

# Refinancing Risks Are Rising As Asia Burns Through Its Carbon Budgets

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## Key Takeways

- Some coals producers in Asia could face heightened refinancing risks, particularly in view of US\$5.6 billion in debt maturing through 2021.
- Rising interest rates and less-supportive lending policies may require some companies to fund themselves with internal cash flows, which thanks to rising coal prices remain strong.
- Companies may face the risk of stranded assets (coal that may never be taken out of the ground) due to rising carbon emission limits.
- Banks and investors are increasingly focusing on alternatives to coal, due to concerns that carbon assets will not be monetized to repay debt.

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Southeast Asia faces a difficult dynamic. Increased access to electricity would improve living standards for hundreds of millions of people, but traditional power sources (such as fossil fuels) would be environmentally detrimental. While growing energy demand is sustaining demand for coal, the focus on lower-emission energy sources is also rising. S&P Global Ratings believes that these trends could raise the long-term credit risks for levered coal producers seeking to refinance as lenders increasingly incorporate environmental risks into investment decisions.

Climate-change risks are long term, but the impact on coal companies could be around the corner. Coal producers have used the recent strength in coal prices and financial markets to extend their debt maturity profiles. However, rising interest rates and less-supportive lending policies may require these companies to fund themselves with internal cash flows. Coal prices hit a six-year high in July 2018, so cash flows have been strong. However, while some companies have used the favorable environment to repay debt, others have increased spending on capacity expansion. This could lead levered coal producers into difficult credit conditions when large maturities come due beginning in 2021 (see chart 2). Coal producers may find that refinancing is significantly more difficult than it has been in recent years.

The potential environmental impact of climate change could lead to new challenges for companies and their investors. The scenarios for carbon emissions and the Paris Agreement limits imply that the majority of global coal reserves can never be burned and may increasingly become stranded (meaning they may never be taken out of the ground). This could lead to material write-offs and

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more financing challenges. This is likely one of the driving factors leading banks and investors to focus more on alternatives to coal, due to concerns that carbon assets will not be monetized to repay debt.

### Just How Serious Are The Consequences Of Asia Exceeding Carbon Budgets?

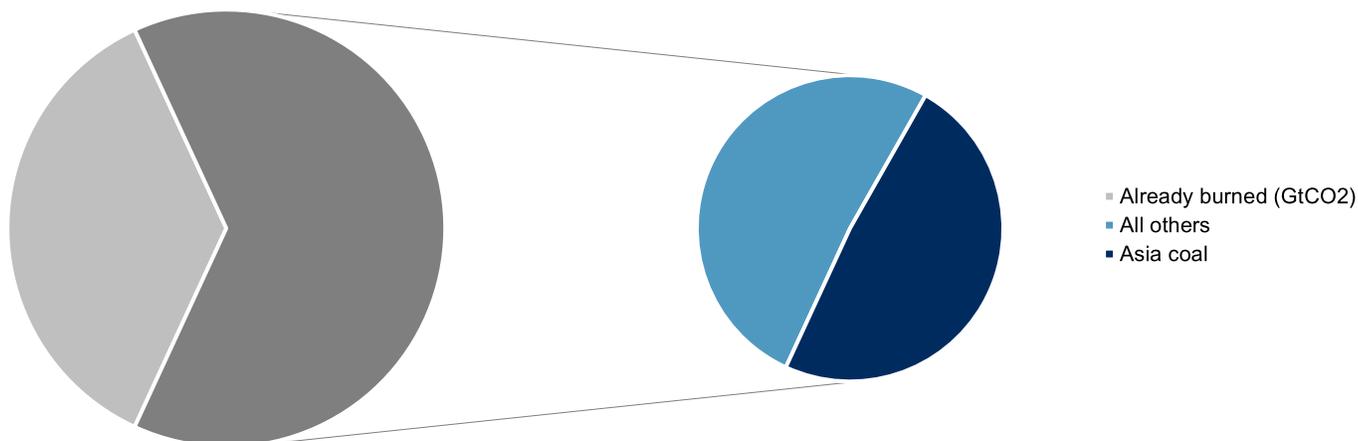
The World Resources Institute estimates that emissions must peak by 2020 and decline to well-below 2010 levels before 2050 to meet the targets set forth in the Paris Agreement. However, this could be difficult, given the multiple construction projects planned to meet rising energy demands. China, India, Indonesia, and Vietnam are slated to build three-quarters of the new coal-fired power plants over the next few years.

