

Asia-Pacific Utilities

Earnings recovery should temper higher transition spending

January 10, 2024

This report does not constitute a rating action.



What's changed?

Economic outlook. Asia-Pacific's growth engine to shift from China to South and Southeast Asia.

Fuel costs. Easing fuel costs will aid earnings recovery.

Interest rates. We expect global interest rates to ease only gradually.

What are the key assumptions for 2024?

Overall power demand growth to stabilize at mid-single digits. Asia will use half of the world's electricity by 2025, with China accounting for one-third of the global total. Natural gas demand will also recover over the next two years, supported by industrial demand and normalizing prices.

Easing fuel costs and increasing renewable generation will underpin operating cash flow.

Pass-through remains uneven among countries, but easing thermal coal and gas prices, plus more renewable power consumption, will aid earnings recoveries.

Leverage will stay high, mainly to fund energy-transition investments. Potential mergers and acquisitions (M&A) and vertical expansion could also pressure metrics.

What are the key risks around the baseline?

Downside risk on demand growth. Economic slowdown in the region, if more than expected, could directly dampen the momentum for power and gas demand.

More volatile fuel prices than expected. Escalation of geopolitical tensions could disrupt energy supply, pushing up prices, mitigated to an extent by long-term contracts or price regulation.

Overaggressive expansion of unregulated businesses. This could heighten the business risk and dampen overall cost pass-through if there is a lack of longer-term protections.

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Ratings Trends: Asia-Pacific Utilities

Chart 1
Ratings distribution and outlook

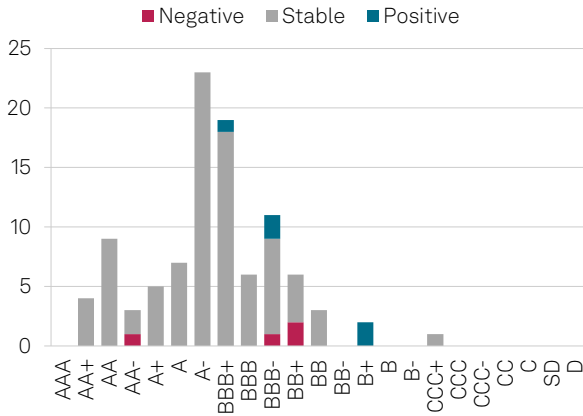


Chart 2
Ratings distribution by region

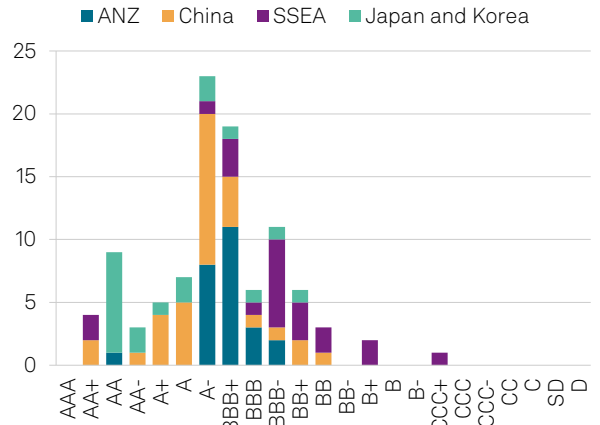


Chart 3
Ratings outlooks

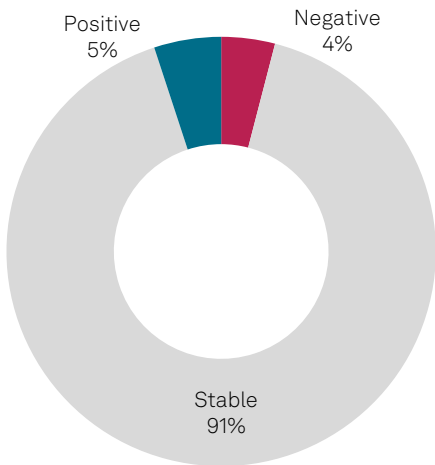


Chart 4
Ratings outlooks by region

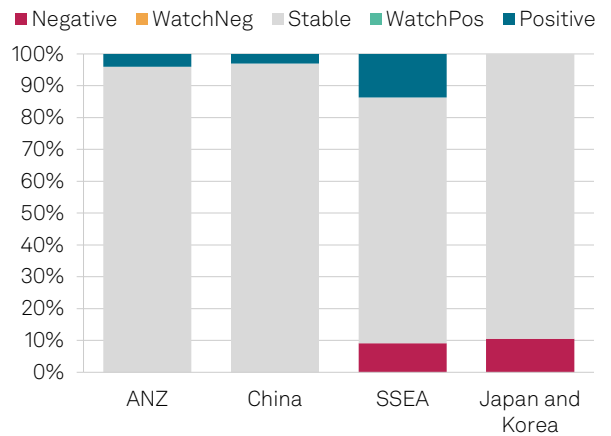


Chart 5
Ratings outlook net bias

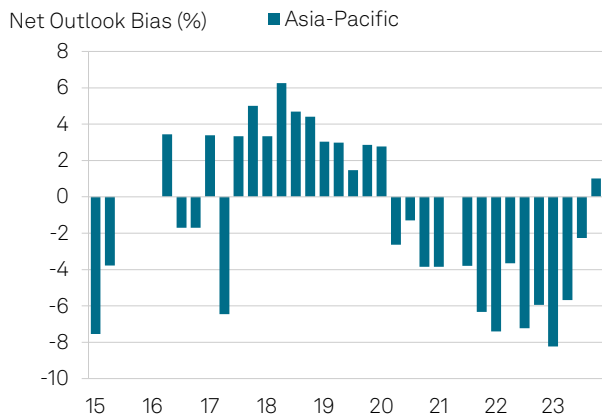
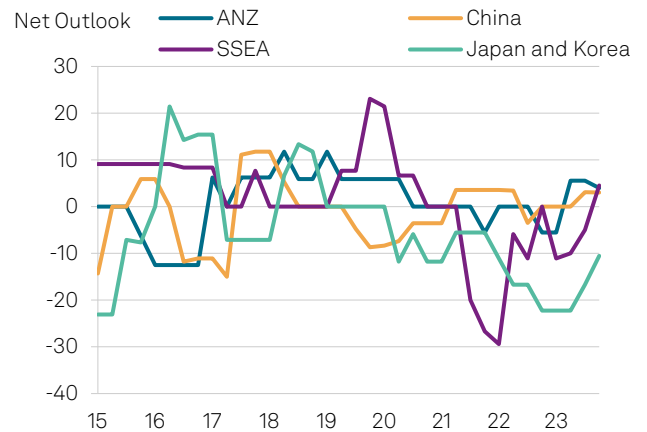


Chart 6
Ratings net outlook bias by region



Source: S&P Global Ratings. Ratings data measured at quarter-end.

