

9.b. APERC Coal Report 2021 (Draft)

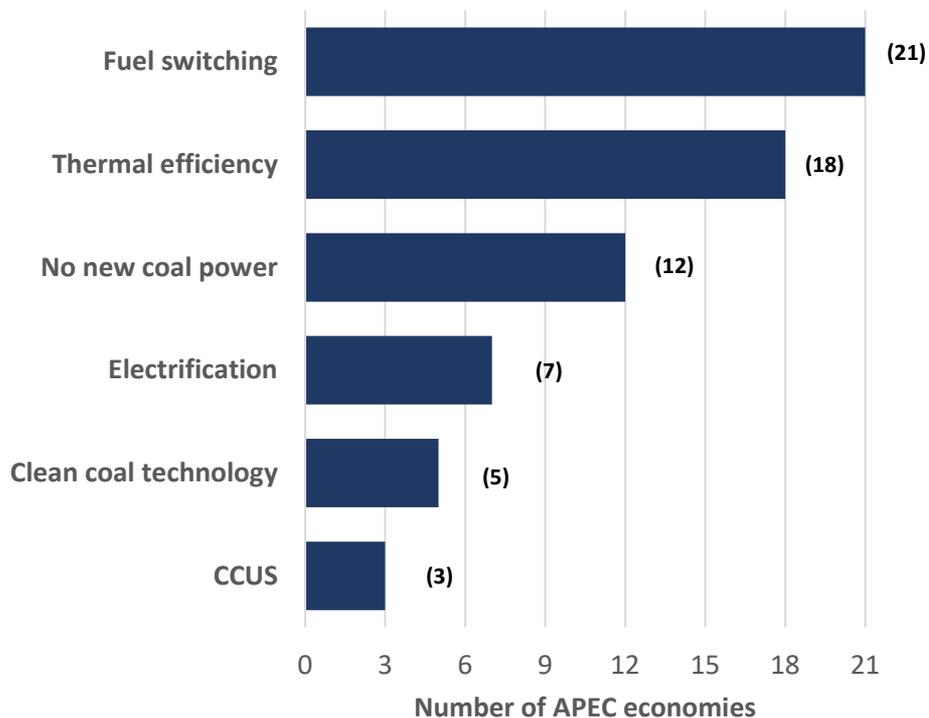
The 62nd Meeting of the APEC Energy Working Group (EWG)
19-21 October 2021 (EDT)

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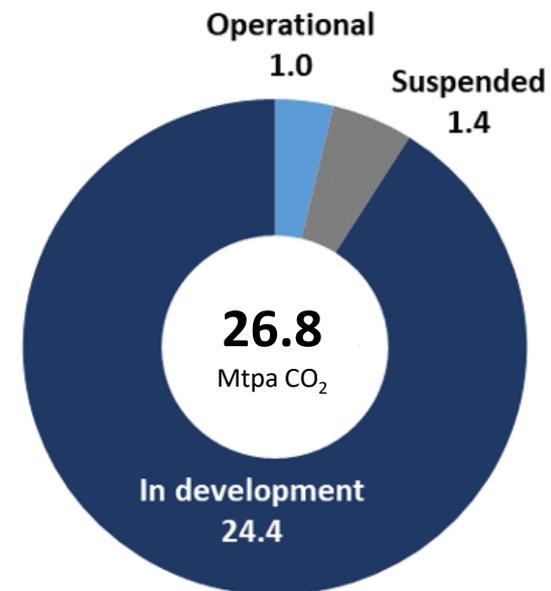
1-1. APEC coal policies: Decarbonisation

Current measures to promote decarbonisation in coal-consuming sectors



Sources: APERC, Boom and Bust (2021), Global Energy Monitor, EGEDA, E3G (2021).

