Profit improvement resulted from effective cost control, which led to lower coal costs and, consequently, higher margins.

RMB 1.3 bn	Revenue -3% YoY
RMB 159 M	EBITDA +RMB 158 M YoY
RMB 45 M	Share of profit +RMB 110 M YoY



Temple I & II

The Temple II acquisition, supported by a higher spark spread, resulted in successful operational results.

83%	EAF +0% YoY
5,415 GWh	Net generation
USD 637 M	Revenue +27% YoY
USD 73 M	Share of profit** +236% YoY

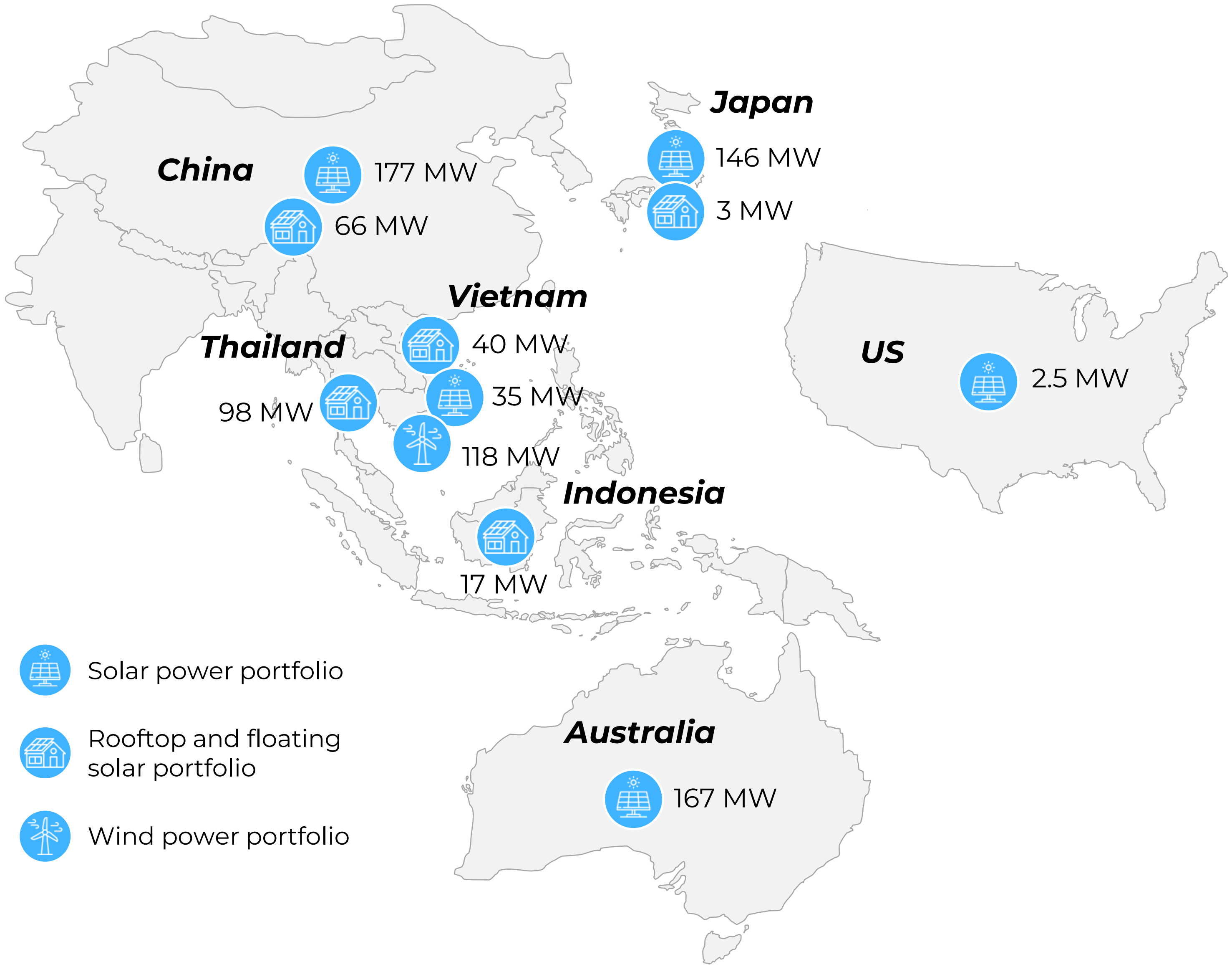
Nakoso IGCC

In 2023, the plant plans a temporary closure for equipment adjustments during its early operations to ensure long-term reliability and sustainability. All maintenance works are on schedule.

n.a.	EAF
n.a.	Net generation
(THB 150 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 145 M loss on derivatives; *** Recognized Temple II since July 2023

Banpu Renewable Power: diversified Asia-Pacific portfolio



870 MW

committed renewables capacity across Asia-Pacific

Committed capacity

527 MW solar power

225 MW rooftop and floating solar

118 MW wind power

Renewable Power: 2023 updates

China Solar

High power sold led by better irradiation.

15%	Avg. capacity factor +1% YoY
230 GWh	Power sold +1% YoY
RMB 147 M	EBITDA -3% YoY
RMB 49 M	Profit contribution -4% YoY

Japan Solar

Good irradiation has contributed to a favorable capacity factor and increase in power sold YoY.

13%	Avg. capacity factor +1% YoY
222 GWh	Power sold +5% YoY
JPY 1.8 bn	Cash distribution +47% YoY

Vietnam Wind

El Wind Mui Dinh

30%	Avg. capacity factor +7% YoY
98 GWh	Power sold +27% YoY
(USD 0.8 M)	Share of loss +1 M YoY

Vietnam Wind

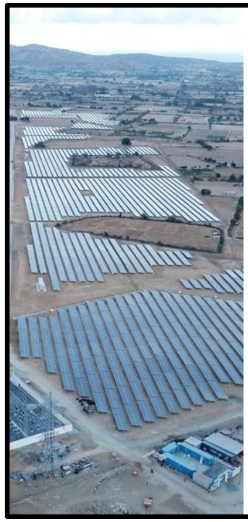
Vin Chau project

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

Australia Solar

Favorable weather conditions leading to an increase in both capacity factor and power sold.

21%	Avg. capacity factor +3% YoY
223 GWh	Power sold +15% YoY
(AUD 20.7 M)	Share of loss* +50% YoY



Vietnam Solar

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

17%	Avg. capacity factor +1% YoY
51 GWh	Power sold +76% YoY
USD 0.7 M	Share of profit +0.5 M YoY

Note: Banpu has 100% shareholding in Banpu NEXT
*Includes AUD 17.2 M of loss on derivatives

06 Energy Technology

Energy technology: current position and future targets

			2023	2025 target
Solar: rooftop & floating			**225 MW** Committed capacity	**500 MW**
Battery & ESS solutions	Li-ion battery production capacity	**Durapower**	**1.0 GWh**	**3.0 GWh**
		Thailand battery production	In progress	**1.0 GWh**
		SVOLT (Thailand)	In progress	**2.0 GWh**
	Battery farm	**Iwate Tono project**	In progress	**58 MWh**
Smart cities & energy management			**27 projects** Energy management, smart infra, etc.	**60 projects**
Energy trading			**760 GWh** Electricity sales	**2,400 GWh** (annually)
E-Mobility	muvmi: Ridesharing; FOMM, BEYOND GREEN: EV; HAUP: Carsharing; evolt: EV charging; OYIKA: Battery swapping			***MaaS*** Mobility-as-a-service

2030 target

INTEGRATED CLEAN ENERGY ECOSYSTEM

 Note: Current and target capacity are based on Banpu group's 100% basis

Energy technology: 4Q23 rooftop and floating solar updates

ACCELERATING DEVELOPMENTS ACROSS BANPU GEOGRAPHIES

THAILAND

98 MW

Total committed capacity

New contract signing with Betagen carport and rooftop and Karoon Farm Co., Ltd. for a total capacity of 2 MW in 4Q23.

CHINA

66 MW

Total committed capacity

Committed capacity of solar rooftop project at Zhengding CHP has the potential to increase to 167 MW by 2023. The current operating capacity is 12.9 MW.

VIETNAM

40 MW

Total committed capacity

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

INDONESIA

25 MW*

Total committed capacity

IBP has signed additional solar rooftop PPA of 9 MWp in 4Q23. Currently, the total installed capacity is approximately 7 MW.

Note: *100% basis (10 MW on equity basis)

Energy technology: 4Q23 battery and ESS solutions updates (cont'd)

Battery & ESS solutions

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.