Industry Credit Metrics: Asia-Pacific Utilities

Chart 7
Debt / EBITDA (median, adjusted)

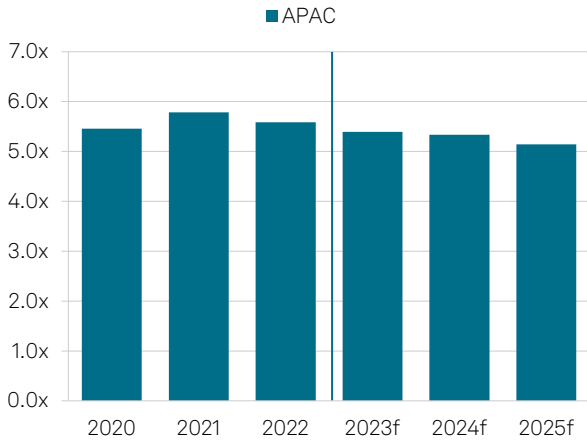


Chart 8
FFO / Debt (median, adjusted)

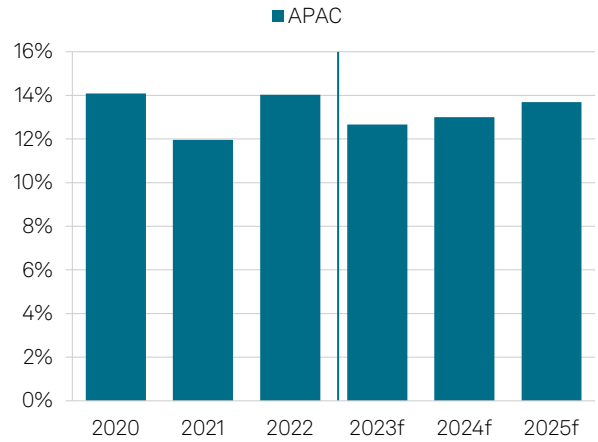


Chart 9
Cash flow and primary uses

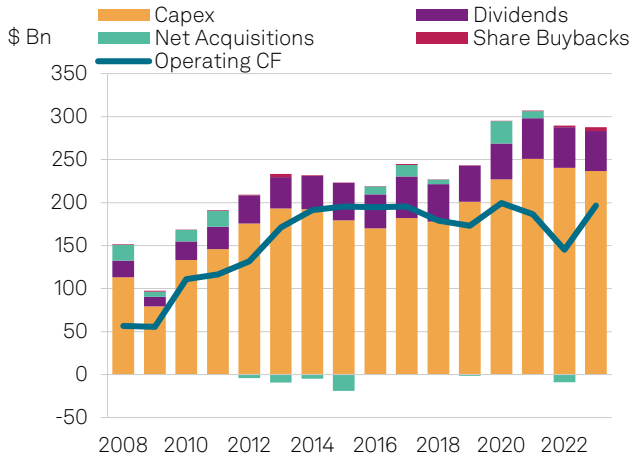
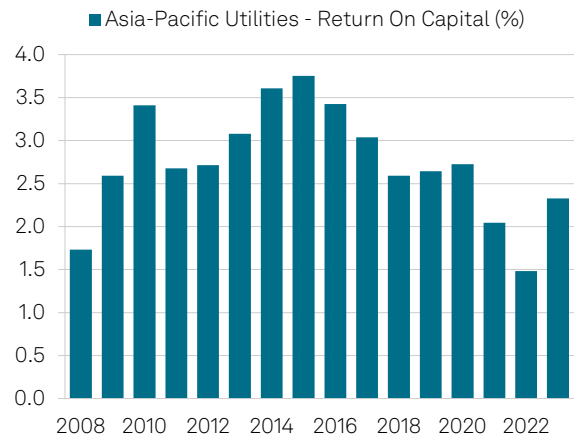


Chart 10
Return on capital employed



Source: S&P Global Ratings, S&P Capital IQ.

Revenue growth shows local currency growth weighted by prior-year common-currency revenue share. All other figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations. Most recent (2023) figures for cash flow and primary uses and return on capital employed use the last 12 months' data.

Industry Outlook: Australia and New Zealand

Ratings trends and outlook

Our stable outlook for the sector is supported by the adequate rating headroom of most rated entities. Regulated utilities will benefit from inflation-linked revenues, but margins will be counteracted by higher costs to an extent. We expect regulation to remain supportive as the industry navigates its way through the energy transition phase, particularly in the gas sector. Unregulated players in New Zealand will benefit from prudent policies on shareholders' distributions during the upcoming building phase.

Main assumptions about 2024 and beyond

1. Inflation benefits to regulated utilities revenue could partly offset cost pressure.

Inflation-linked pricing will flow to revenues, but margins will be suppressed by higher costs for labor, contracts, and procurement. In New Zealand, an annual cap to price increases can also constrain margins. Refinancing of debt will increase interest costs, mitigated somewhat by the annual adjustment to debt costs, or higher weighted average cost of capital where pricing resets are due. Softer gas demand or new connections could limit upside to gas distributors.

2. Outperformance of regulatory allowances can be harder.

Inflationary pressure on project maintenance costs will reduce cash available for distributions. We view this risk as manageable because shareholders of most of the rated entities are long-term infrastructure investors. Hence, they are less likely to extract cash.

