

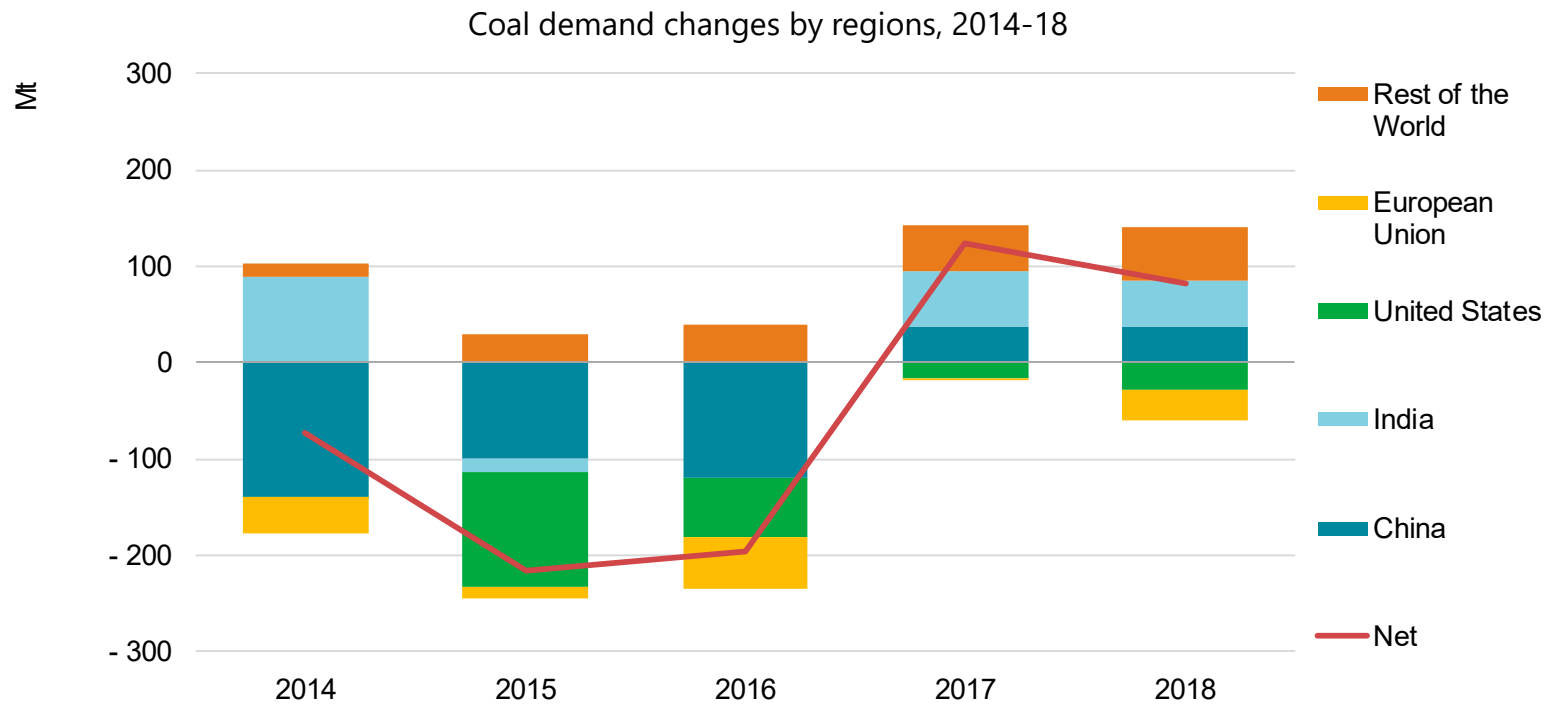


COAL 2019

Carlos Fernández Alvarez. Senior Coal Analyst. International Energy Agency

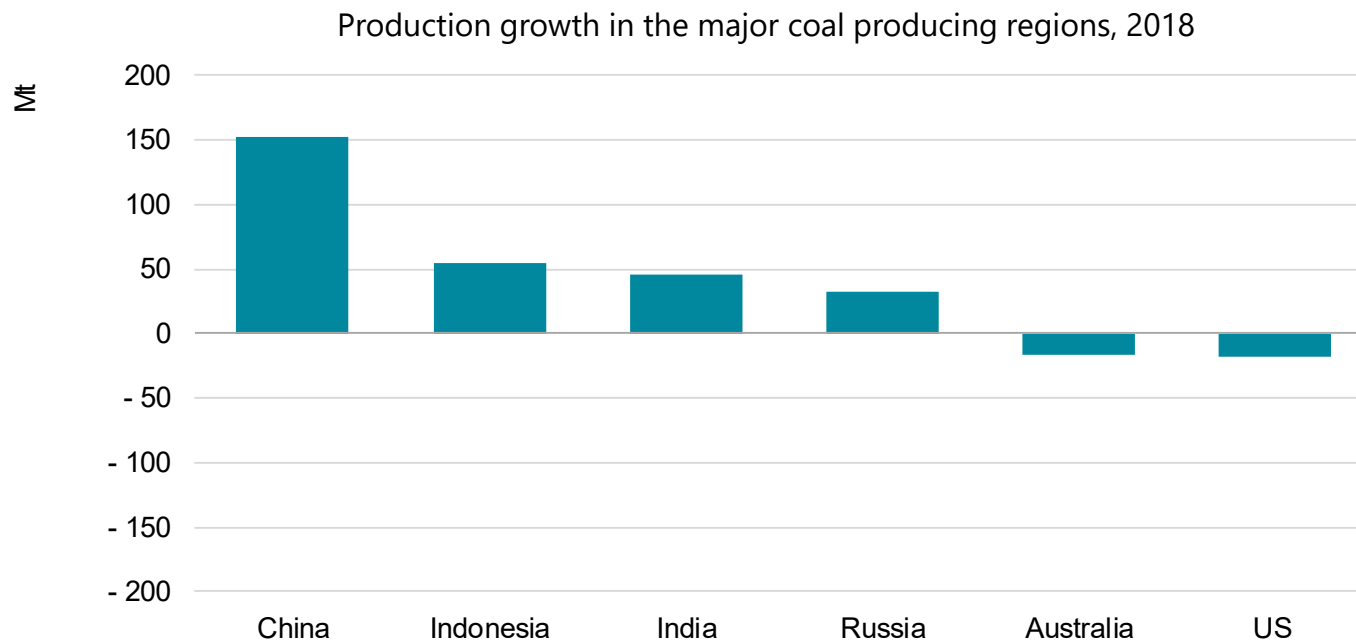
Madrid. 13 January 2020

After three years of decline, global coal demand rebounded in 2017 and 2018



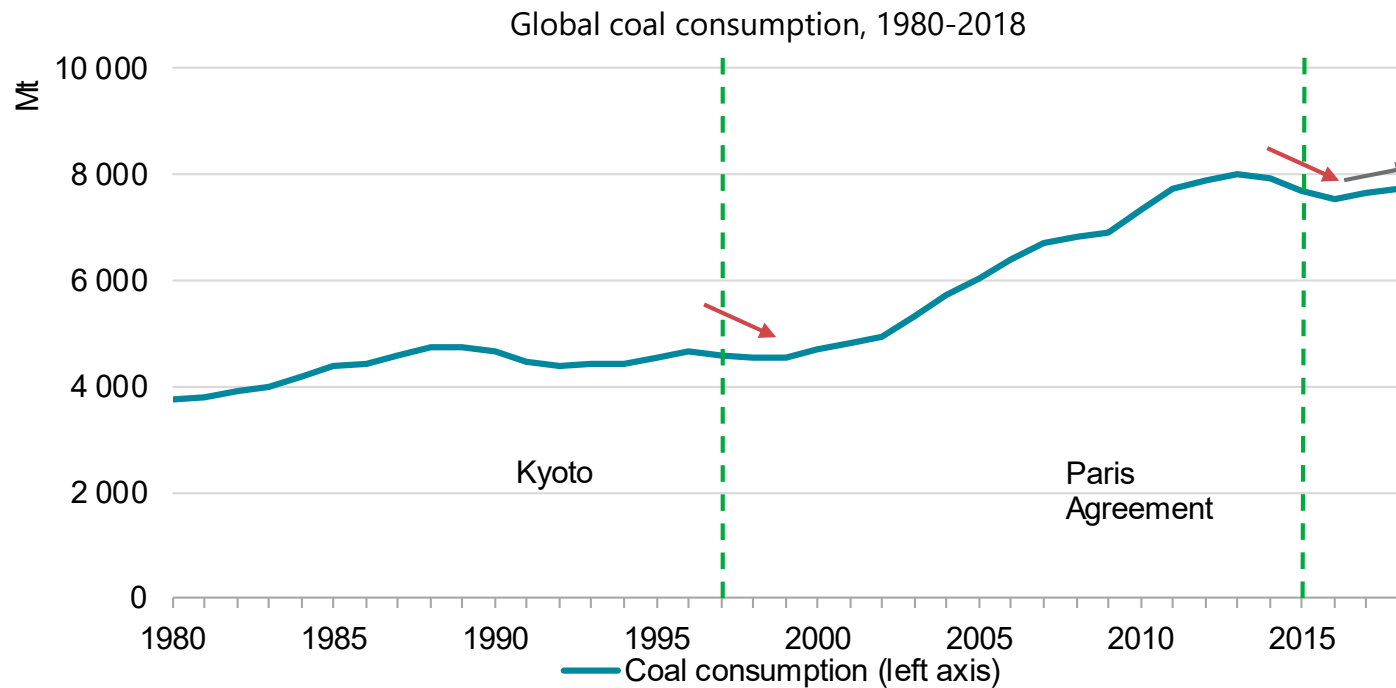