STRATEGIC DIRECTION

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

Battery cells → Energy storage systems → Battery recycling

CURRENT STRATEGIC PLANS

Feasibility studies

For energy storage system manufacturing facilities in Thailand

2026

Expected COD of battery cell production in Thailand

Future market expansion

With business plans for the ASEAN region, Japan, Australia, and North America

Energy technology: 4Q23 battery and ESS solutions updates

Battery & ESS solutions

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

SVOLT

28th Feb. 2024
Factory COD

2.0 GWh
Committed production capacity

60,000 units
Annual production output

FACTORY PROGRESS

- Main factory renovation and energy facility have been completed, with pending office renovation.
- Trial production for BA14, BA17, BM13, BV48 C samples has completed, with a scheduled trial production of 240 packs for BM13 and BA14 in February, aligning with customer demand.

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: 4Q23 battery and ESS solutions updates (cont'd)

Battery & ESS solutions

DP NEXT PRODUCTION PLANT

IWATE TONO PROJECT

DURAPOWER PHASE 2 EXPANSION OF 2 GWh

durapower

Two manufacturing lines are scheduled to commission by Dec'24, with the third to follow in 2025 to meet customer requirements.

$102 M
Total investment

20 major projects
across the Asia Pacific and Europe

STRATEGIC FOCUS SEGMENTS: Mobility, Marine, Specialty, Stationary

DP NEXT PRODUCTION PLANT (AMATA CITY, CHONBURI)

1.0 GWh
Production capacity

c.$40 M (THB 1.4 bn)
Total investment

3Q24
Expected COD

70%
Banpu NEXT shareholding

60% completed
Steel construction progress, with remaining work for wall mounting, installations and decoration

3 customers
For battery supply and subsequent purchase orders

IWATE TONO PROJECT

c.$17 M (JPY 2.6 bn)
Total investment

2Q25
Expected COD

75%
BJP shareholding

87%
Construction progress (Jan. 31st)

PRJOECT UPDATES

Phase 2 of the construction of extra-high voltage electric equipment and the substation was halted during the snow season (Dec'23-Feb'24)

Energy technology: 4Q23 e-mobility updates

CONTINUOUS DEVELOPMENTS IN EVOLT TECHNOLOGY WITH NEW PROJECTS AND CHARGING NETWORK EXPANSION

EVOLT SMART SIMPLE SEAMLESS

23.81%
Current shareholding position

711 units
Installed public chargers

RECENT PROJECTS

- AION: Awarded for GAC AION home chargers
- MQDC: Awarded from MQDC for Mulberry Groove Condo
- HONDA: Awarded for Honda home chargers
- TESLA: Won the bid for Tesla Supercharger installation of 14 units at Central Pattaya
- Shell: Awarded from Shell to install DC Charger station

BEYOND GREEN RECENT DEPLOYMENTS

BEYOND GREEN

39.2%
Current shareholding position
(Increased from 30.0% in 2Q23)

22 branches
Growth from 6 branches at the end of 2021

NEW TEMPO 2 MODEL DELIVERIES

- 30 carts delivered to the Burapaha Golf Course in Chonburi, with plans to ship another 120 units in Nov.
- 2 carts delivered to the Buddhachinnarat Hospital in Phitsanulok, with additional trailer seats
- 40 carts delivered to the Athitaya Golf Course in Kanchanaburi, along with 2 New Villager 8-seat carts

OTHER DELIVERIES

- One cart of the New Tempo 4-seat model to Pro Bike Company Limited in Nakhon Ratchasima
- One cart of the New Villager 6-seat model to San Sai Luang Municipal Offices in Chiang Mai

Energy technology: 4Q23 e-mobility updates (cont'd)

ACCELERATING RIDESHARING NETWORK EXPANSION

muvmi

9 million+
Total number of passengers

600 e-tuktuks
In operation

154 chargers
Deployed in Bangkok

12 servicing locations
Across Bangkok

Over 45,000 pick ups
MuvThing deliveries, ranging from daily necessities to personal luggage

CONTINUOUS DEVELOPMENT IN HAUP CAR WITH NEW PROJECTS

HAUP

300k users
Total registered users

1,500+ Vehicles
In operation (ICE & EV)

600+ sharing locations
Across Bangkok

RECENT PROJECTS

- Expanded exclusive services including airport fast track & limousine to capture tourism market
- Collaboration with Bua Travel & Car Rental to provide car-sharing services in 4 key airports (Suvarnabhumi, Don Mueang, Phuket, Chiangmai)
- Partnership with Trip.com to attract higher customer base from increasing number of Chinese tourists

Energy technology: 4Q23 EMS and energy trading updates

Energy management

ENERGY EFFICIENCY IMPROVEMENT THROUGH BANPU NEXT ECOSERVE

BANPUNEXT EcoServe

BanpuNEXT EcoServe, a wholly-owned subsidiary of BanpuNEXT, specializes in Energy Efficiency Improvement solutions under the ESCO model, offering comprehensive investment and O&M packages with guaranteed energy efficiency for commercial and industrial clients.

25 Contracts
Including BOOT*, Solar PPA, and IFM** contracts

2,800 kW
Air compressor management

21,500 RT***
Chilled water management

Energy trading

IMPLEMENTED AN ADVANCED MARKETING AND SALES STRATEGY, INTEGRATING MARKET-DRIVEN PRICING STRUCTURES AND SECURING SUPPLY AGREEMENTS THROUGH A COMPETITIVE TENDERING PROCESS

760 GWh

2023 annual sales

- 61% of total sales are market-linked price products
- Remaining sales are fixed-price contracts obtained through tendering (hedged to minimize potential risks)

658 clients

From public and private sectors in 8 utility grid areas.

(increasing from 470 clients in 3Q23)

BPPTGK has also increased its involvement in short-term and transmission rights trading to mitigate the risk of sales imbalances between utility grid areas.

Note: *Build-Own-Operate-Transfer, **Integrated Facilities Management, ***Refrigeration ton