Coal power-related CCUS capacities in the APEC region



Sources: Global CCS Institute

1-2. APEC coal policies: Financing

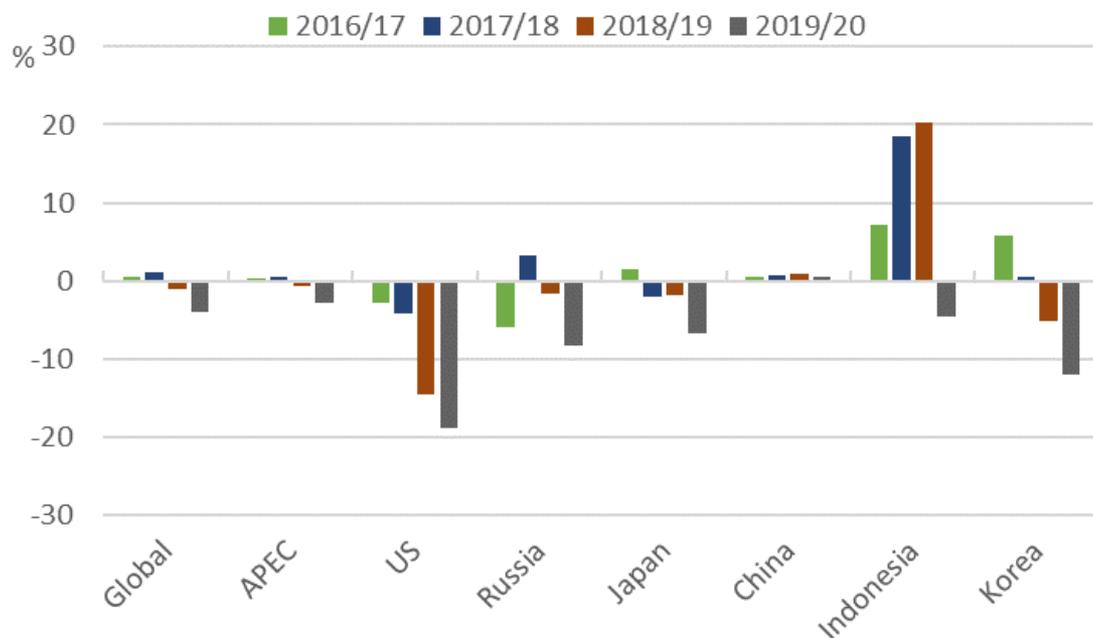
Selected financial and investment institutions committed to reduce or end involvement in coal supply and coal-fired power plants

Economy	Institutions
Australia	QBE Insurance Group
China	State Development & Investment Corporation
Japan	Marubeni, Mitsui, Itochu, Sojitz, Mitsubishi UFJ (MUFG), Sumitomo Mitsui Financial Group (SMFG), Japan Bank for International Cooperation (JBIC).
Republic of Korea	Teachers Pension System, Government Employees Pension System, Export-Import Bank of Korea.
Singapore	Oversea Chinese Banking Corp, United Overseas Bank
The United States	Chubb Ltd.

Sources: IEA (2019), Boom and Bust (2021).