Coal power generation in Asia drove the growth in 2018 and offset the declining coal demand in Europe and North America.

The demand growth resulted in a jump in coal production in 2018



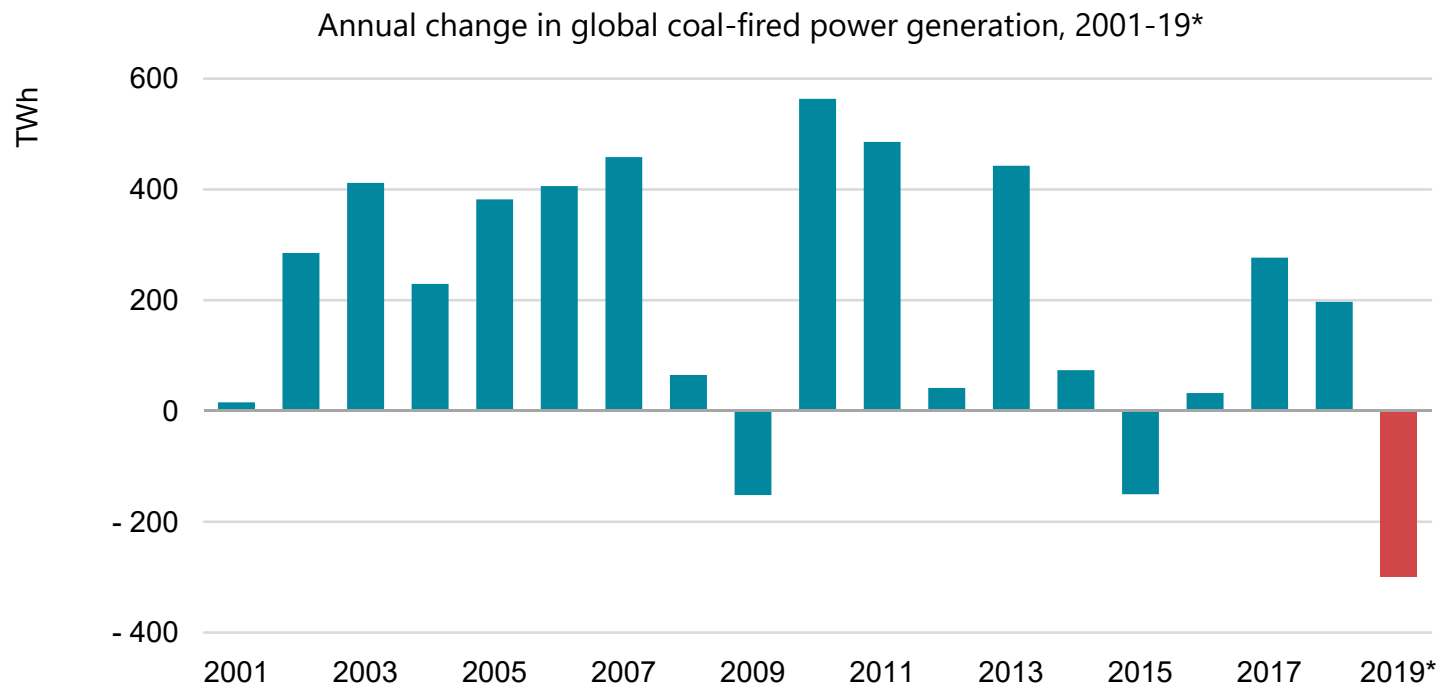
Production grew to meet soaring demand. China contributed the most. India (+6%), Indonesia (+11%) and Russia (+8%) achieved the highest output ever.