3. Electricity prices will remain high in New Zealand.

We forecast electricity prices will remain high, based on normal hydrology and stable demand. Downside risks include extreme hydrology, reduced demand from aluminum smelters or a slow rise in alternate demand, and strong retail competition.

Credit metrics and financial policy

In our view, the financial policies of rated entities are generally supportive of credit quality. Most rated entities operate to various financial policy targets that can range from target ratios of funds from operations (FFO) to debt, risk limits, interest rate hedging, and scheduling debt refinancing ahead of debt maturities. The financial metrics of the rated portfolio have reasonable headroom against company policies, which gives leeway for any unexpected variation in operating parameters. All rated entities have flexibility in dividend distributions and, to some extent, for capital expenditures (capex).

Key risks or opportunities around the baseline

1. An accelerated pursuit of growth in the unregulated segment by regulated utilities.

Rapid growth in renewable power and demand for electric vehicle (EV) charging infrastructure will require large investments, which will bring risks.

2. Australian unregulated utilities: Renewable power investments present mixed outcomes.

Construction costs, approvals, network connections, and contract arrangements will be a risk to project deliveries.

3. More renewable power heightens risk to coal plants in Australia.

Still, we're seeing life extensions for some coal plants. Volatile pool prices, plant availability, and construction costs remain the biggest risk to the unregulated sector.

4. Merchant utilities in New Zealand gearing up for several new "green" projects.

Cost management and execution remain key risks. Some projects have been completed with no or limited risk to credit quality, while others have seen cost escalation or delays.

An accelerated pursuit of growth in the unregulated segment by regulated utilities will bring risks. Rapid growth in renewable power and demand for electric vehicle (EV) charging infrastructure will require large investments. Most of these are likely to be contracted or unregulated and be debt-funded. We expect phased growth; however, a rapid increase in unregulated investments could dilute our assessment of business risk.

Australian unregulated utilities: Renewable power investments present mixed outcomes.

Construction costs, approvals, network connections, and contract arrangements will involve steady variables and be a risk to project deliveries. Planned investments for generation and transmission are substantial, spurred by the target to reduce emissions by 43% by 2030.

More renewable power heightens risk to coal plants in Australia. The pressure is escalating due to lower average prices of renewables amid an increase in roof-top and large-scale solar. Still, stability and reliability issues, as well as uncertain visibility on the roll-out of renewable capacity, is leading to life extensions for some coal plants. Volatile pool prices, plant availability, and construction costs remain the biggest risk to the unregulated sector over the next one to two years. Lifting retail price caps will provide some respite for those with plant portfolios.

Merchant utilities in New Zealand gearing up for several new "green" projects. Cost management and execution remain key risks amid tight supply of contractors and long lead times for equipment supply. While some projects have been completed recently with no or limited risk to credit quality, others have seen cost escalation or delays due to weather, supply, or design changes.

Industry Credit Metrics: Australia and New Zealand

Chart 11

Debt / EBITDA (median, adjusted)

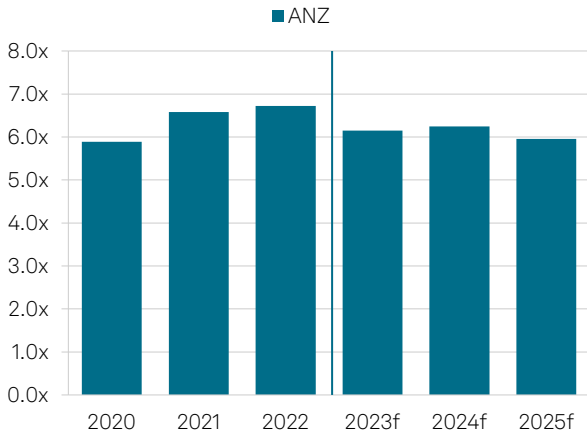


Chart 12

FFO / Debt (median, adjusted)

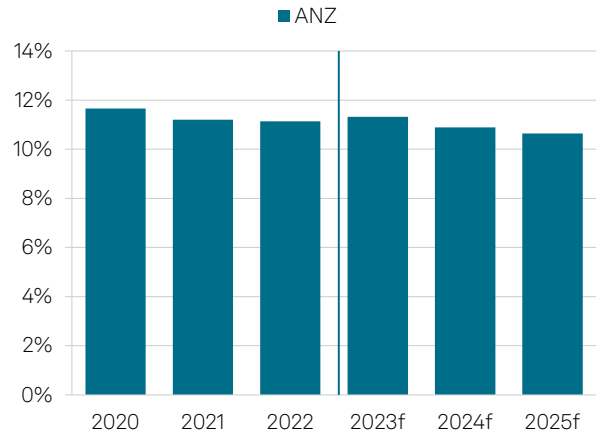


Chart 13

Cash flow and primary uses

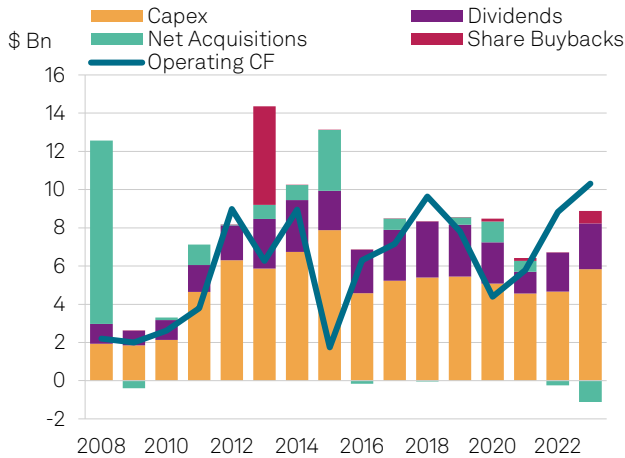
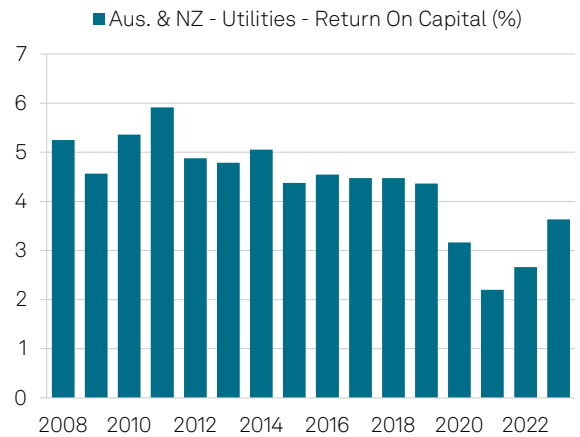


Chart 14

Return on capital employed



Source: S&P Global Ratings, S&P Capital IQ.