07

Financial

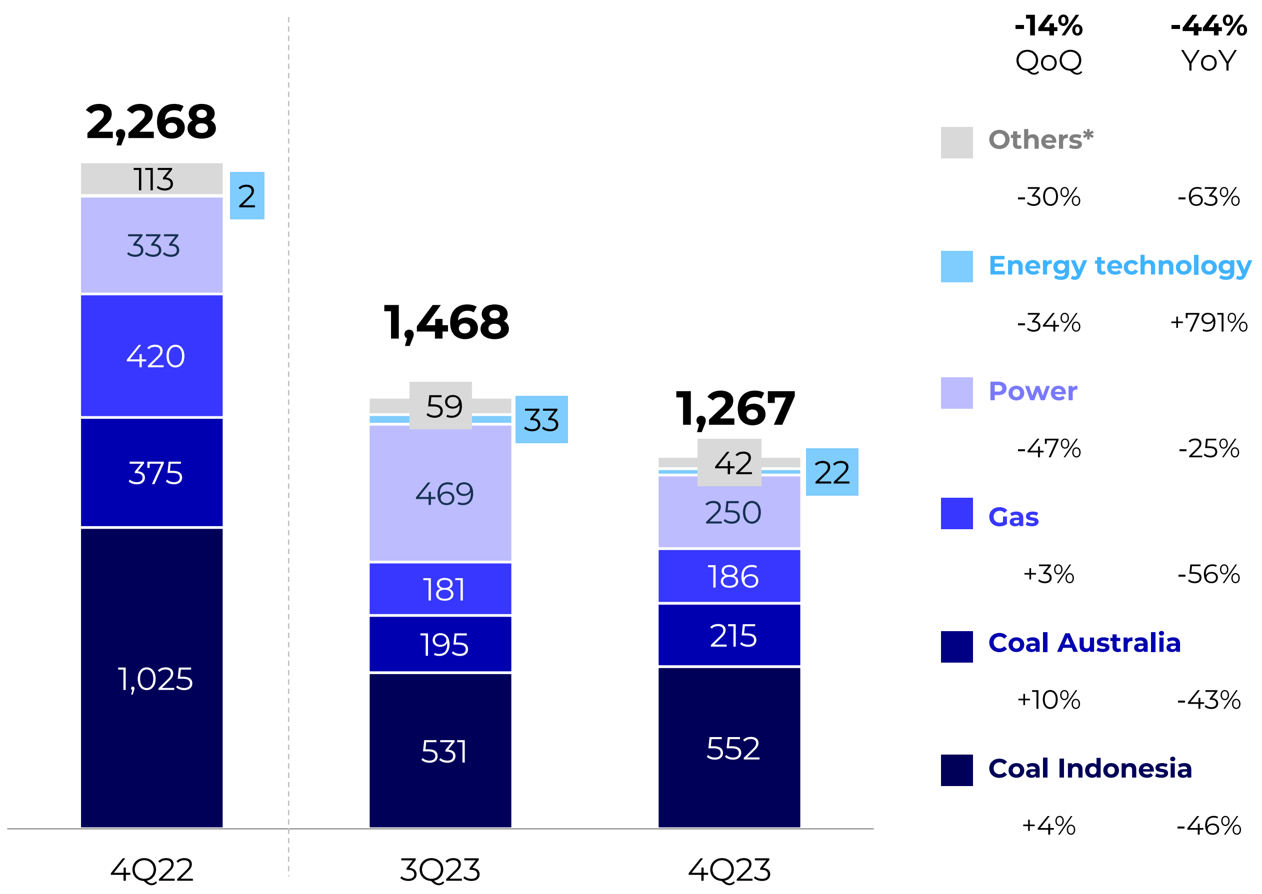
Summary

BANPU

Banpu consolidated sales revenues – 4Q23 and FY23

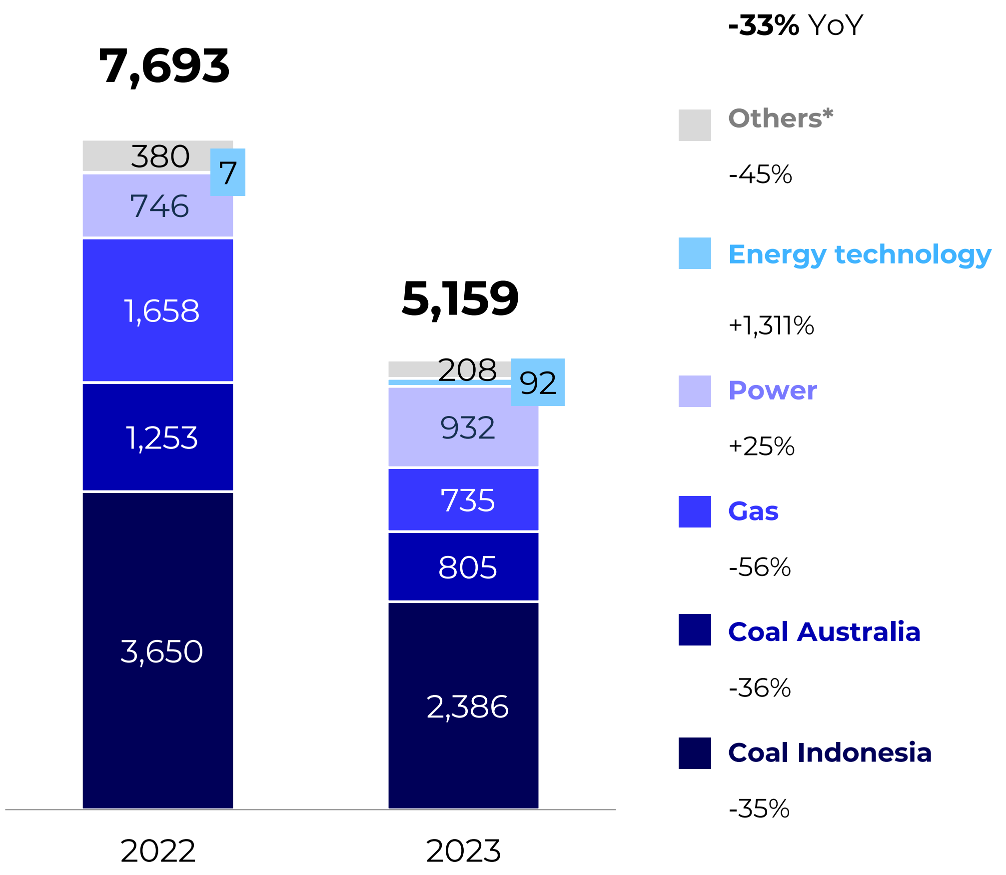
Consolidated sales revenue, by quarter

USD million



Consolidated sales revenue, by year

USD million

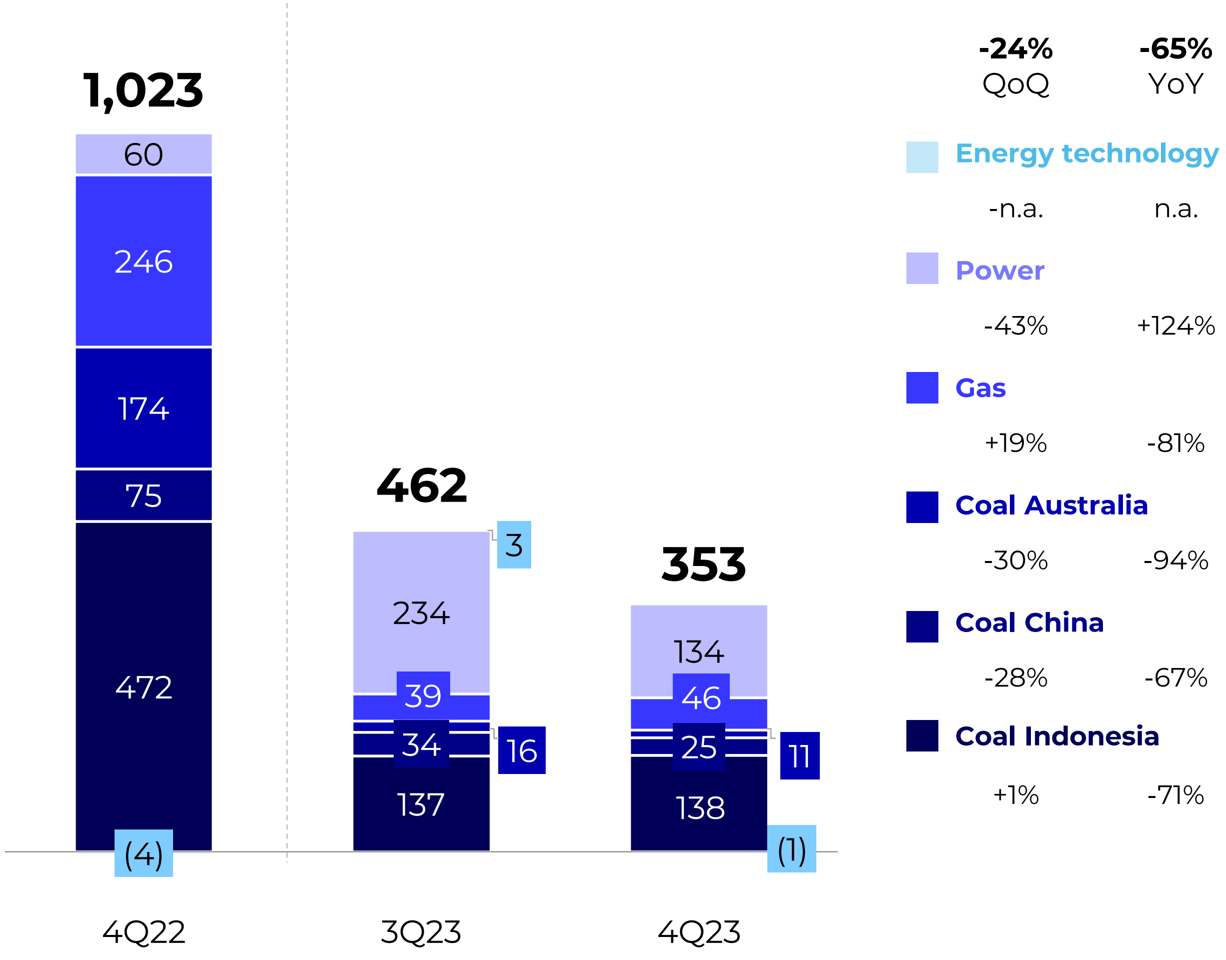


Note: *Revenue from others includes coal trading, and other businesses

Banpu consolidated EBITDA– 4Q23 and FY23

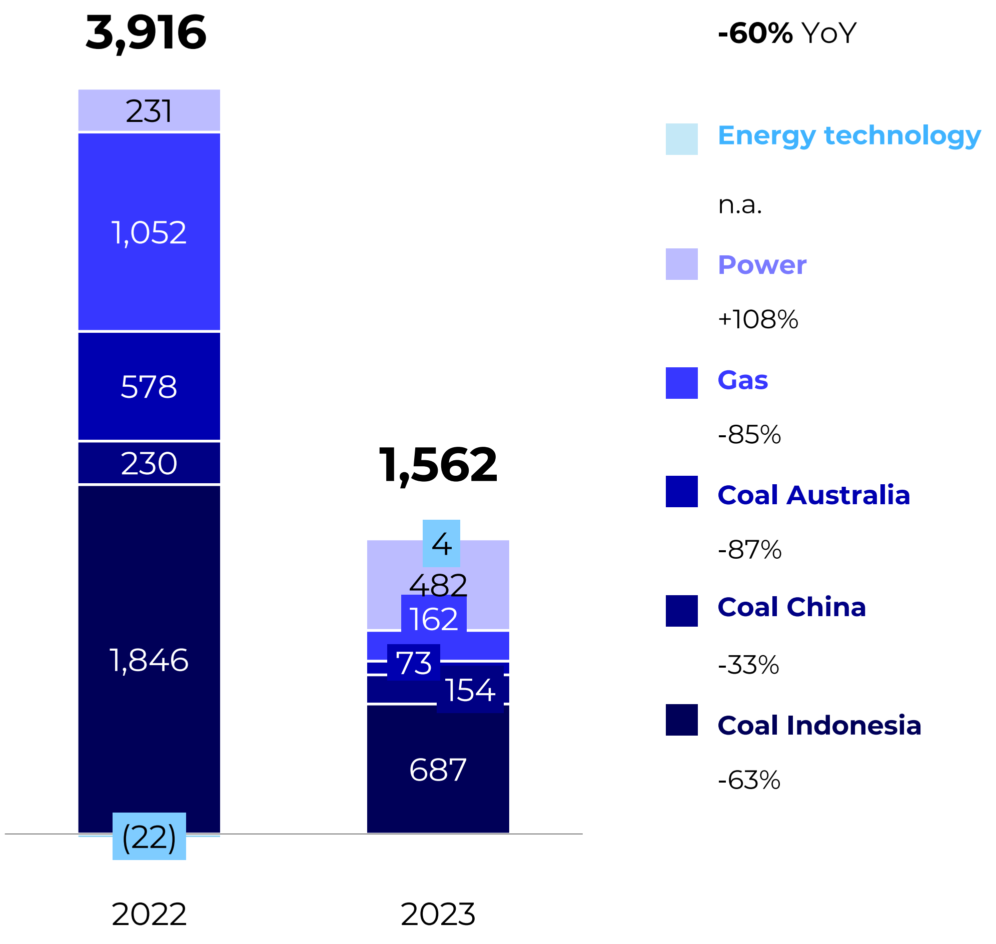
Consolidated EBITDA, by quarter

USD million



Consolidated EBITDA, by year

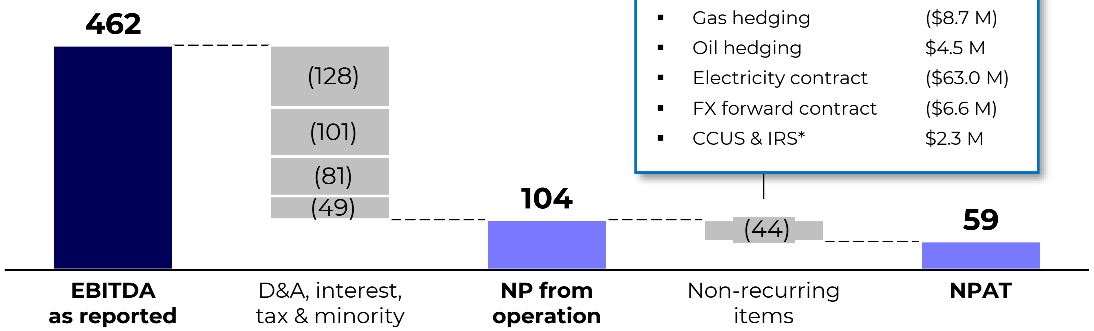
USD million



Banpu consolidated NPAT – 4Q23 and FY23

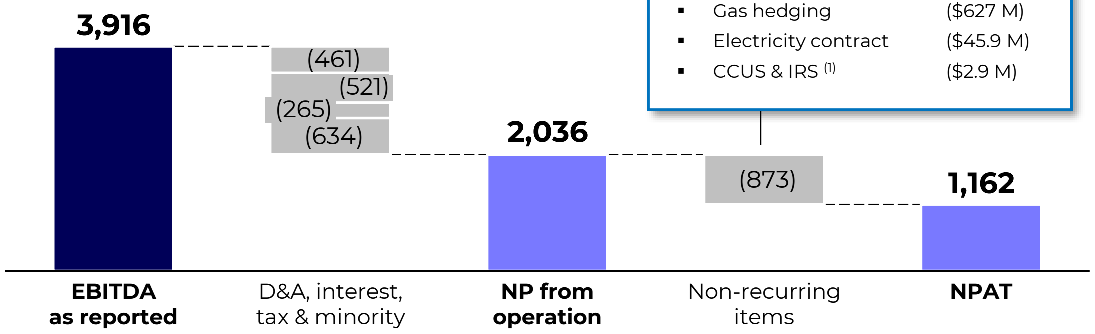
3Q23 NET PROFIT AFTER TAX
USD million

Non-recurring items:	
FX gain USD:THB	$37.9 M
Other non-recurring	($16.1 M)
Derivative gain	($66.1 M)
▪ Coal hedging	$5.4 M
▪ Gas hedging	($8.7 M)
▪ Oil hedging	$4.5 M
▪ Electricity contract	($63.0 M)
▪ FX forward contract	($6.6 M)
▪ CCUS & IRS*	$2.3 M



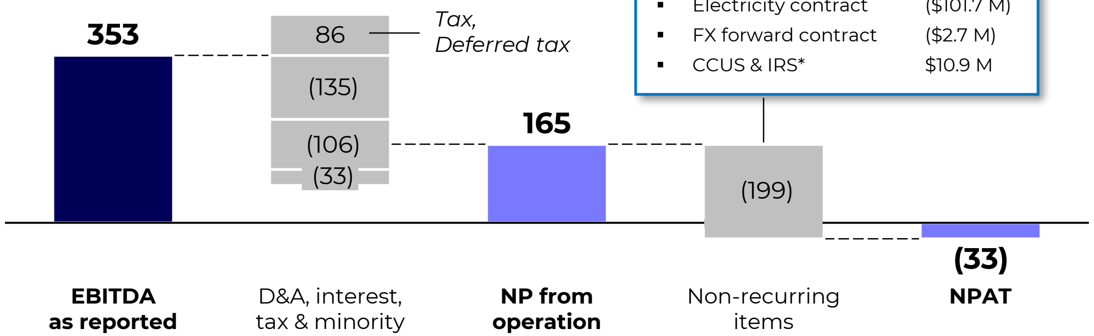
2022 NET PROFIT AFTER TAX
USD million

Non-recurring items:	
FX gain USD:THB	$4.8 M
Other non-recurring	($62.3 M)
Derivative loss	($815.7 M)
▪ Coal swap	($134.4 M)
▪ Gas hedging	($627 M)
▪ Electricity contract	($45.9 M)
▪ CCUS & IRS [1]	($2.9 M)



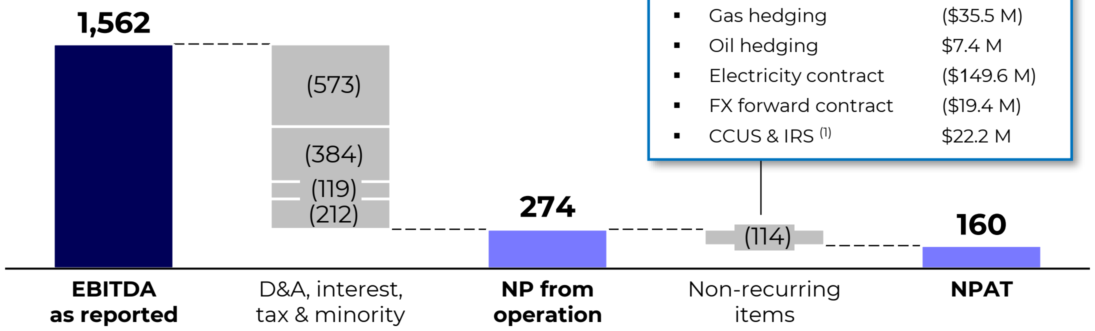
4Q23 NET PROFIT AFTER TAX