The UN Environment Program estimated in 2017 that existing and planned coal power plants in Asia will release 275 giga tons of carbon dioxide (GtCO<sub>2</sub>). The Potsdam Institute for Climate Impact Research, a German government-funded research institute, calculates that to have an 80% chance of keeping global warming below 2°C, the global carbon budget for 2000-2050 is 886 GtCO<sub>2</sub>. However, the Carbon Tracker Initiative estimated that 321 GtCO<sub>2</sub> was already emitted by 2011, leaving 565 GtCO<sub>2</sub> as the remaining budget for the period to 2050 (see chart 1). This means Asian coal would use about half of the remaining budget, leaving little for oil and gas fueled power, industrial use, transportation, construction, and agriculture, let alone emissions in the rest of the world.

Chart 1

### Asia Is Expected To Use Much Of The World's Long-Term Carbon Budget

Coal power in Asia could use around half of 2050 climate-impact emission targets



GtCO<sub>2</sub>--Giga tons of carbon dioxide. Source: Potsdam Institute of Climate Impact Research and UN Environment Programme. Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

Exceeding this budget could have a material, long-term impact across the region. This could result in coastal flooding, food shortages, air pollution, loss of biodiversity, and disease. The Global Climate Risk Index identifies six of the world's 10 countries most affected by climate change are

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located in Asia, with four in Southeast Asia. Also, S&P Global Ratings estimates that Cambodia, Vietnam, and Bangladesh are the most vulnerable countries to climate change. Nineteen of the top 25 cities affected by a one meter rise in sea level are located in Asia, while worsening monsoons and typhoons could also lead to some of the worst flood damage in the world.

The Asian Development Bank (ADB) estimates 410 million Asians are at risk of coastal flooding by 2025, and tens of millions of people could be displaced. Food shortages could increase as crop yields drop, with the ADB estimating each 10% increase in food prices would push 64 million people into poverty. Nearly all coral reefs would be bleached, and health concerns would increase due to air pollution. Insect borne malaria and dengue would increase. Harvard University estimates air pollution would already cause 3.3 million deaths globally, led by China, India, Pakistan, and Bangladesh. These consequences could lead to increasingly adverse regulations for greenhouse gas emitters, including coal producers

## **It's Complicated, But Alternatives Solutions Are Developing**

The positive benefits and negative consequences of coal use are colliding. The International Energy Agency estimated that 65 million people in Southeast Asia don't have access to electricity, and another 200-300 million in India. Access to electricity has a multiplier effect by improving education, productivity, poverty, health, and food security. Coal is generally cheaper in Southeast Asia, with research consultancy Wood Mackenzie estimating the cost at around US\$60 per megawatt hour compared with over US\$200 for roof-top solar plus storage. Additionally, coal is abundant, especially in Indonesia, at a time where varied fuel sources will be needed to meet growing demand.

Realistic and affordable alternatives to fossil fuels are emerging for companies, consumers, and policymakers. And there are several ways that Southeast Asia can achieve the sustainable development goals of both affordable and clean energy as well as the climate action goals outlined in the Paris Agreement. Renewable technology is increasingly cost competitive with coal--especially older, less-efficient coal technologies.

Additionally, many remote island areas don't have easy access to coal generation. Rural areas with low population density can see grid connection costs exceed US\$300 per megawatt hour, so localized solar may be a cost-effective option compared with coal in these areas.