Revenue growth shows local currency growth weighted by prior-year common-currency revenue share. All other figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations. Most recent (2023) figures for cash flow and primary uses and return on capital employed use the last 12 months' data.

Industry Outlook: China and Hong Kong

Ratings trends and outlook

We have a stable outlook for the sector, based on likely continued earnings recovery but large capital spending. Still, economic slowdown may drag on China's power and gas consumption growth. This could modestly hinder earnings recovery for our rated issuers. Softening fuel costs will help sustain issuers' margins. In some cases, pass-through could be delayed since local governments may prioritize affordability for end-users.

Main assumptions about 2024 and beyond

1. A slowdown in power demand growth may hurt utilization hours for China's independent power producers (IPPs).

China's power demand growth will likely soften. Coal-fired power will be the most affected. Coal units will gradually assume the role of 'peak shaving' in the power system.

2. Coal power tariffs may start to soften in 2024 as thermal coal prices normalize.

Recent weaknesses in the spot market will not materially affect the overall tariff level for 2023. Nevertheless, we expect power tariffs to start edging down in 2024.

3. China's ambitious energy transition plan will load state-owned IPPs with even more debt.

IPPs will invest heavily in renewables, and heavy debt-funded capex may weigh on the credit improvements. Plus, the additional costs of installing energy storage may narrow new project returns.

A slowdown in power demand growth may hurt utilization hours for China's IPPs. China's power demand growth will likely soften to 4%-5% year-on-year in 2024 as sluggish property and export-related sectors depress industrial production. Coal-fired power will be the most affected because the rapid deployment of renewable energy is eating into its share. Meanwhile, coal units will gradually assume the role of 'peak shaving' in the power system. This is because the lack of storage facilities for intermittent power output of wind and solar means they can't match the power demand curve. Additional revenues from such ancillary services may not fully compensate for the loss of utilization hours by coal fleets.

Coal power tariffs may start to soften in 2024 as thermal coal prices normalize. IPPs sell most of their power through annual contracts that lock in tariffs for the full year. As such, recent weaknesses in the spot market will not materially affect the overall tariff level for 2023. Nevertheless, we expect power tariffs to start edging down in 2024 since the annual contracts signed for next year may factor in potential coal price declines. Loosening power supply-demand in China may also contribute to price weaknesses.

China's ambitious energy transition plan will load state-owned IPPs with even more debt. IPPs will invest heavily in renewables over the next couple of years as COVID-related lockdowns in the previous two years have slowed the progress of clean energy development. Heavy debt-funded capex may weigh on the credit improvements brought about by declining coal costs. Plus, competition over new renewable projects is keen, and the additional costs of installing energy storage may also narrow new project returns.

Hong Kong: The five-year plan announcement in November brought clarity on transition-related spending burdens. The plan guides the power companies' capex over 2024-2028. Energy

transition remains the key theme, and entails the development and upgrades of the existing power grids to accommodate a higher mix of renewables.

Transmission capabilities between Hong Kong and mainland China will also be strengthened to import more clean energy directly from the mainland. The regulatory framework will likely remain strong and ensure steady profits for the power companies.

Credit metrics and financial policy

We expect credit metrics to be stable for China IPPs over 2024-2025. Their average ratio of FFO to debt will remain about 9%, given coal power tariffs may moderately soften alongside fuel costs. The recent implementation of capacity tariffs may help stabilize the profitability of coal-fired IPPs going forward. Also, we believe IPPs will invest heavily in renewable energy development over the next few years, which will likely drive up their capex level and limit any substantial improvements in their credit profiles.

The credit metrics of China gas distributors, on the other hand, may slightly improve. Their average ratio of FFO to debt will likely increase to 24% in 2025 from 22% in 2023, because gas sales volume will continue to grow with some mild improvements in dollar margins. We expect capex levels of gas distributors to be broadly stable over the next few years.

Key risks or opportunities around the baseline

1. Weaker-than-expected volume growth may dampen retail gas earnings.

We project gas volumes will rise, but the industrial production slowdown will probably limit the recovery of China's gas consumption. Also, distributors' average dollar margins will be pressured.

2. Ineffective or delayed cost pass-through would hurt dollar margins.

We expect dollar margins for gas distributors to modestly rise. However, pass-through policy still varies across local governments, and socioeconomic considerations may influence governments' decisions in end-user price adjustments.

3. Price volatility remains for liquefied natural gas (LNG).

Gas distributors are diversifying their gas procurement channels by buying unconventional gas and importing LNGs through long-term contracts and spot trading. Our improving dollar margin forecasts factor in declining LNG costs. However, any price jumps will raise the cost base of distributors.

Weaker-than-expected volume growth may dampen retail gas earnings. We project gas volumes will rise by an average 9% annually for rated issuers over the next couple of years. The industrial production slowdown will probably limit the recovery of China's gas consumption. High double-digit growth seen prior to 2022 is thus unlikely for the foreseeable future. Also, the falling mix of high-margin industrial gas sales will drag on distributors' average dollar margins.

Ineffective or delayed cost pass-through would hurt dollar margins. We expect dollar margins for gas distributors to modestly rise by Chinese renminbi (RMB) 0.01/per cubic meter (cbm) to RMB0.02/cbm in 2024 as pass-through continues to improve in various cities post-pandemic. However, pass-through policy still varies across local governments, particularly in the residential sector. And socioeconomic considerations, such as boosting economic growth or ensuring user affordability, may influence governments' ultimate decisions in end-user price adjustments.