USD million

Non-recurring items:	
FX loss USD:THB	($90.1 M)
Other non-recurring	($22.2 M)
Derivative gain	($86.5 M)
▪ Coal hedging	$0.5 M
▪ Gas hedging	$3.8 M
▪ Oil hedging	$2.9 M
▪ Electricity contract	($101.7 M)
▪ FX forward contract	($2.7 M)
▪ CCUS & IRS*	$10.9 M



2023 NET PROFIT AFTER TAX
USD million

Non-recurring items:	
FX gain USD:THB	$1.9 M
Other non-recurring	$47.4 M
Derivative loss	($163.7 M)
▪ Coal swap	$11.1 M
▪ Gas hedging	($35.5 M)
▪ Oil hedging	$7.4 M
▪ Electricity contract	($149.6 M)
▪ FX forward contract	($19.4 M)
▪ CCUS & IRS [1]	$22.2 M



Note: (1) Cross currency swap, interest rate swap

Appendix

Banpu: ESG leadership and credit rating recognition

BANPU ESG RATINGS

MSCI ESG RATINGS
CCC | B | BB | BBB | A | AA | AAA

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.

THSI THAILAND SUSTAINABILITY INVESTMENT 2022

Awarded since 2015
Recognized in THSI for sustainable operations and responsible investment principles.

HONOR Sustainability Excellence 2022

Honor since 2018
Highest distinction in SET's Sustainability Excellence Award for at least 4 consecutive years.

SET AAA ESG Ratings 2023

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.

THAIPAT

Sustainability Disclosure Award 2022
from Thaipat Institute for consistent and excellent conduct of ESG principles.