Kyoto and Paris: similarities and differences



Global coal consumption grew by 65% between Kyoto Protocol (1997) and Paris Agreement (2015). Coal demand declined in both years, but much changed in the period between them.

Coal power generation declines in 2019

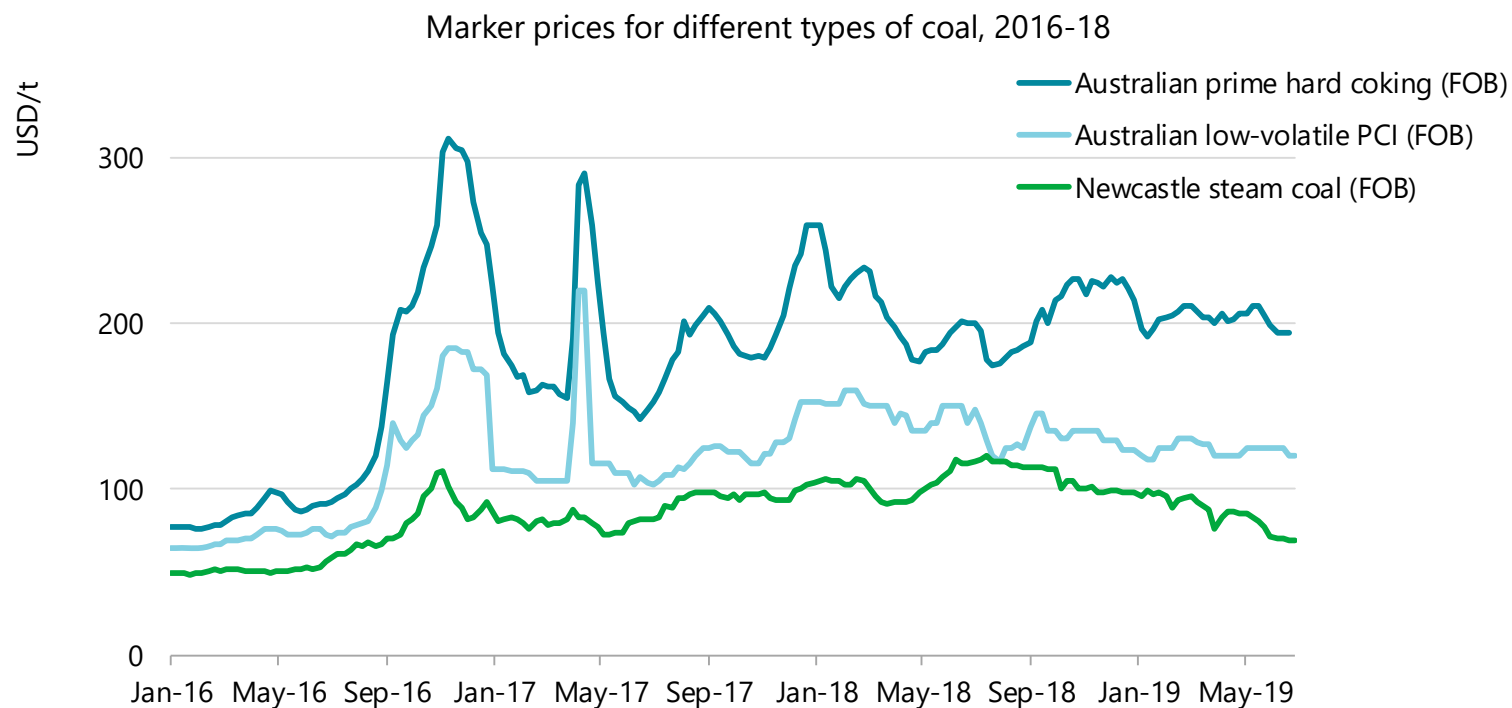


Global coal power generation is likely to decline in 2019 for the third time this century.