2-1. APEC coal consumption: In a global context

Coal consumption growth rate of selected APEC economies, 2016-2020

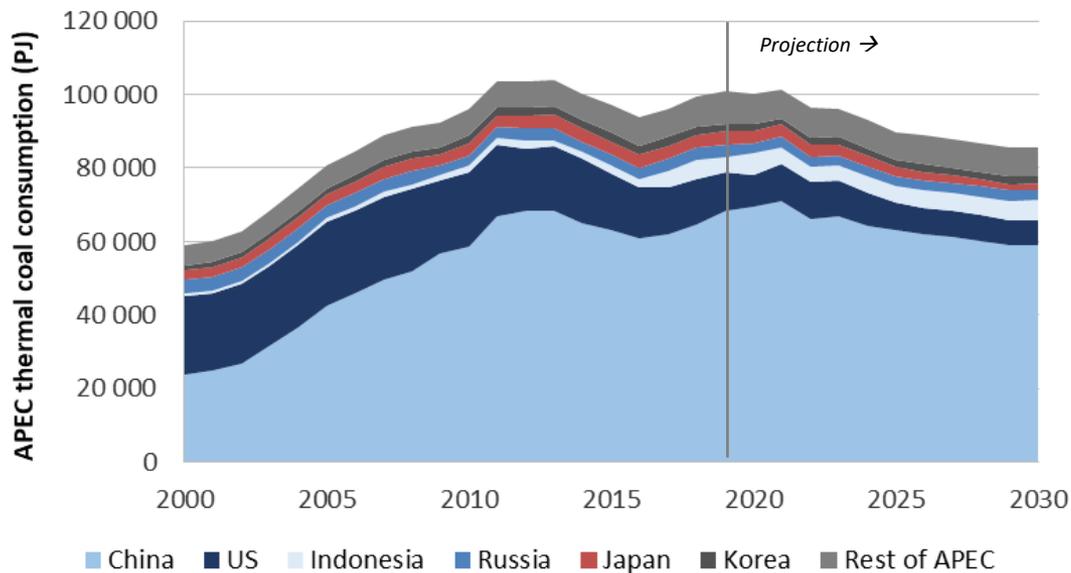


Source: (BP, 2021), APERC calculations

- Global coal consumption declined by 3.9% in 2020, whereas the decline was only 2.8% in APEC. The decline was recorded in two consecutive years.
- Coal consumption in the US decreased by 19% in 2020, which continues an accelerating decline in recent years.
- China was the only APEC economy to record an increase in coal consumption in 2020 (0.6%).

2-2. APEC coal consumption: Thermal coal

APEC thermal coal (including lignite) consumption since 2000, with projections to 2030

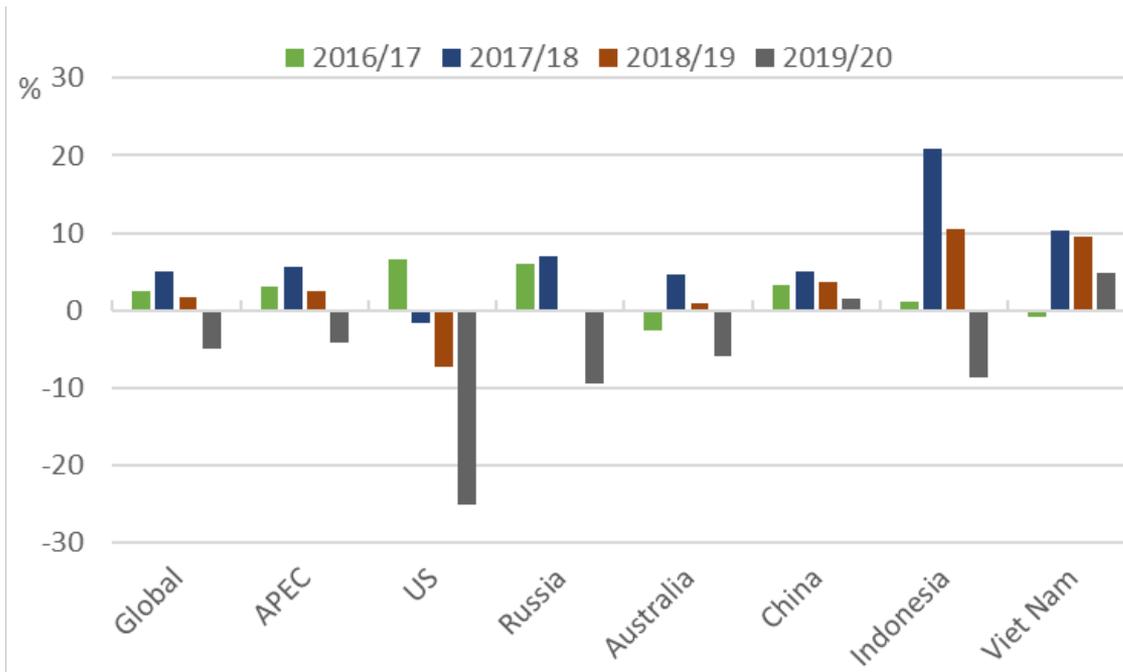


Source: EGEDA (2021) and preliminary APERC forecasts from forthcoming APEC Energy Demand and Supply Outlook (2021)

- APEC thermal coal consumption accounted for 82% of all APEC coal consumption in 2018.
- China remained the largest consumer, accounting for 65% of APEC thermal coal consumption in 2018.
- In 2018, the US was the second-largest thermal coal consuming economy, accounting for 12%.
- Thermal coal consumption is projected to decline through to 2030.