Price volatility remains for LNG. Gas distributors are diversifying their gas procurement channels to reduce their reliance on the big three oil majors. This includes buying unconventional gas and importing LNGs through long-term contracts and spot trading. These currently account for 10%-20% of gas sources for our rated issuers with high project coverage in coastal provinces. Our improving dollar margin forecasts factor in declining LNG costs, in line with the global energy price trend. However, any price jumps caused by demand spikes or supply disruptions will raise the cost base of distributors.

Taiwan: Large capex for energy transition with stressed profitability due to high cost for renewable energy and domestic LNG prices. Following the government's energy transition policy, Taiwan Power Co. will invest heavily to expand gas-fired plants, network reliability improvement, and network connections for additional green power. This could weaken debt leverage over the next few years. Meanwhile, domestic LNG prices could remain high in 2024. This, as well as rising purchase costs for renewable energy, will continue to strain the company's profitability. While the government has twice adjusted tariffs upwards to reflect rising fuel costs since July 2022, the increments are still far less than sufficient to cover increasing costs.

Industry Credit Metrics: China and Hong Kong

Chart 15

Debt / EBITDA (median, adjusted)

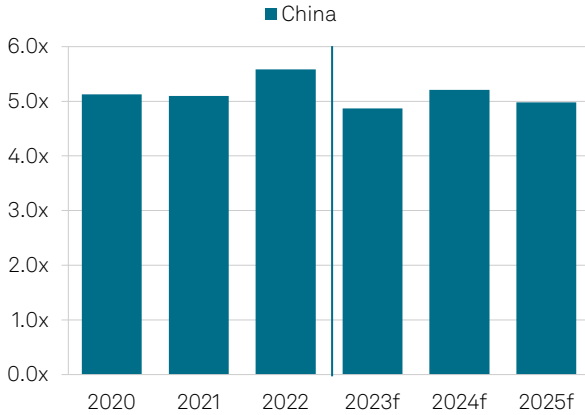


Chart 16

FFO / Debt (median, adjusted)

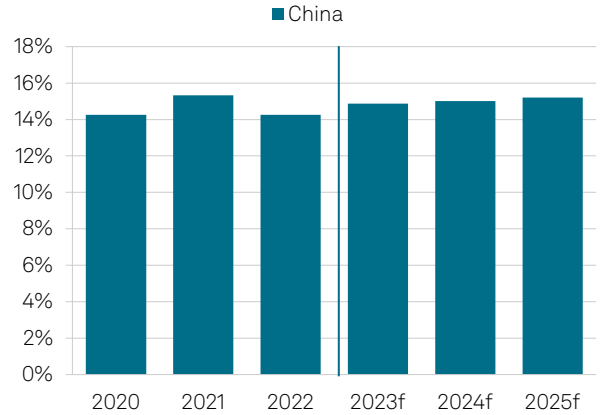


Chart 17

Cash flow and primary uses

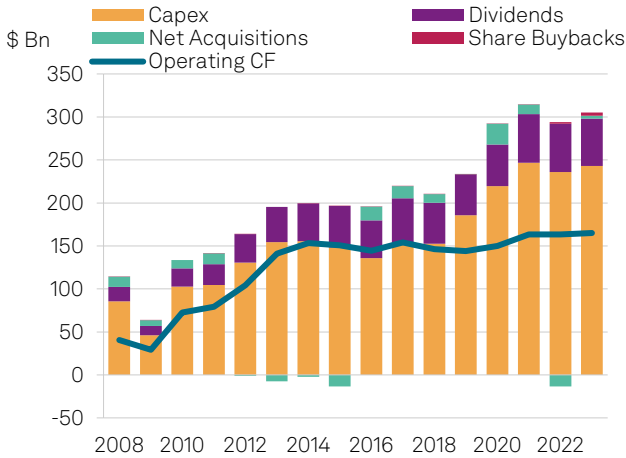
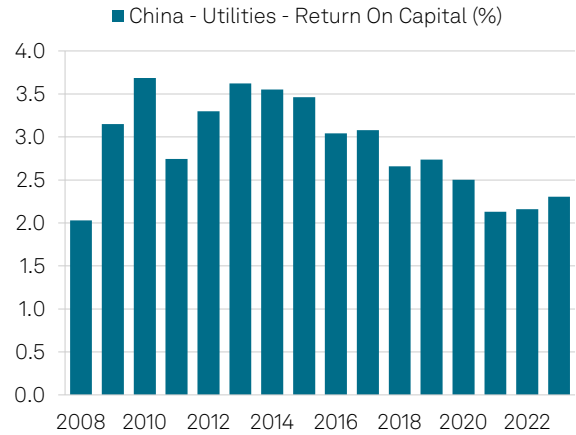


Chart 18

Return on capital employed



Source: S&P Global Ratings, S&P Capital IQ.

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Industry Outlook: South and South-East Asia

Ratings trends and outlook

The largely stable outlook in 2024 for our portfolio of regulated utilities and IPPs has a relatively thin headroom. We expect governments to allow regulated utilities to recover full costs either through tariffs or subsidies, though the timeliness and effectiveness will vary significantly across the region. Rated IPPs will also be able to pass through fuel costs under existing contracts. Moderating fuel costs from last year's peaks can provide some relief to generation and distribution firms that face a lag in recovery. Aggressive capex, leveraged acquisitions, and an inability to recover high interest and fuel costs remain the key risk for ratings.

Main assumptions about 2024 and beyond

1. Healthy economic growth to support power demand.

We project around 5%-7% growth in annual power demand in fast-growing emerging economies such as India, Indonesia, and the Philippines. Singapore, Malaysia, and Thailand will experience increased power demand of 3% annually.

2. High capex and rising interest costs will keep leverage elevated.

Increasing investments for energy transition and high interest costs will keep capex and leverage elevated for rated utilities in South and Southeast Asia. Access to relatively competitive domestic funding will likely reduce risks from rising interest rates and dollar funding.