ASEAN CORPORATE GOVERNANCE

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

CREDIT RATINGS

MONEY & BANKING AWARDS

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.

TRIS RATING
A Strategic Partner of S&P Global

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

BKV

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.

ITM

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.

BANPU POWER

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.

6 CLEAN WATER AND SANITATION

Move towards a circular economy by minimizing direct disposal waste to zero

- **Zero** hazardous waste to landfill
- **<0.130 kg/MWh** of non-hazardous waste disposal intensity for thermal power business
- **<0.140 kg/ton** of non-hazardous waste disposal intensity for mining business

7 AFFORDABLE AND CLEAN ENERGY

Support Just Transition by ensuring the benefits of sustainable energy are shared

- **>50% EBITDA** from greener energy and energy technology business by 2025
- **>1.1 GW of renewable energy** production capacity by 2025

8 DECENT WORK AND ECONOMIC GROWTH

Respect and uphold human rights as defined by UN Guiding Principles

- **Zero** occupational fatalities
- **Zero** process safety event
- **100% of business units assessed** for human rights impact

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption with responsible use of natural resources

- **100% recycling rate** on non-hazardous waste
- **5% energy intensity reduction** from 2019 by 2025 for mining business

13 CLIMATE ACTION

Proactive on climate-related initiatives to reduce GHG emissions at all business units

- **7% GHG emissions intensity reduction** from BAU by 2025 for mining business
- **20% GHG emissions intensity reduction** from BAU by 2025 for energy generation business

15 LIFE ON LAND

Partner with stakeholders to ensure net gains for biodiversity at the end of project lifetime

- **Net positive impact** on biodiversity upon closure of the mine
- **100% of business units assessed** for potential biodiversity impact

17 PARTNERSHIPS FOR THE GOALS

Collaborate with stakeholders for achieving all other Sustainable Development Goals

- **Embed SDGs** into all community development projects
- **100% of tier-1 supplier assessed** for ESG risks

Banpu: 'integrated energy solutions' 2023

ENERGY RESOURCES

Shale Gas
892 MMcfed*
Net production

Mining
34.5 Mt
Coal sales

ENERGY GENERATION

Renewable Power
645 MW
Committed capacity

Thermal Power
4,008 MW
Committed capacity

ENERGY TECHNOLOGY

Rooftop & Floating Solar
225 MW
Committed capacity

Clean Energy Tech
1.0 GWh (100% basis)
Li-ion batteries

E-mobility services
E-mobility solutions

Smart Cities &
Energy Management

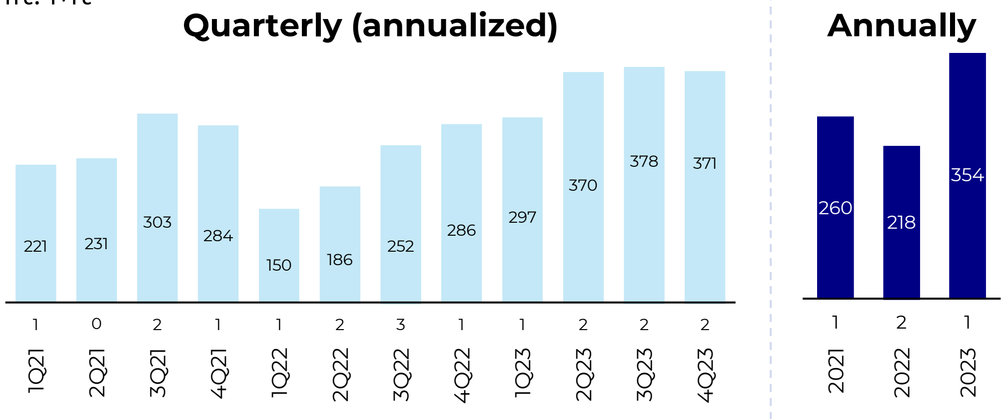
760 GWh
Electricity trading

Note: *Average for nine months ended 31st December 2023

China: domestic supply tightness boosting imports

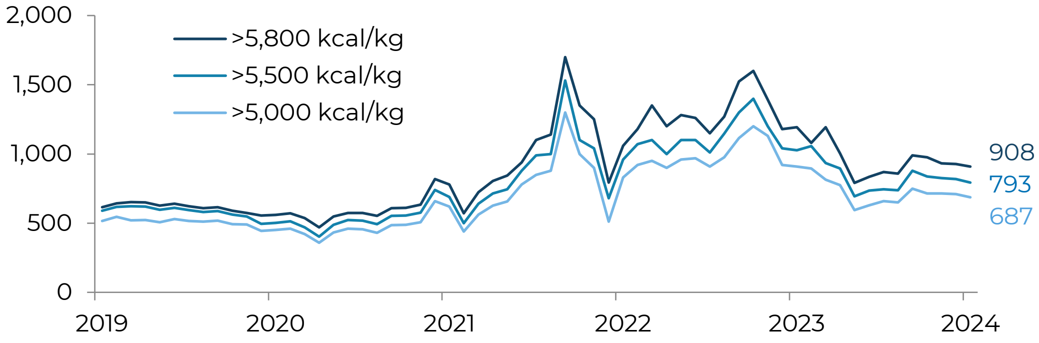
CHINA THERMAL COAL IMPORTS/EXPORTS*

Unit: Mt



CHINA DOMESTIC COAL PRICES

Unit: RMB/t



Note: *Includes lignite but excludes anthracite imports/exports

Source: www.sxcoal.com/cn (4th February 2024), Banpu MS&L

4Q23

- China's GDP grew by 5.3% in 4Q23, surpassing a 4.9% growth in 3Q23.
- For 2023, GDP growth accelerated to 5.2% from 3.0% in 2022, meeting the government's 5% target. The property sector hampered growth, while infrastructure offered limited support due to local government debt burdens.
- In 2023, China's power consumption reach 9,224 TWh, increasing 6.7% from 2022. Thermal power production rose to 6,231 TWh, accounting for approximately 70% of total generation.
- However, hydropower output decreased by 5.6% to 1,141 TWh, due to drought conditions, compared to a 1.0% rise in 2022.
- Despite stricter safety inspections after accidents disrupted production, China produced a record 4.66 bnt of coal in 2023, increasing from 2.9% in 2022.
- In 4Q23, China imported 93 Mt of thermal coal, increasing by 30% YoY and bringing the total annual imports to 354 Mt, reflecting a 38% YoY growth. The competitive pricing of imported coal led to negative margins for traders, reducing domestic supply to coastal regions.

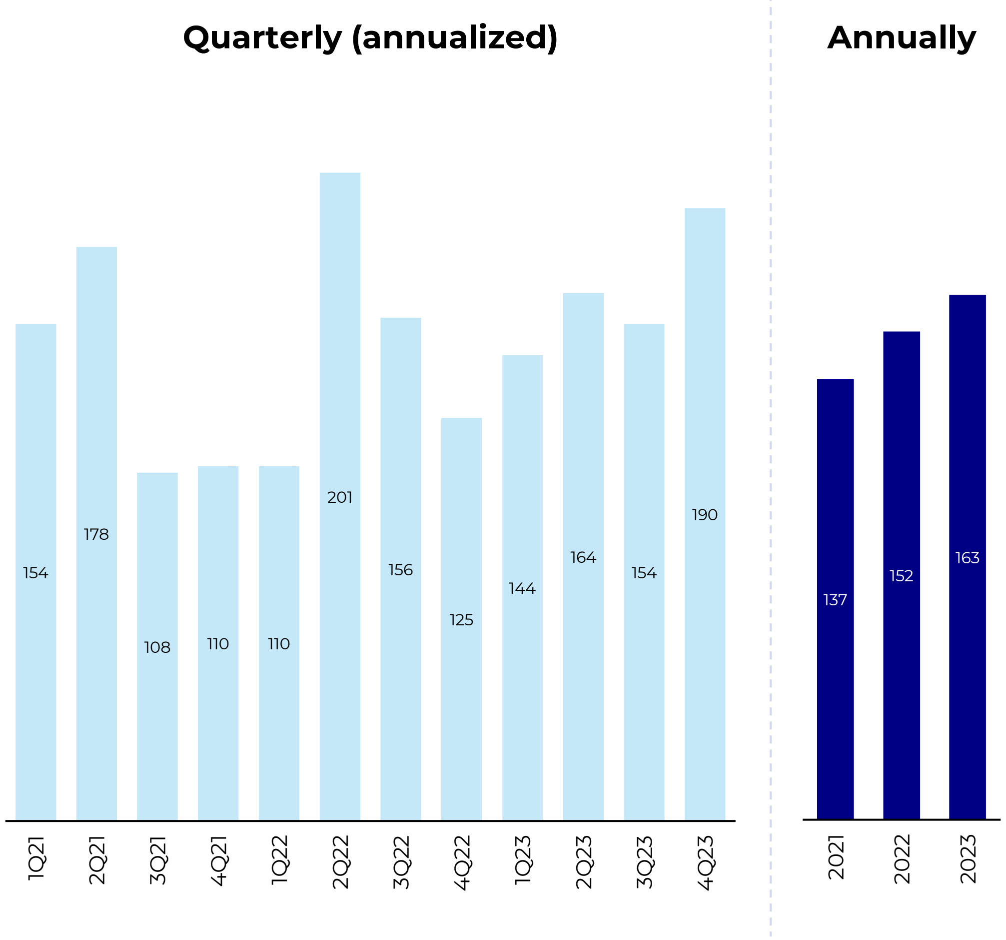
OUTLOOK

- In 2024, China is expected to achieve a 4.6% GDP growth, despite challenges in the real estate sector. Government initiatives like social housing and urban renewal projects aim to provide some support.
- The forecast for power demand growth in 2024 is 5.4%, with effective stimulus measures expected to boost demand.
- Uncertainty in domestic coal production growth may drive import buying due to ongoing mine safety controls.
- While the central government urges major coal producers to increase production to meet demand and stabilize prices, the growth pace may be more moderate.
- To adapt to this, China has reduced the volume of term contract supply for 2024, allowing utilities to purchase more on the spot market, including coal import.