3-1. APEC coal production: In a global context

Coal production growth rate of selected APEC economies, 2016-2020

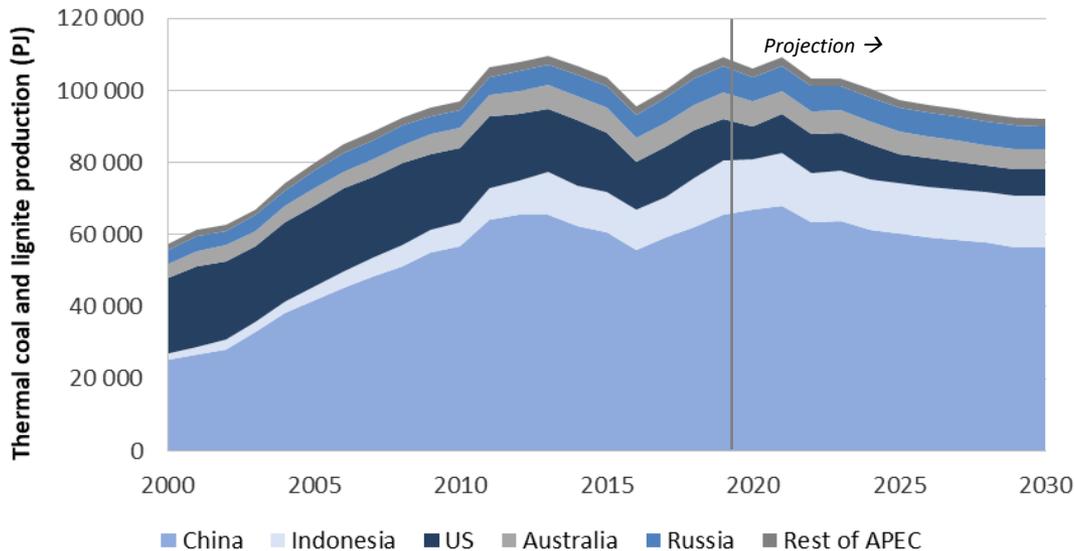


Source: (BP, 2021), APERC calculations

- Global (and APEC) coal production fell by a greater amount than coal consumption in 2020, with a fall of 4.9% (4.2% for APEC).
- Significant falls were recorded in the US (-25%), Russia (-9%), Indonesia (-8%), and Australia (-6%).
- At odds with a fall in production in many economies in 2020, Viet Nam and China posted increases of 4.8% and 1.4%, respectively.

