

9.c. APERCC Coal Report 2020

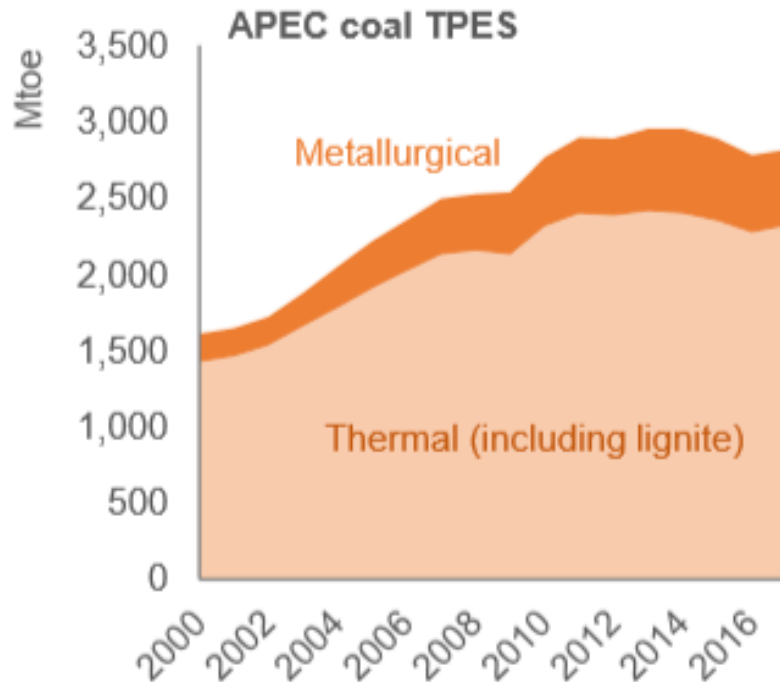
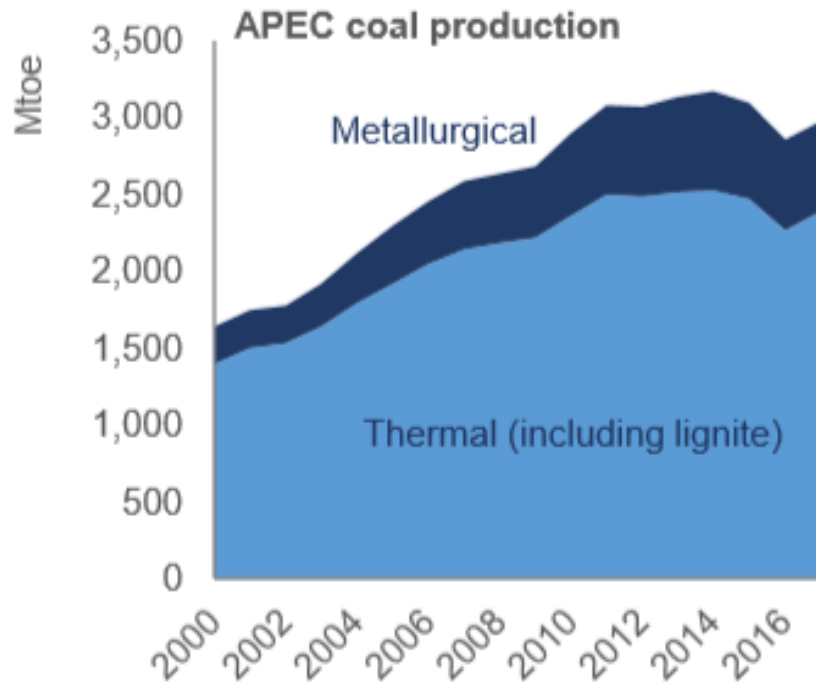
Plenary Meeting