India: strong domestic coal production curbed import demand

INDIA THERMAL COAL IMPORTS*

Unit: Mt



Note: *Includes lignite grade imports

Source: Commodity Insights, Banpu MS&L

4Q23

- In 4Q23, India experienced a surge in electricity demand, driven by a hotter October and increased festive demand.
- The total electricity generation for 4Q23 reached 364 TWh, marking a 10% YoY increase, but a 7% decrease from 3Q23 due to milder weather. The overall annual electricity generation was 1,486 TWh, reflecting a 6% YoY growth.
- Imported coal-fired generation contributed 311 TWh, rising 85% YoY due to low hydro and renewable output. This brought the total annual imported coal-fired generation to 1,230 TWh, with a 9% YoY increase.
- Domestic thermal coal production in 4Q23 was 244 Mt, representing 17% YoY growth post-monsoon. The cumulative output for 2023 reached 910 Mt, with a 14% increase from 2022.
- Thermal coal imports in 4Q23 reached 47.5 Mt, showing a significant 51% YoY increase and a 23% increase from 3Q23. The total annual thermal coal import for the year amounted to 163 Mt, increasing 8% from the previous year.

OUTLOOK

- Indian power demand is set to remain strong amid economic growth, supported by the forecasted El Niño phenomenon in 2024, leading to weak hydro conditions and bolstering coal-fired generation.
- To prevent shortages, the government allows domestic coal-based generators to blend 6% of imported coal until March 2024.
- Import-dependent coal-fired plants are directed to operate at full capacity until June 2024.
- Domestic coal production is expected to project a strong growth, but still fall short of meeting demand.
- The Minister of Power and New and Renewable Energy announced plans to build 80 GW of coal-fired capacity by 2031-32, up from the previous 50-55 GW, emphasizing the continued importance of thermal power until cost-effective energy storage is available for continuous renewable energy supply.

Coal quarterly output summary

AUSTRALIA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON EQUITY BASIS					
Mines	**CV (kcal/kg)**	**2Q23**	**3Q23**	**4Q23**	**1Q24e**
Western operations		**1.2**	**0.9**	**1.1**	**0.7**
Springvale	6,700	0.7	0.5	0.6	0.2
Clarence	6,700	0.2	0.3	0.3	0.3
Airly	6,700	0.3	0.1	0.2	0.2
Northern operations		**0.5**	**0.5**	**0.8**	**0.7**
Mandalong	6,700	0.3	0.2	0.6	0.5
Myuna	6,700	0.2	0.3	0.2	0.2
Total Australia Coal		**1.7**	**1.4**	**1.9**	**1.4**

INDONESIA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON 100% BASIS									
Mines	**CV (kcal/kg)**	**2Q23**		**3Q23**		**4Q23**		**1Q24e**	
		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	14.1	1.7	13.9	1.5	14.3	1.4	14.7
Trubaindo	6,550 – 6,700	0.7	16.1	1.0	13.1	0.4	23.1	0.7	12.5
Bharinto		1.8	9.6	2.3	9.7	1.3	13.4	2.3	6.6
Jorong	5,300	0.1	11.0	0.2	10.4	0.1	11.0	0.1	6.7
Graha Panca Karsa	3,700	- -	- -	- -	- -	- -	- -	0.05	4.3
Total Indonesia Coal		**4.4**	**12.5**	**5.3**	**11.7**	**3.4**	**15.0**	**4.7**	**10.1**

CHINA OPERATIONS: COAL OUTPUT (MT) – ROM OUTPUT ON 100% BASIS					
Mines	**CV (kcal/kg)**	**2Q23**	**3Q23**	**4Q23**	**1Q24e**
Gaohe	6,500 – 8,000	2.7	2.6	2.3	2.1
Hebi	5,300 – 6,800	0.2	0.4	0.2	0.2
Total China Coal		**2.9**	**3.0**	**2.5**	**2.5**

Note: CV figures are air-dried basis

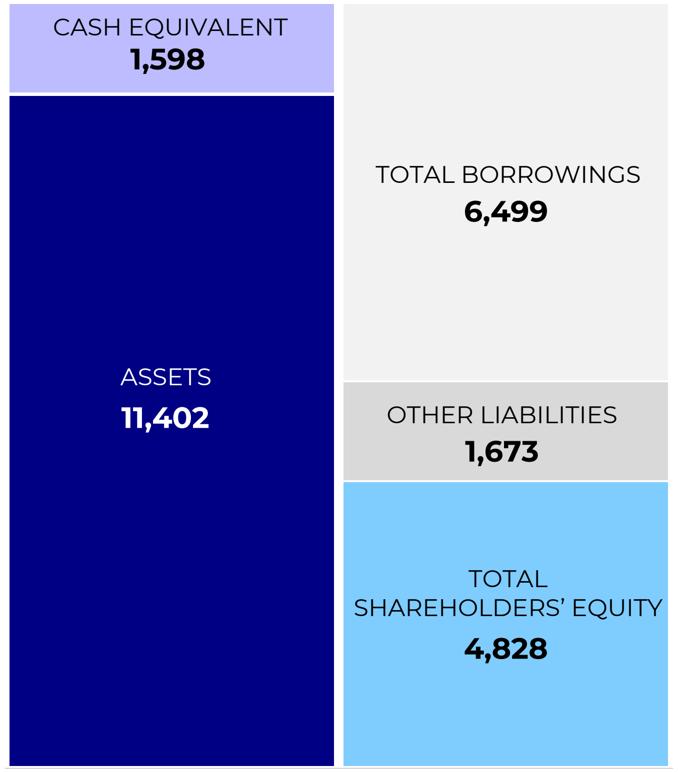
FX impact analysis guidance on P&L

CURRENCY EXPOSURE	NPAT IMPACT 4Q23 (US$M)	APPROXIMATE FX EXPOSURE (US$M) Net liability / Net asset		NPAT 5% SENSITIVITY 1Q24 (US$M) *Assuming 5% depreciation of local currencies against USD*	
Banpu: AUD asset, THB bond, and others	-87.3	-1,800	THB	88	*BOT lower 2024 growth at 3.2% (no digital wallet) -3.8% (incl. digital wallet)*
		400	AUD	-20	
ITMG: IDR asset and liabilities	2.4	240	IDR	-12	*BI forecast 2024 GDP to 4.7-5.5%*
BPA: USD asset	-5.2	20	AUD	1	*RBA raised 2024 growth at 1.55%*
Net	-90.1		Net	57	

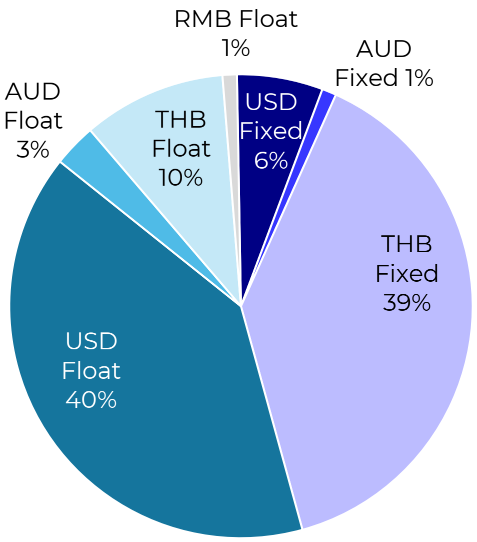
Banpu consolidated balance sheet – 2023

2023 CONSOLIDATED FINANCIAL POSITION

USD million



DEBT FX STRUCTURE

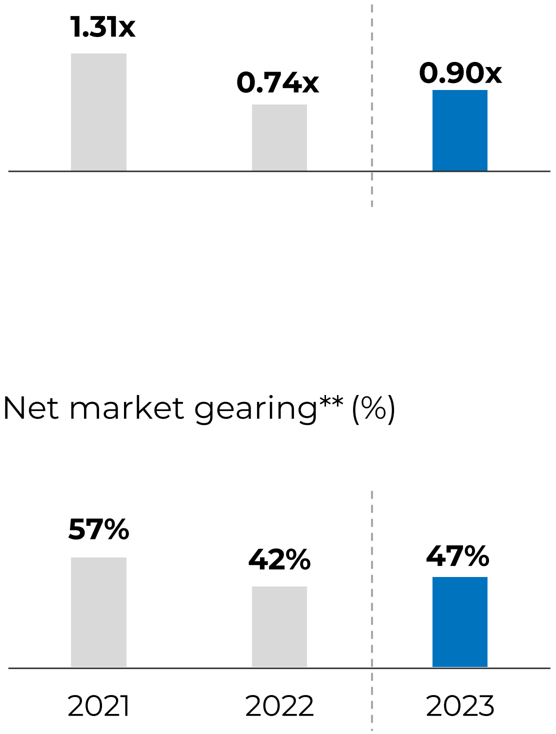


US$6,499 bn

Total gross debt (31st December 2023)