*Forecast

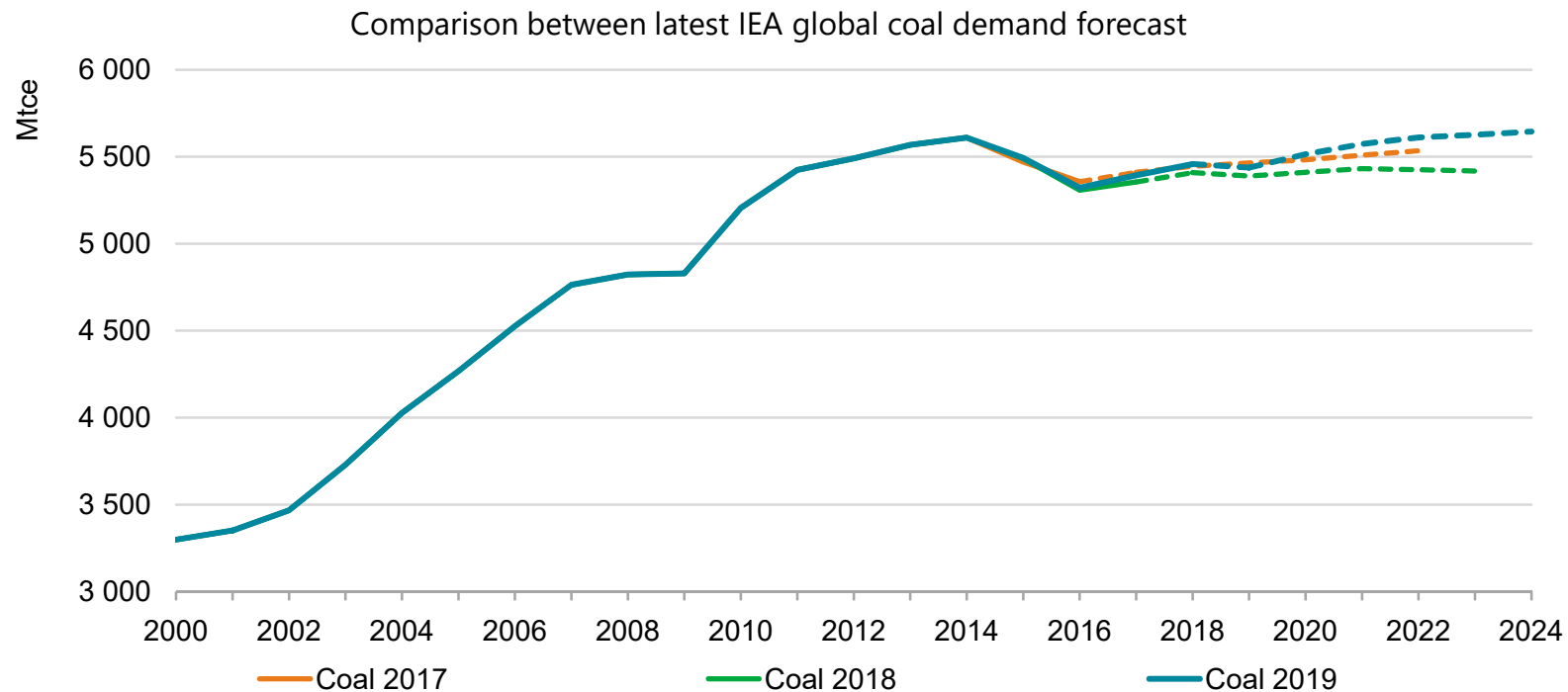


Thermal and met coal follow different price trends



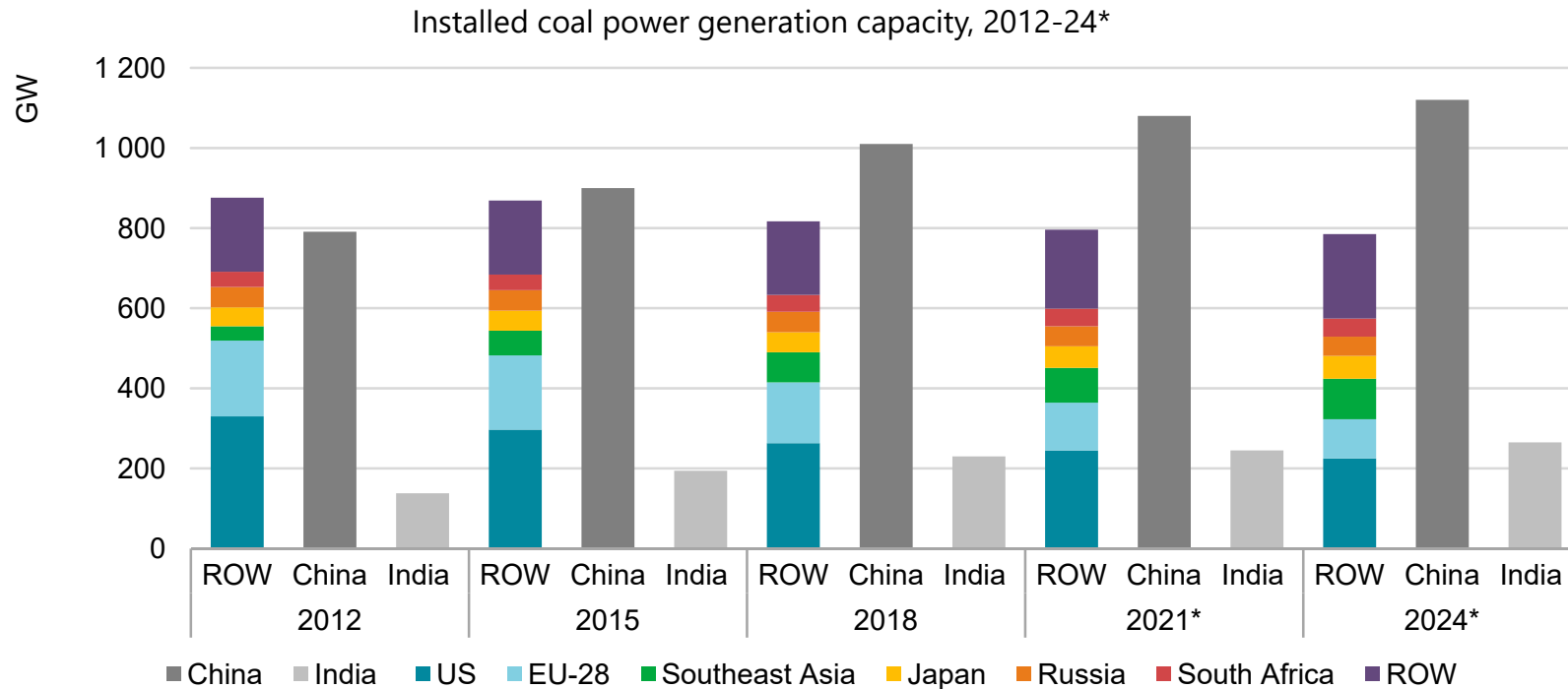
Thermal coal prices declined from the high levels in 2018 while met coal prices remain solid.