3. Reversal to pre-pandemic regulatory tariff frameworks for most countries.

South and Southeast Asia are able to recover tariffs deferred during the pandemic, and many have begun to. However, the Thai government retained some relief measures.

Healthy economic growth to support power demand. Relatively healthy GDP growth in South and Southeast Asian economies will drive power demand. We project around 5%-7% growth in annual power demand in fast-growing emerging economies such as India, Indonesia, and the Philippines. The more developed economies of Singapore, Malaysia, and Thailand will experience increased power demand of 3% annually.

High capex and rising interest costs will keep leverage elevated. Increasing investments for energy transition and high interest costs will keep capex and leverage elevated for rated utilities in South and Southeast Asia even as they have been scaling back traditional investments into coal plants. Good access to relatively competitive domestic funding will likely reduce risks from rising interest rates and dollar funding.

Reversal to pre-pandemic regulatory tariff frameworks for most countries. South and Southeast Asia are able to--or are beginning to--recover tariffs deferred during the pandemic. Many have reverted to pre-pandemic regulatory frameworks and tariff mechanisms. However, the Thai government retained some relief measures and approved a tariff cut from September to December 2023. A watchpoint is whether Thailand will stick with its tariff philosophy of regulated returns with full cost pass-through.

Credit metrics and financial policy

Utilities in growing markets such as India and Indonesia will operate at around 5x debt-to-EBITDA because of growth in capex. Power majors in mature and fully electrified markets such as Singapore and Peninsular Malaysia will operate around 4x debt-to-EBITDA.

Weaker performance for renewables will also weigh on leverage. Continued underperformance below P90 (meeting power generation probability at least 90% of the time) will strain cash flow and margins. Resource risk is greater for players more exposed to wind assets, such as in India and Indonesia, where performance recovery has been lagging. Lower cash flow and aggressive growth spending will likely keep leverage high, with debt-to-EBITDA ratios over 6x and interest coverage of about 1.5x.

Key risks or opportunities around the baseline

1. Rising interest cost and inflation remain key risks.

Unregulated power players are exposed to rising interest cost and inflation, and companies that require large funding needs may be more so. Generation companies will be exposed to fuel price fluctuations if they have fixed-price revenue contracts. In some markets, power purchase agreements were cancelled and contracts renegotiated to allow for fuel cost pass-through.

2. Higher exposure to merchant markets may increase cash flow volatility.

More power producers are expanding into merchant power markets, seeking higher returns at the expense of higher risk.

3. Growth investments in overseas markets can be a double-edged sword.

Many IPPs are investing opportunistically in offshore markets. However, sizable debt-funded investments can pressure balance sheets and elevate leverage.

Rising interest cost and inflation remain key risks. Unregulated power players are exposed to rising interest cost and inflation, given they are unable to pass on increases in such costs. Companies that require large funding needs for growth or refinancing may be more vulnerable. While fuel costs have eased, generation companies will be exposed to fuel price fluctuations if they have fixed-price revenue contracts. In some markets, such as the Philippines, power purchase agreements were cancelled, and contracts renegotiated to allow for fuel cost pass-through. Most of our rated IPPs in Thailand and Indonesia can pass through fuel costs under existing contracts.

Higher exposure to merchant markets may increase cash flow volatility. More power producers, for example in the Philippines, are expanding into merchant power markets. This strategy offers higher returns at the expense of higher risk via more exposure to spot-price volatility. Mitigants to such volatility range from active trading strategies to long-term contracts that offer downside protection to the floor price during lower pricing-power conditions. The ability to weather depressed power price periods or unforeseen detrimental circumstances will depend on sponsors' financial discipline.

Growth investments in overseas markets can be a double-edged sword. Many IPPs are investing opportunistically in offshore markets to increase scale and enhance geographic diversity. Some of the plans may be driven by energy transition. However, sizable debt-funded investments can pressure balance sheets and elevate leverage. Earning quality can suffer if exposures rise in countries that carry higher regulatory and country risks, such as Vietnam and Laos.

Industry Credit Metrics: South and South-East Asia

Chart 19

Debt / EBITDA (median, adjusted)

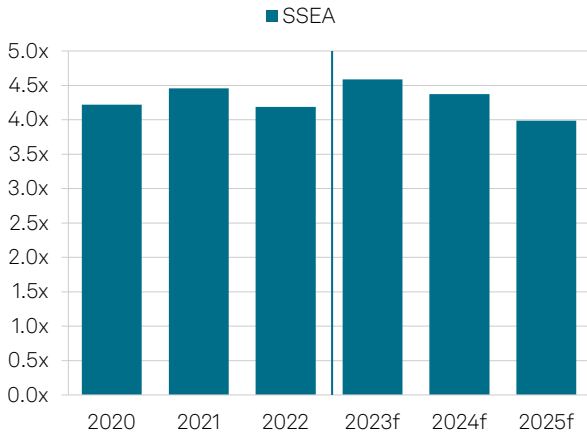


Chart 20

FFO / Debt (median, adjusted)