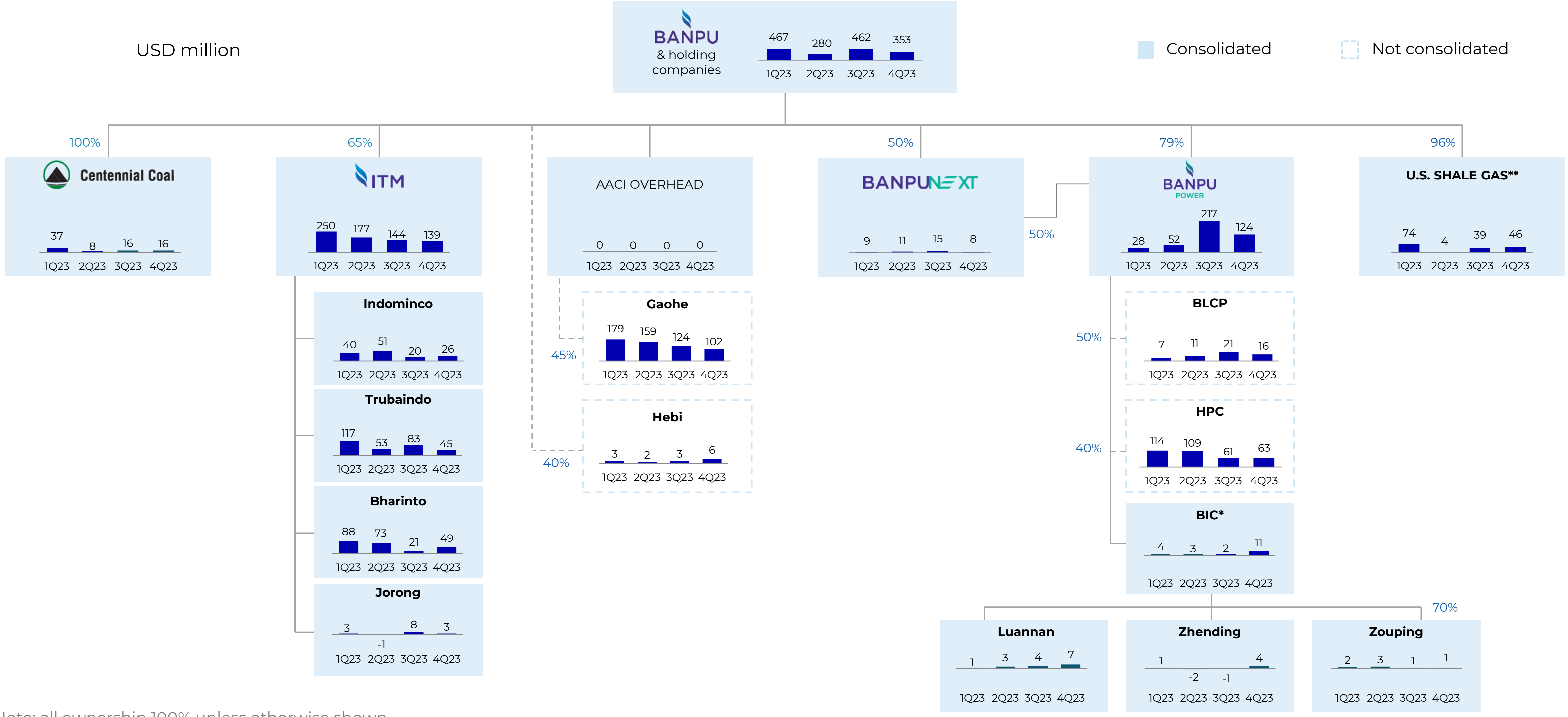
GEARING RATIOS

Net debt / Equity* (x)



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

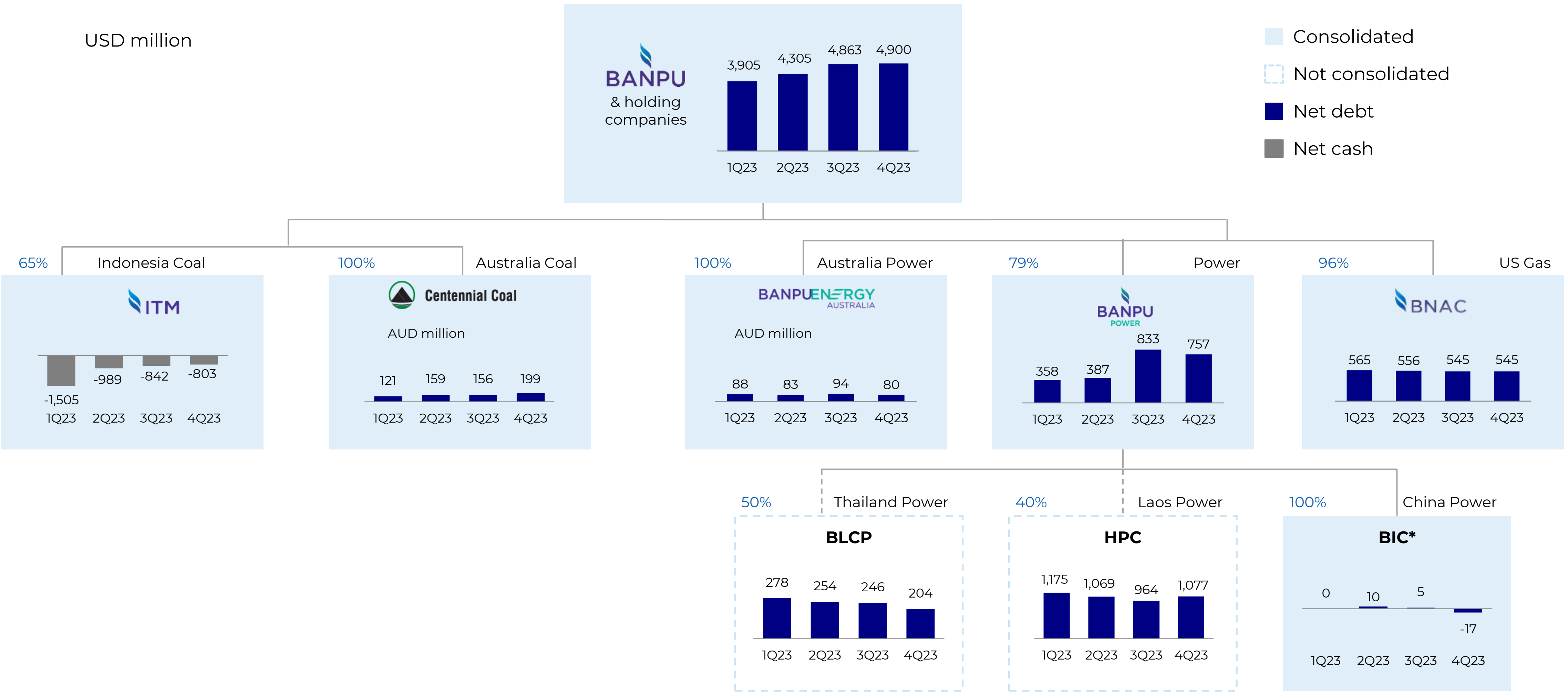


Note: all ownership 100% unless otherwise shown

*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	2023	2022	YoY%
Total sales revenues*	**5,159**	**7,693**	**-33%**
Sales revenue – Coal**	3,310	5,190	-36%
Sales revenue – Gas	735	1,658	-56%
Sales revenue – Power	932	746	+25%
Sales revenue – Energy Technology	92	7	+1,311%
Cost of sales	(3,666)	(3,616)	
Gross profit*	**1,493**	**4,077**	**-63%**
Gross profit – Coal**	1,114	2,948	-62%
Gross profit – Gas	20	1,019	-98%
Gross profit – Power	351	87	+303%
Gross profit – Energy Technology	23	1	+2,736%
Gross profit margin (GPM)	***29%***	***53%***	
GPM – Coal	*34%*	*57%*	
GPM – Gas	*3%*	*61%*	
GPM – Power	*38%*	*12%*	
GPM – Energy Technology	*25%*	*12%*	

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

Banpu consolidated: operating profit

USD million	**2023**	**2022**	YoY%
Gross profit	**1,493**	**4,077**	**-63%**
GPM	***29%***	***53%***	
SG&A	(485)	(595)	
Royalty	(379)	(592)	
Income from associates	268	339	
Other income and Dividend	121	77	
Mining property	(30)	(23)	
EBIT	**989**	**3,282**	**-70%**
EBIT – Coal	633	2,256	-72%
EBIT – Gas	(59)	875	n.a.
EBIT – Power	427	183	133%
EBIT – Energy Technology	(12)	(32)	-61%
EBITDA	**1,562**	**3,916**	**-60%**
EBITDA – Coal	914	2,654	-66%
EBITDA – Gas	162	1,052	-85%
EBITDA – Power	482	231	+108%
EBITDA – Energy Technology	4	(22)	n.a.