The 60th Meeting of APEC Energy Working Group (EWG)
9-11 December 2020

Mathew Horne, Researcher



APEC coal production and coal TPES to 2017

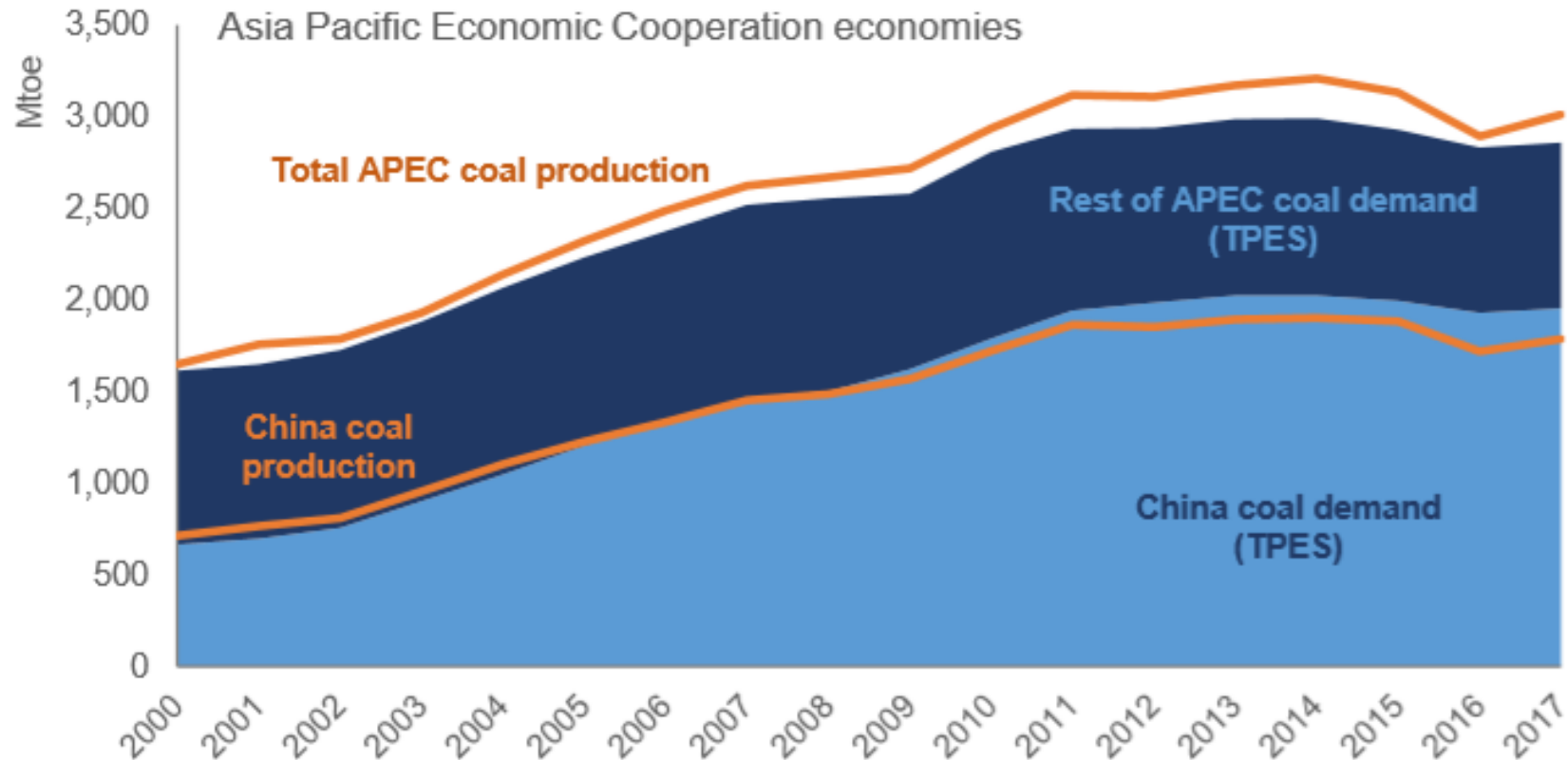


Source: (IEA, 2019a), APERC calculations

APEC coal production and coal total primary energy supply (the quantity available to meet domestic demand) reached a high plateau from 2010 to 2017