Coal demand flattens with a slight increase to 2024



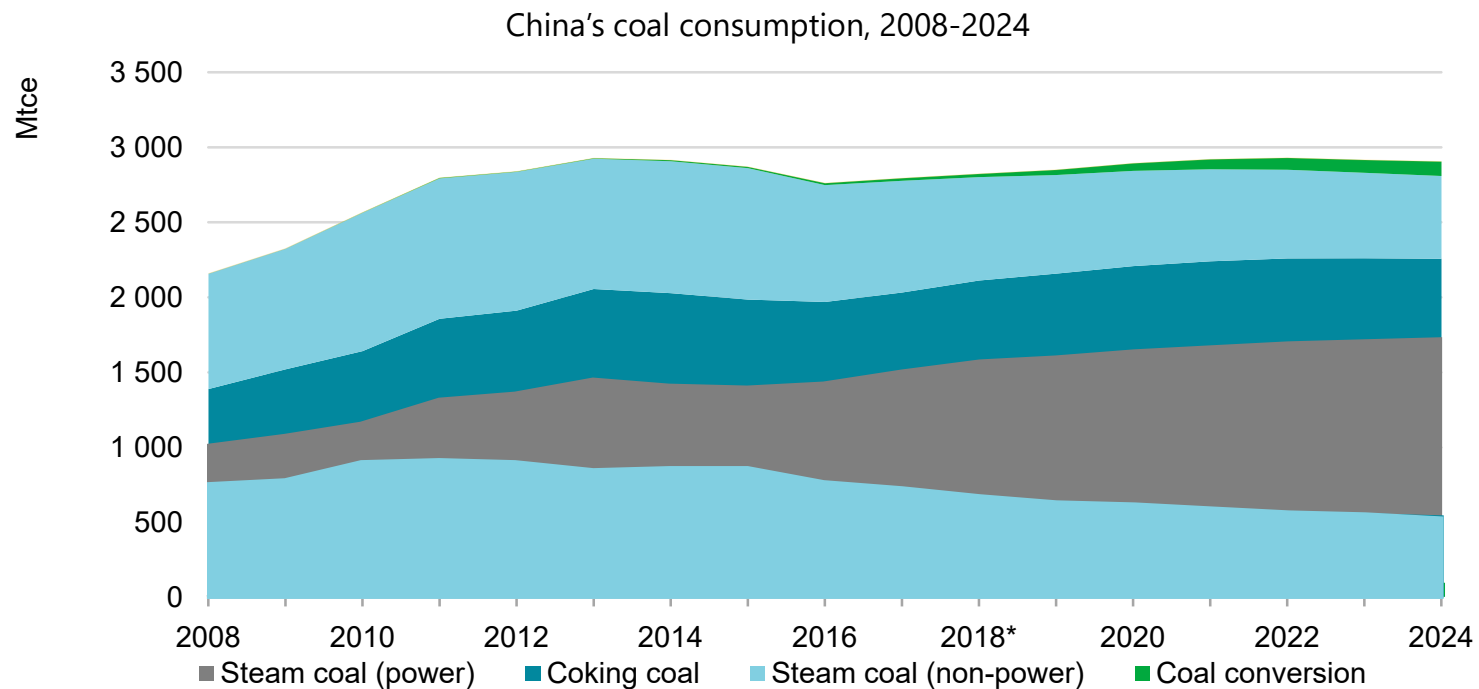
Despite numerous policy changes and announcements, coal demand is forecast to be stable with slight increase to 2024.

Global coal capacity, ex China & India, continues to decline



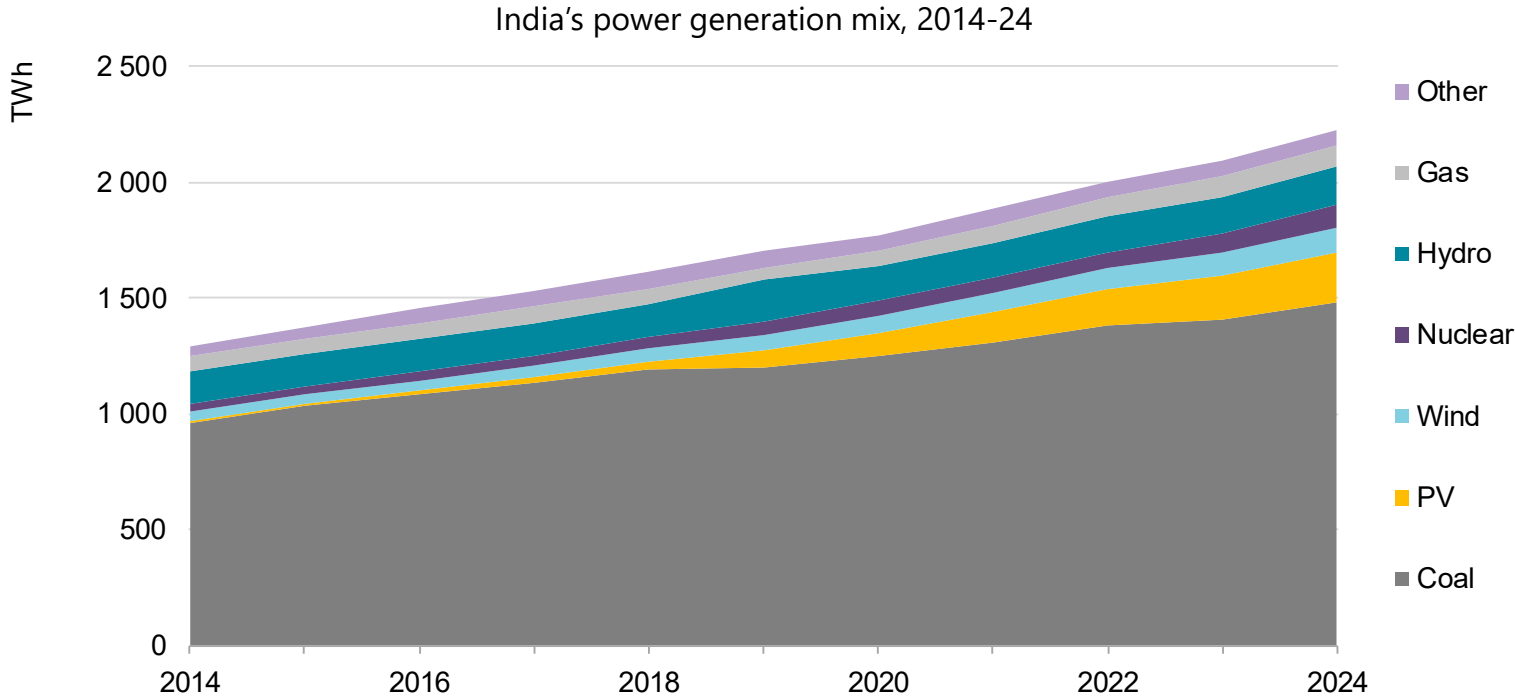
Driven by retirements in US and Europe, global coal power generation capacity outside China and India has been in decline since 2012.