3-2. APEC coal production: Thermal coal

APEC thermal coal (include lignite) production since 2000 with forecasts to 2030

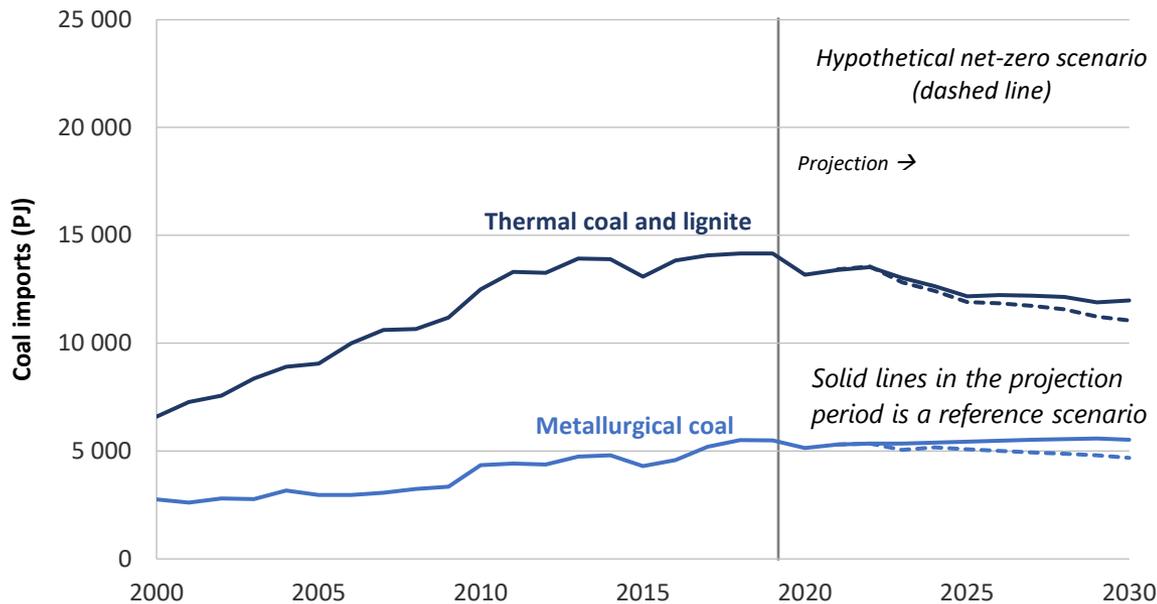


Source: EGEDA (2021) and preliminary APERC forecasts from forthcoming APEC Energy Demand and Supply Outlook (2021)

- APEC thermal coal production accounted for 81% of total APEC coal production in 2018.
- In 2018, China produced 59% of APEC thermal coal production. Indonesia and the US followed, accounting for 13% of APEC coal production, then Russia (7%), and Australia (7%).
- Thermal coal production is projected to decline through to 2030, led by the US (-46%), Australia (-20%), Russia (-12%), and China (-9%). Indonesia is the only economy projected to increase production (+2.9%).

4-1. APEC coal trade: Coal imports

APEC coal imports from 2000, with projections to 2030



Source: EGEDA (2021) and preliminary APERC forecasts from forthcoming APEC Energy Demand and Supply Outlook (2021)

Thermal coal

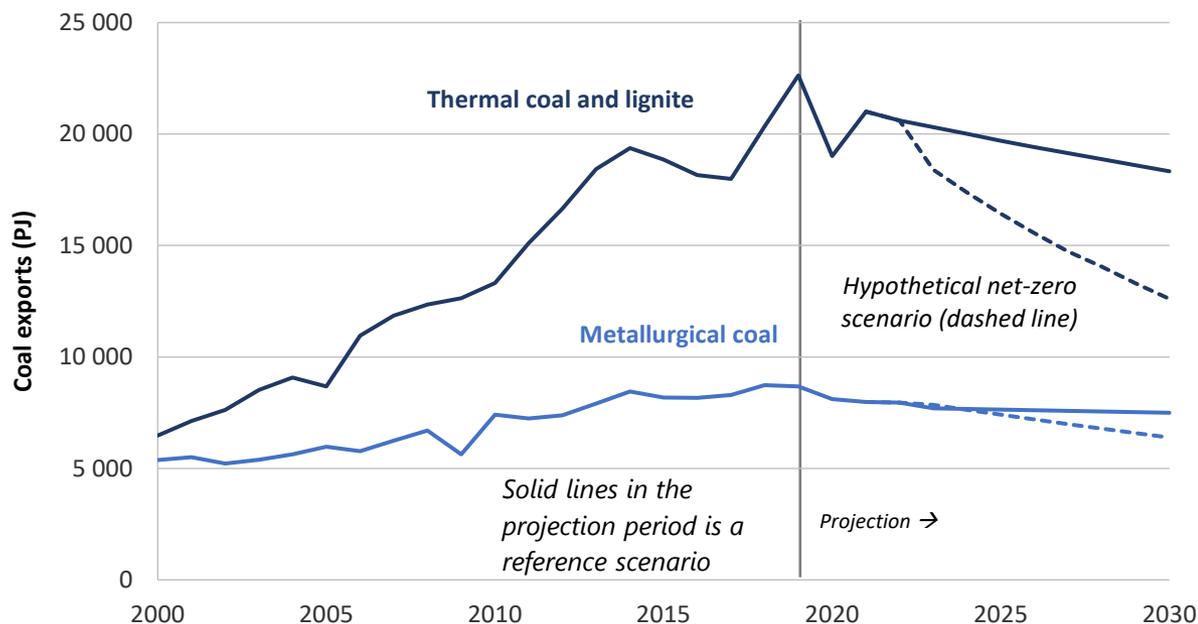
- China, Japan, Korea, and Chinese Taipei have accounted for around 75% of imported thermal coal in the APEC region in recent years.