Battery and storage costs remain a challenge, but a focus on technology development and improvements could significantly change the overall dynamic. Wind, geothermal, and hydropower, and bioenergy technologies are also becoming increasingly cost competitive. New carbon capture and sequester (CCS) technologies are expensive but also could help.

## **Bank Policies And Investor Focus Are Shifting**

A number of large banks, both global and regional have instated policies to end financing to new thermal coal mines. Others have created policies to stop financing less-efficient subcritical power plants, low grade coal mines, or coal-related projects in developed markets. At the same time, international organizations like the G20's Task Force on Climate Related Disclosures are recommending that banks further assess and disclose climate-related risks and opportunities.

Investors and lenders are experiencing a similar shift in focus towards less carbon-intensive investments. The California Public Employee's Retirement System (CalPERS), Manulife, and Australia Super, were among investors that designed the "Climate Action 100+" initiative to engage with greenhouse gas-emitting companies. Some 289 investors have signed the initiative,

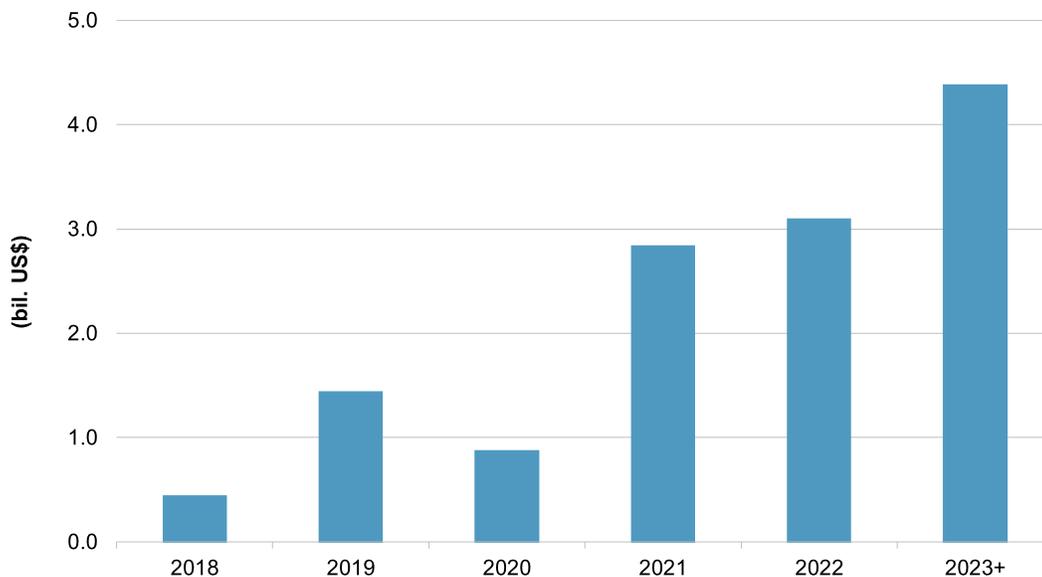
## Refinancing Risks Are Rising As Asia Burns Through Its Carbon Budgets

and collectively manage around US\$30 trillion. Additionally, the World Bank and ADB are spending about 30% of their funding on climate change projects.

Given such developments, Southeast Asian coal producers could face colder markets when they seek to refinance in the future.

Chart 2

### Maturity Profile Of Southeast Asia's 25 Largest Coal Companies



bil.--Billion. Source: S&P Ratings and Market Intelligence Data.

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## Navigating The Risks Will Be Tricky

The risks of increasingly challenging refinancing, adverse regulations, and lender risk aversion to stranded assets will likely play out over the next two to three years. They will also provide more of a challenge to levered companies than to coal producers that have used favorable recent conditions to reduce their debt levels. Over the longer term, these less-levered companies should also be better positioned to adapt to changing market conditions, diversify their operations, or invest in developing new technologies. Still, a growing focus on sustainable energy will be a key credit risk that all coal companies in the region will have to navigate.

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