China's coal consumption will plateau



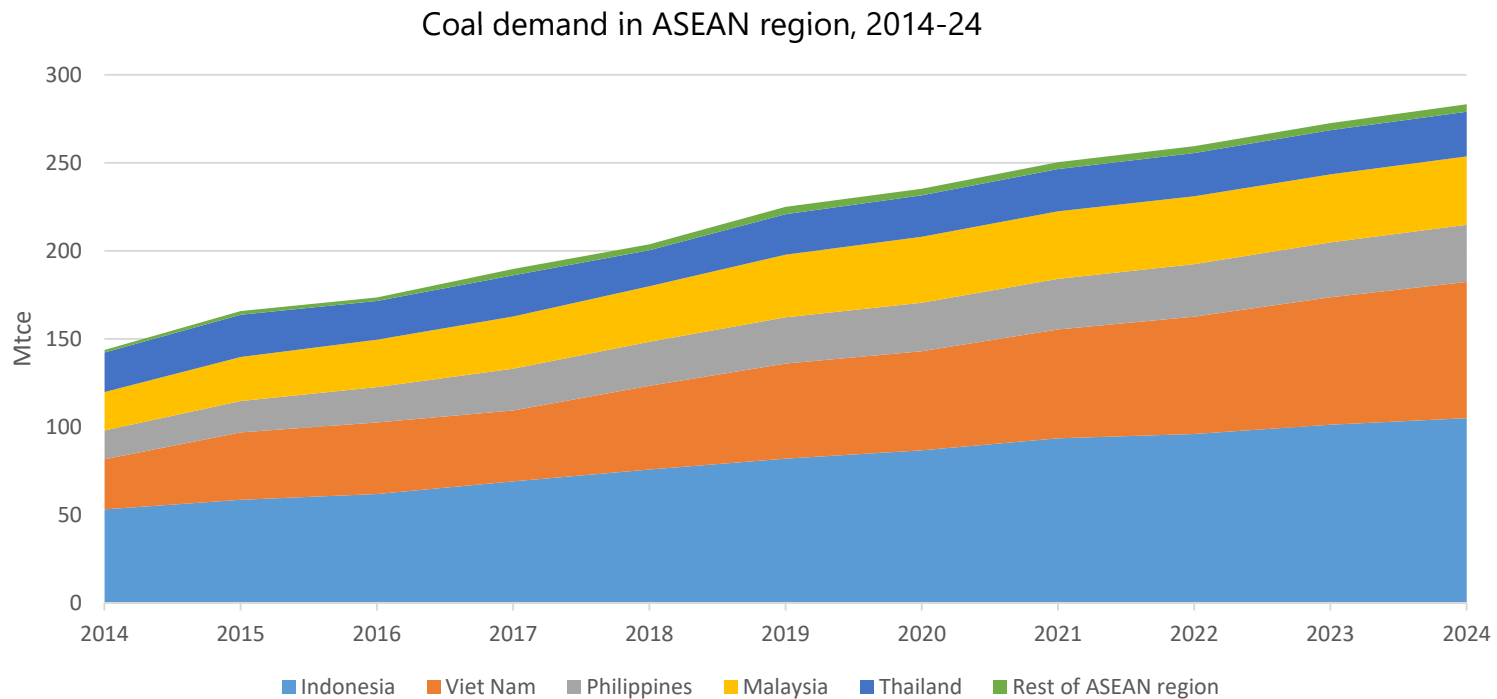
Coal power generation and coal conversion sectors are growing and offsetting the decline in coal use in heavy industry, residential and small industry sectors.

Coal still fuels India's economic growth



Despite wind capacity doubling and PV increasing six times, coal generation increases 4.5% per year.

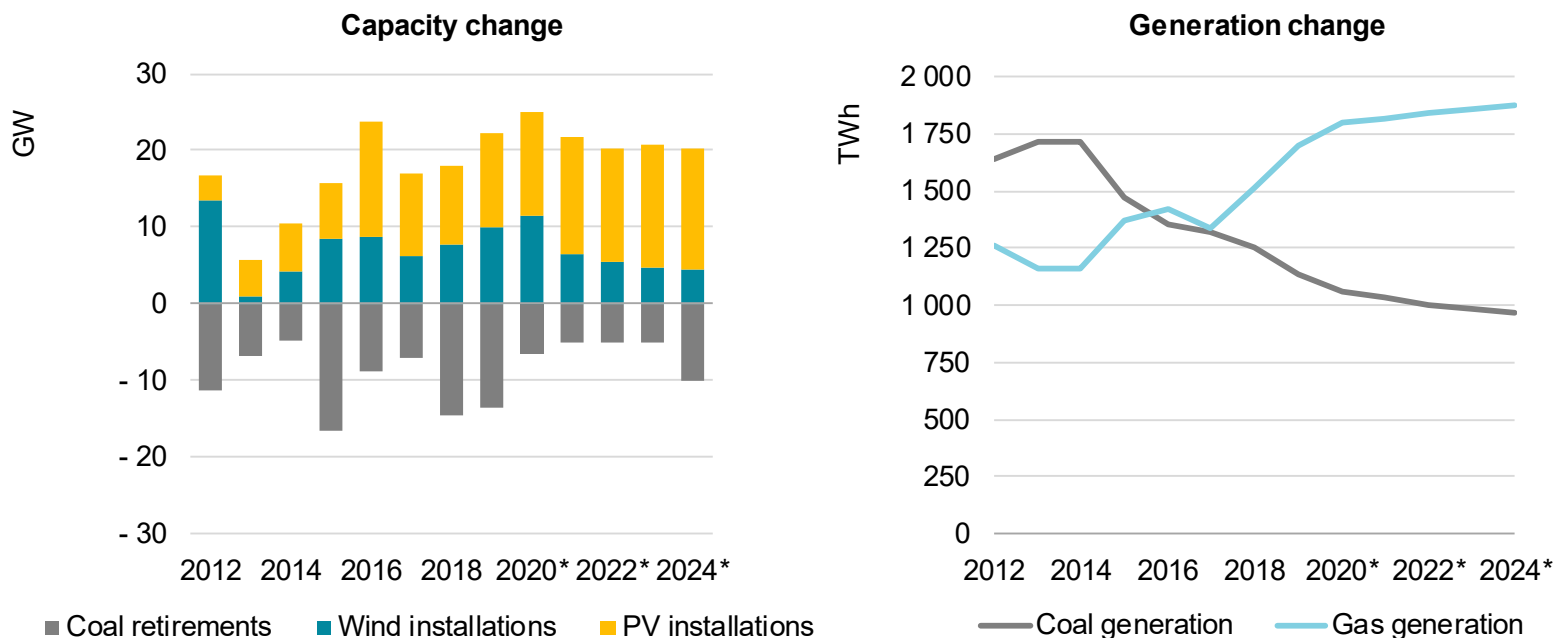
Coal demand in Southeast Asia grows over 5% p.a. through 2024