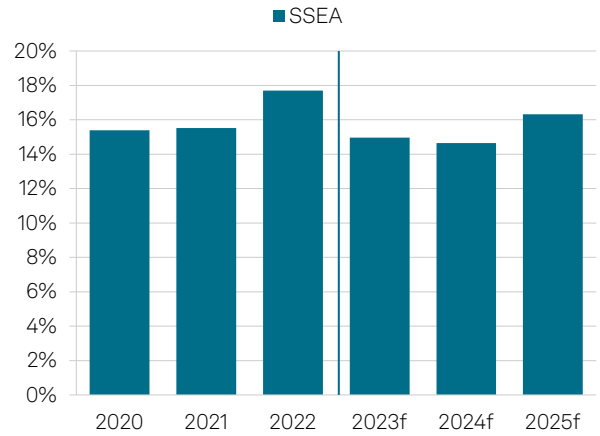


Chart 21

Cash flow and primary uses

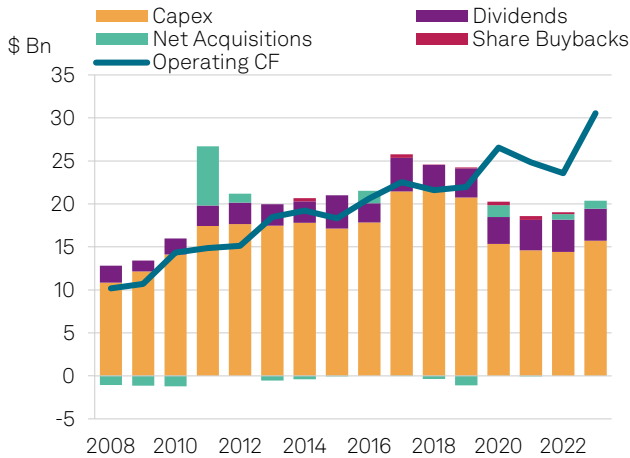
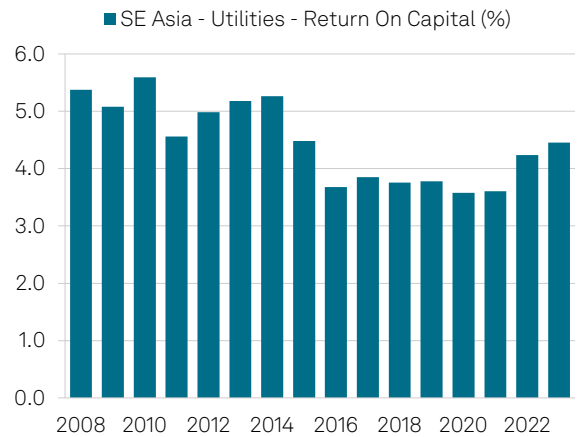


Chart 22

Return on capital employed



Source: S&P Global Ratings, S&P Capital IQ.

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Industry Outlook: Japan and Korea

Ratings trends and outlook

The outlook for the Japanese utilities sector is stable. We expect strong positions in respective supply regions, favorable regulatory frameworks, transparent pricing systems, and the possibility of extraordinary support from the government in times of need. All these factors help to support creditworthiness.

South Korean utilities also have mostly stable outlooks. Korea Electric Power Corp. (Kepeco) and Korea Gas Corp. (Kogas) are government-related entities with an almost certain likelihood of support in times of financial distress. The ratings and outlooks are equalized with those on the South Korean government.

Main assumptions about 2024 and beyond

1. Expectations for Japanese utilities over the next 12 months:

Earnings will recover and stay steady, but debt will likely stay elevated.

2. Expectations for South Korean utilities over the next 12 months:

Earnings and operating cash flows will stabilize to some degree in 2024, but leverage of Kepeco and Kogas will likely remain elevated over the next 12-24 months.

Japanese utilities: Earnings will recover and stay steady over the next 12 months, thanks primarily to rate hikes in mid-2023, allowing electricity utilities to flexibly pass on fuel costs. After a significant rise over the past two years, debt will stay elevated due to aggressive investments in the pipeline.

South Korean utilities: With fuel costs stabilizing at lower levels, we believe the earnings and operating cash flows of South Korean utilities companies will stabilize to some degree in 2024. Still, leverage of Kepeco and Kogas will likely remain elevated over the next 12-24 months, due to higher debt driven by high commodity prices, and delayed and insufficient tariff hikes.

Credit metrics and financial policy

Cash flow metrics for Japanese utilities will improve to pre-2020 levels. FFO-to-debt ratios will be around 10% for most electric utilities and slightly above 25% for city gas players. However, the metrics will improve only slowly when excluding the positive impact of the time lag in transferring volatility in fuel costs to electricity sales prices for electric utilities.

Japanese electric utilities will continue with modest shareholder returns, in our view. This is because they are increasingly aware that a sufficient financial buffer is necessary to cushion future capex, which likely accelerates, amid uncertainties around operating environments including potential fuel price volatility.

Leverage burden for key South Korean utilities companies such as Kepeco and Kogas will remain elevated, since their debt spiked over 2021-2022 due to weak cash flows. We forecast Kepeco's debt-to-EBITDA ratio to stay at 7-8x, and Kogas at 9-10x in 2024-2025.

South Korean utilities companies' capex burden will remain sizable for the next 12-24 months. Kepeco's investments will likely increase further as the group needs to invest in construction of nuclear power plants, as well as other green projects.

Key risks or opportunities around the baseline

1. Electricity utilities' fuel prices could spiral if, for example, underlying geopolitical risks accelerate further.

Higher fuel prices would delay our assumptions that electricity utilities' earnings and finances will recover in 2024. In South Korea, another significant spike in fuel costs would directly hit credit metrics. In Japan, higher fuel prices won't cause immediate credit stress because of new pricing formulas.

2. Acceleration in investments by electricity utilities.

Free cash flow deficits could deteriorate due to aggressive investments in decarbonization, which could pose more downside pressure for issuers whose credit metrics have been dampened during the global energy crisis. Korean electricity utilities' investment burdens will also likely remain elevated due to construction of nuclear plants and investments in renewable energies.

3. Intensified competition in domestic electricity retail in Japan.

Deregulation of electricity retail leaves open the possibility of the industry facing further fierce competition--as was common until a few years ago. This could subdue profitability for the sector.

4. Expansion in unregulated businesses for Japanese gas players.

Japan's leading regulated gas players aim to accelerate investments in domestic electricity retailing, renewable energy, and overseas businesses like gas upstream projects or IPPs. Higher exposure to such areas could heighten the volatility of earnings.

5. Higher oil and gas prices and difficulties in tariff adjustments for Korea Gas.

A sharp increase of oil and gas prices, if any, could lead to an increase in working capital burdens and further debt growth for Kogas. Also, uncertainties around the timely tariff adjustments remain a key swing to Kogas' credit metrics and deleveraging efforts.