Banpu consolidated: net profit

USD million	2023	2022	YoY%
EBIT	**989**	**3,282**	**-70%**
Interest expenses	(374)	(257)	
Financial expenses	(10)	(8)	
Income tax (core business)	(139)	(342)	
Minorities	(212)	(461)	
Net profit before extra items	**253**	**2,215**	**-89%**
Non-recurring items*	47	(62)	
Gain (Loss) on Derivatives Transactions	(164)	(816)	
Income tax (non - core business)	(50)	(42)	
Deferred tax income (expenses)	71	(137)	
Net profit before FX	**158**	**1,158**	**-86%**
FX translation	2	5	
Net Profit	**160**	**1,162**	**-86%**
EPS (US$/share)	0.018	0.162	

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

Banpu consolidated: operating profit

USD million	4Q23	3Q23	4Q22	QoQ%	YoY%
Total sales revenues*	**1,267**	**1,468**	**2,268**	**-14%**	**-44%**
Sales revenue – Coal**	791	753	1,465	+5%	-46%
Sales revenue – Gas	186	181	420	+3%	-56%
Sales revenue – Power	250	469	333	-47%	-25%
Sales revenue – Energy Technology	22	33	1	-33%	+2,208%
Cost of sales	(932)	(998)	(1,145)		
Gross profit*	**334**	**470**	**1,123**	**-29%**	**-70%**
Gross profit – Coal**	214	246	833	-13%	-74%
Gross profit – Gas	11	9	231	+22%	-95%
Gross profit – Power	122	203	37	-40%	+230%
Gross profit – Energy Technology	8	8	0	-3%	+2,882%
Gross profit margin (GPM)	***26%***	***32%***	***50%***		
GPM – Coal	*27%*	*33%*	*57%*		
GPM – Gas	*6%*	*5%*	*55%*		
GPM – Power	*49%*	*43%*	*11%*		
GPM – Energy Technology	*37%*	*25%*	*11%*		

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

Banpu consolidated: operating profit

USD million	**4Q23**	**3Q23**	**4Q22**	QoQ%	YoY%
Gross profit	**334**	**470**	**1,123**	**-29%**	**-70%**
GPM	***26%***	***32%***	***50%***		
SG&A	(120)	(123)	(210)		
Royalty	(79)	(83)	(168)		
Income from associates	50	53	104		
Other income and Dividend	44	26	30		
Mining property	(10)	(8)	(1)		
EBIT	**218**	**335**	**877**	**-35%**	**-75%**
EBIT – Coal	116	133	644	-13%	-82%
EBIT – Gas	(8)	(15)	190	n.a.	n.a.
EBIT – Power	117	217	50	-46%	+135%
EBIT – Energy Technology	(6)	(1)	(7)	n.a.	n.a.
EBITDA	**353**	**462**	**1,023**	**-24%**	**-65%**
EBITDA – Coal	174	188	722	-7%	-76%
EBITDA – Gas	46	39	246	+18%	-81%
EBITDA – Power	134	234	60	-43%	+123%
EBITDA – Energy Technology	(1)	3	(4)	n.a.	n.a.

Banpu consolidated: net profit

USD million	4Q23	3Q23	4Q22	QoQ%	YoY%
EBIT	**218**	**335**	**877**	**-35%**	**-75%**
Interest expenses	(103)	(99)	(80)		
Financial expenses	(4)	(2)	(2)		
Income tax (core business)	(31)	(22)	(83)		
Minorities	(33)	(49)	(112)		
Net profit before extra items	**49**	**163**	**599**	**-70%**	**-92%**
Non-recurring items*	(22)	(16)	(404)		
Gain (Loss) on Derivatives Transactions	(87)	(66)	(126)		
Income tax (non - core business)	(2)	(15)	(24)		
Deferred tax income (expenses)	118	(45)	85		
Net profit before FX	**57**	**21**	**130**	**+126%**	**-56%**
FX translation	(90)	38	(137)		
Net Profit	**(33)**	**59**	**(7)**	**n.a.**	**n.a.**
EPS (US$/share)	(0.005)	0.007	(0.001)		

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

Centennial: income statement

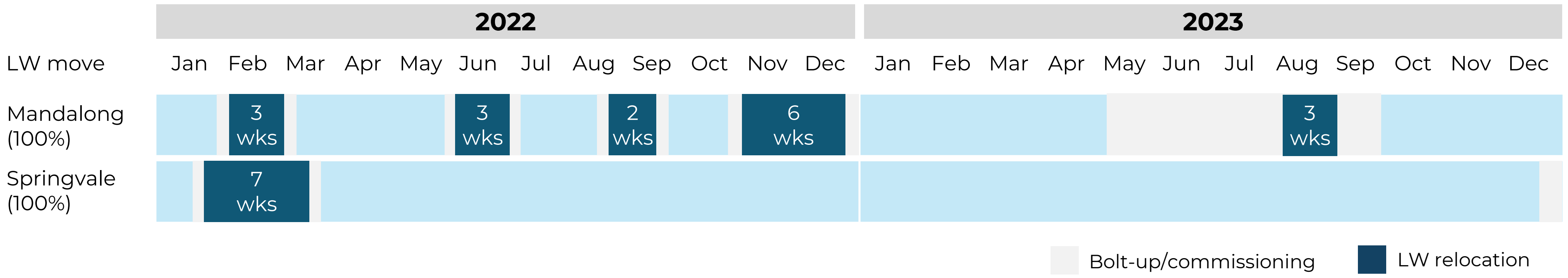
USD million	2023	2022	YoY%
Sales volume (Mt)	**7.0**	**8.5**	**-18%**
Sales revenue	805.2	1,253.3	-36%
Cost of Sales	(795.6)	(773.5)	
Gross profit	**9.7**	**479.8**	**-98%**
GPM	***1%***	***38%***	
SG&A	(94.2)	(104.4)	
Royalty	(46.8)	(78.5)	
Other income	14.2	7.4	
Other expenses	-	-	
EBIT	**(117.2)**	**304.2**	**n.a.**
Interest expenses	(34.3)	(38.1)	
Financial expenses	(8.5)	(2.7)	
Gain (loss) on exchange rate	(4.8)	(10.5)	
Gain (loss) on derivative	(17.6)	(50.2)	
Corporate income tax	0.0	0.0	
Deferred tax income	58.0	(61.0)	
Net Profit	**(124.0)**	**141.8**	**n.a.**

Centennial: income statement

USD million	4Q23	3Q23	4Q22	QoQ%	YoY%
Sales volume (Mt)	**1.8**	**1.8**	**2.0**	**0%**	**-10%**
Sales revenue	215.5	195.1	374.8	+10%	-43%
Cost of Sales	(206.1)	(182.6)	(194.7)		
Gross profit	**9.4**	**12.5**	**180.1**	**-25%**	**-95%**
GPM	***4%***	***6%***	***48%***		
SG&A	(22.8)	(21.2)	(30.0)		
Royalty	(12.4)	(10.8)	(23.5)		
Other income	1.0	0.6	2.6		
Other expenses	-	-	-		
EBIT	**(24.8)**	**(18.9)**	**129.2**	**n.a.**	**n.a.**
Interest expenses	(10.1)	(8.3)	(10.1)		
Financial expenses	(3.5)	(1.7)	(1.0)		
Gain (loss) on exchange rate	(5.2)	(2.6)	(4.4)		
Gain (loss) on derivative	(3.8)	(7.0)	(6.7)		
Corporate income tax	0.0	-	0.0		
Deferred tax income	15.3	11.4	(32.3)		
Net Profit	**(32.1)**	**(27.1)**	**74.7**	**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)

AN INTERNATIONAL VERSATILE

ENERGY PROVIDER