Coal consumption grows to meet increasing power demand in Southeast Asia. Indonesia and Viet Nam lead the growth.

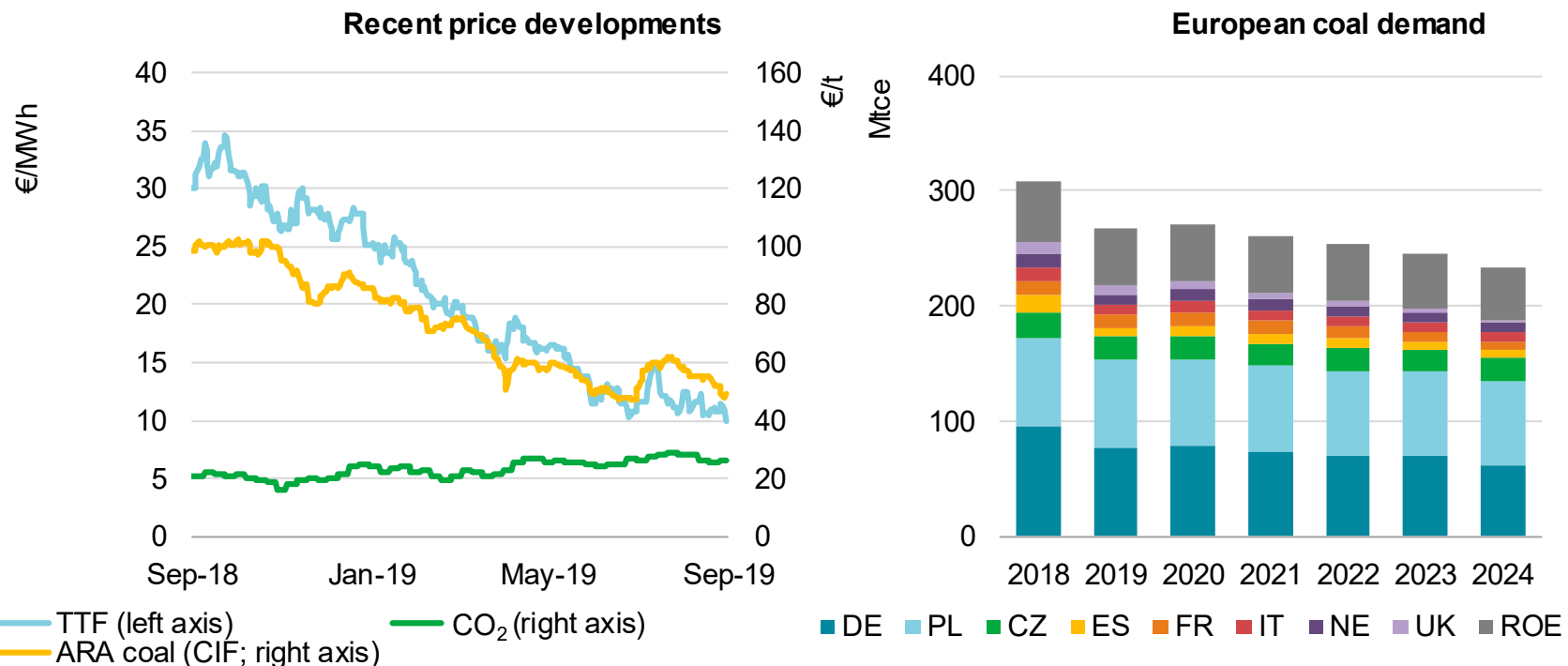
For US coal, decline continues despite policy announcements

Capacity and generation changes for coal and other sources, 2012-24*



Cheap and abundant natural gas, the climate policies of many states, will continue to squeeze coal out of the electricity market.

European coal demand will decline by 4.5% p.a.