Metallurgical coal

- China, Japan and Korea, have accounted for around 85% of total APEC metallurgical coal imports in recent years.

4-2. APEC coal trade: Coal exports

APEC coal exports from 2000, with projections to 2030



Source: EGEDA (2021) and preliminary APERC forecasts from forthcoming APEC Energy Demand and Supply Outlook (2021)

Thermal coal

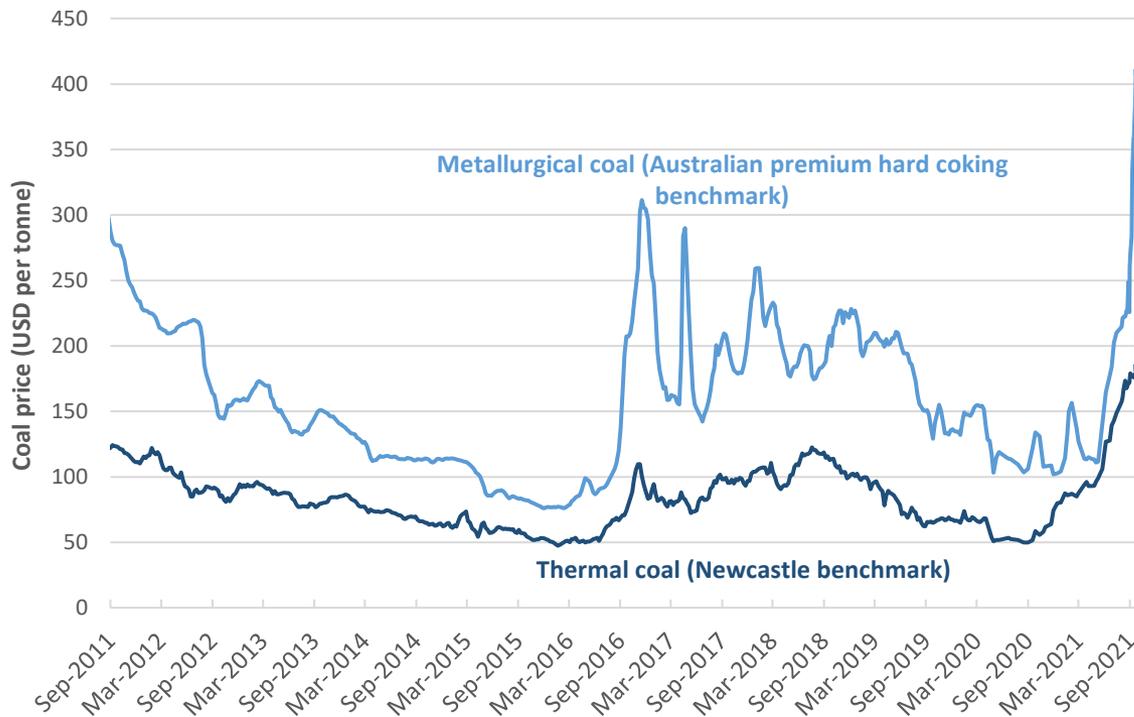
- Major APEC thermal coal exporting economies are Indonesia, Australia, Russia and the US, accounting for over 90% of APEC thermal coal exports for a decade.
- 80% of APEC's thermal coal volume was exported to other APEC members economies.

Metallurgical coal

- The top metallurgical coal suppliers in APEC were Australia, the US, Canada and Russia, providing 98% of APEC's metallurgical coal exports in recent years.

5. Coal prices: Spot price spikes in 2021

Coal spot prices, September 2011 to September 2021



Source: globalCOAL, HIS, Fastmarkets, Trading Economics.

Notes: Newcastle benchmark is the price for seaborne thermal coal in the Asia-Pacific region

China demand

- Surging economic growth has led to very large increases in electricity demand

China supply

- Emissions commitments and mining safety actions have diminished China's production

Wider APEC

- Floods and import restrictions have exacerbated demand and supply imbalance
- Demand increase from Korea and Japan

Net result is severely depleted inventories in China and a scramble to secure additional supply for the coming winter

→ Industrial shutdowns; blackouts

→ Extreme price spikes in 2021



Thank you for your kind attention.

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