Fuel prices could spiral for electricity utilities if, for example, underlying geopolitical risks accelerate further. Higher fuel prices would delay our baseline assumptions that earnings and finances for the industry will recover in 2024.

For Korean utilities, another significant spike in fuel costs would directly hit credit metrics. Delayed and insufficient tariff hikes drove a sharp increase in their debt burdens in 2022, and uncertainties around tariff hikes remain high.

However, for Japanese electricity utilities, higher fuel prices won't cause immediate credit stress, as occurred over the past two years, because the Japanese government approved new pricing formulas in early 2023 that allows the regulated power companies to pass-through higher fuel costs more easily.

Acceleration in investments by electricity utilities. Free cash flow deficits could further deteriorate due to aggressive investments in decarbonization, which would be on top of spending on maintenance and replacement of conventional thermal power facilities and, for Japanese electricity utilities, the burden of enhanced safety measures to restart nuclear power plants. This could pose more downside pressure for issuers whose credit metrics have been dampened during the global energy crisis.

For Korean utilities, investment burdens will also likely remain elevated due to construction of nuclear plants and investments in renewable energies.

Intensified competition in domestic electricity retail in Japan. Full deregulation of electricity retail in 2016 opened the retail market to hundreds of newcomers. Many peers aggressively switched their fee plans to transfer volatility in fuel procurement prices to end customers. This means the industry might face another round of fierce competition--as was common until a few years ago. This could subdue profitability for the sector.

Expansion in unregulated businesses for Japanese gas players. Japan's leading regulated gas players aim to accelerate investments in domestic electricity retailing, renewable energy, and overseas businesses like gas upstream projects or IPPs. Recent examples include Tokyo Gas Co. Ltd.'s December 2023 announced acquisition of a U.S. shale gas development and production company for US\$2.7 billion. Profit is more volatile in these businesses than in the regulated domestic gas utility business. Higher exposure to such areas could heighten the volatility of earnings.

Higher oil and gas prices and difficulties in tariff adjustments for Korea Gas. Resurgence of oil and gas prices, if any, could lead to an increase in working capital burdens and further debt growth for Kogas. Also, uncertainties around the timely tariff adjustments remain a key swing to Kogas' credit metrics and deleveraging efforts.

Industry Credit Metrics: Japan and Korea

Chart 23

Debt / EBITDA (median, adjusted)

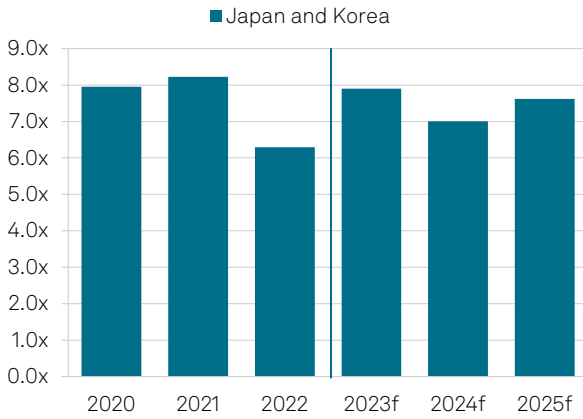


Chart 24

FFO / Debt (median, adjusted)

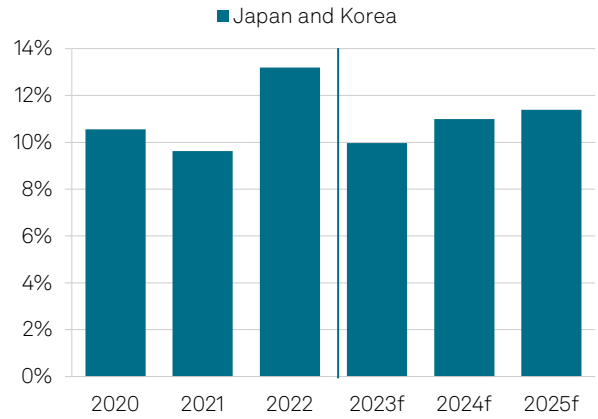


Chart 25

Cash flow and primary uses

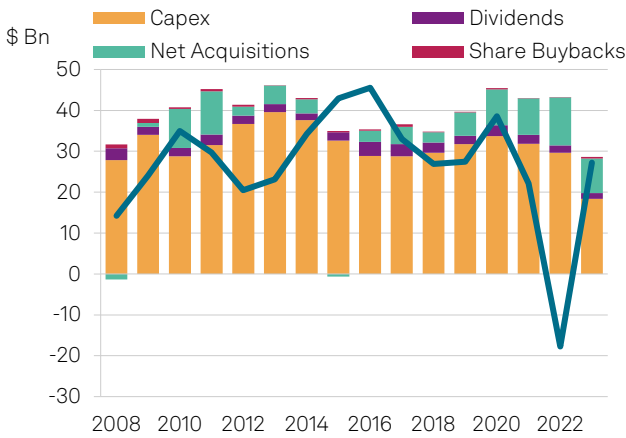
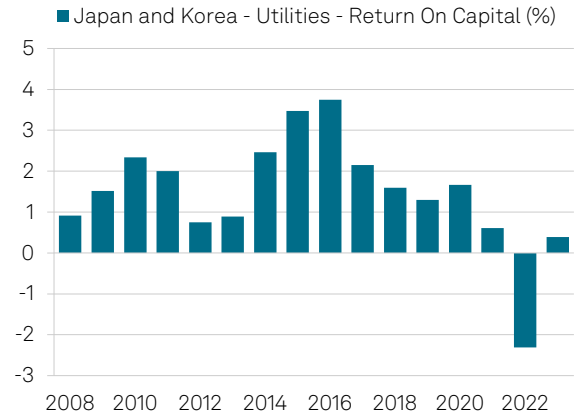


Chart 26

Return on capital employed



Source: S&P Global Ratings, S&P Capital IQ.

Revenue growth shows local currency growth weighted by prior-year common-currency revenue share. All other figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations. Most recent (2023) figures for cash flow and primary uses and return on capital employed use the last 12 months' data.

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