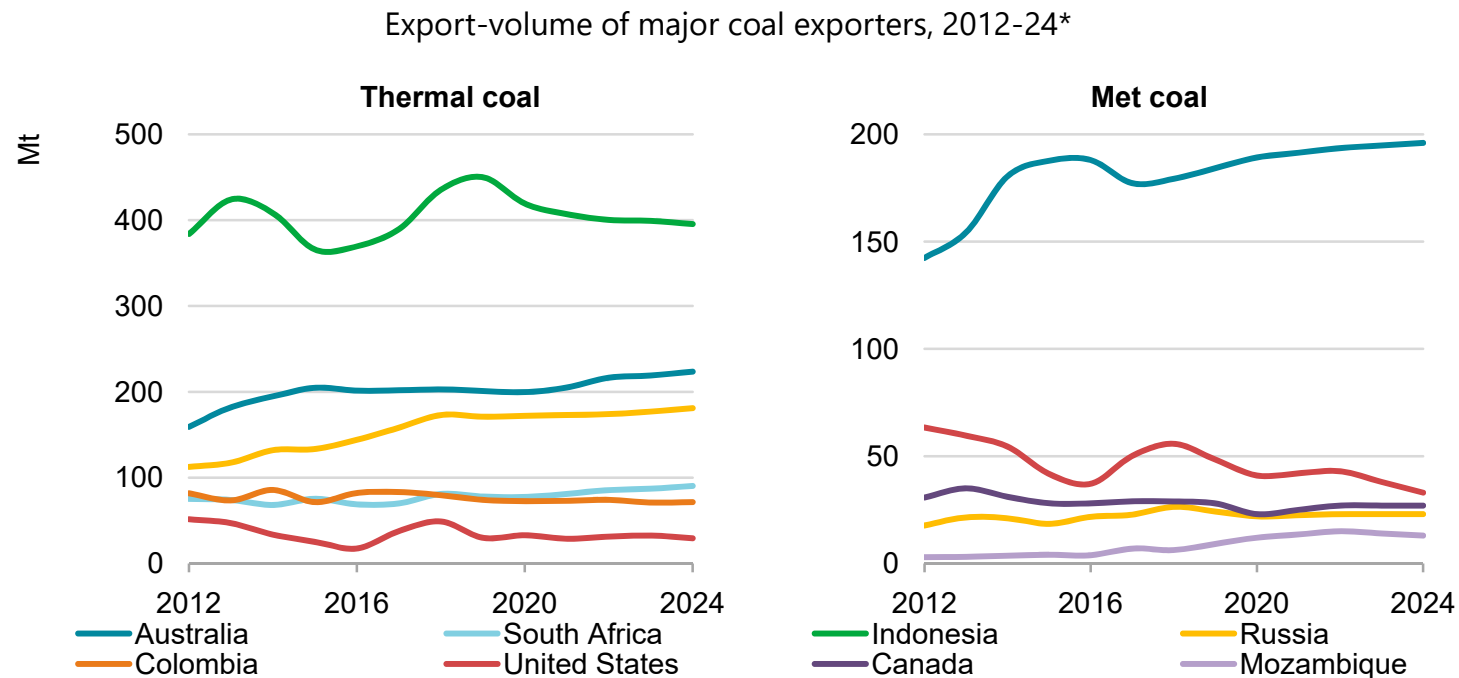


Low gas prices, higher CO₂ prices, policies to reduce air pollution and coal phase-out weigh heavily on EU28 coal use.

ROE = Rest of the Europe



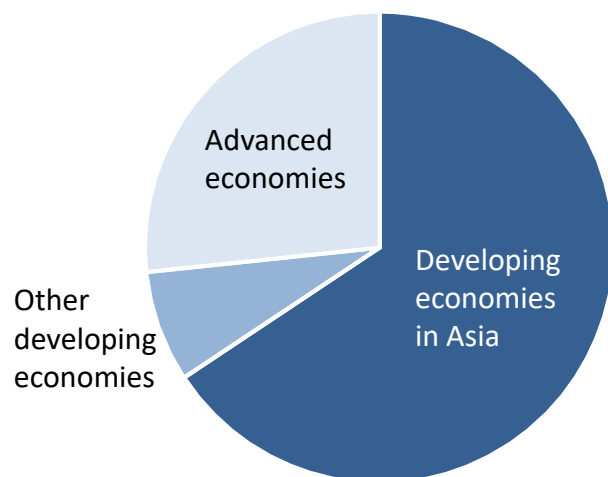
Exporters in the Pacific Basin do better than the Atlantic exporters



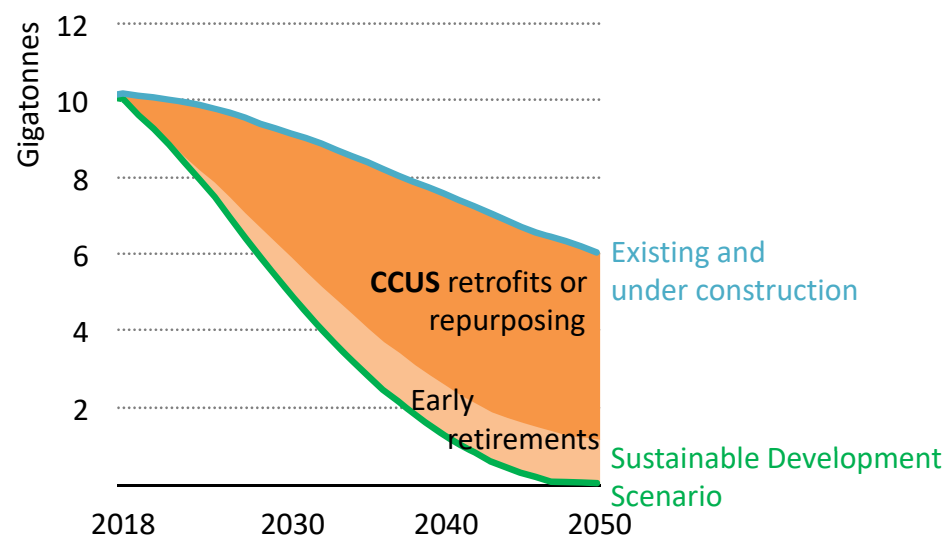
In 2018, Indonesia and Russia recorded all-time high coal exports, with Russian surpassing 200 Mt exports for the first time. Australia's and Mozambique's met coal exports are expected to rise.

Today's coal plants leave a legacy that technology can address

Coal-fired capacity, existing and under construction:
2 250 GW



Annual CO₂ emissions from coal-fired power plants



Investment in CCUS will be critical to ensure that the young coal fleet is compatible with climate targets, while repurposing them to provide flexibility can reduce CO₂ and pollutant emissions, and help integrate renewables

Key messages

- The **rebound of global coal demand in 2017 and 2018** was driven by coal power generation, which reached the all-time high in 2018. Global coal power generation is set to decline in 2019, but it may be too early to call it the start of a new trend.
- Coal demand will remain **stable through 2024**, as increasing demand in India and other countries in Asia will offset the drop in United States and the European Union.
- Coal demand in **China is forecast to increase only slightly**. Policy measures will determine the future course of coal demand in China, and therefore, global trends.
- **Uncertainty** continues to be the main feature of trade forecast. Exporters in the Pacific Basin will do better than those in the Atlantic.
- **Investments in coal mining assets are facing strong headwinds**, with metallurgical coal projects progressing more swiftly than thermal coal projects.

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