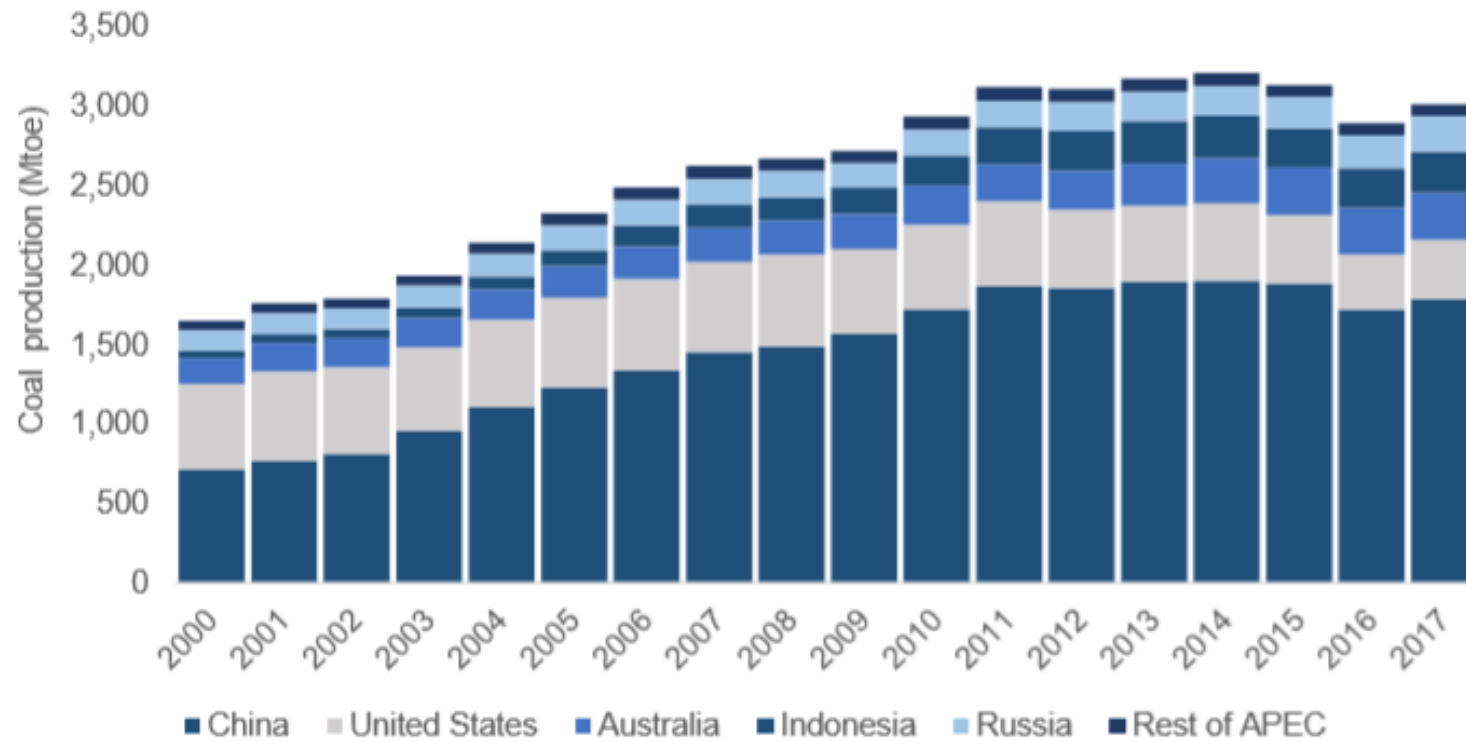
Metallurgical coal has become more prominent in the total market for coal

China is the dominant coal producer and consumer in APEC



China 's domestic coal production was insufficient to meet its domestic appetite for coal from about 2009 onwards

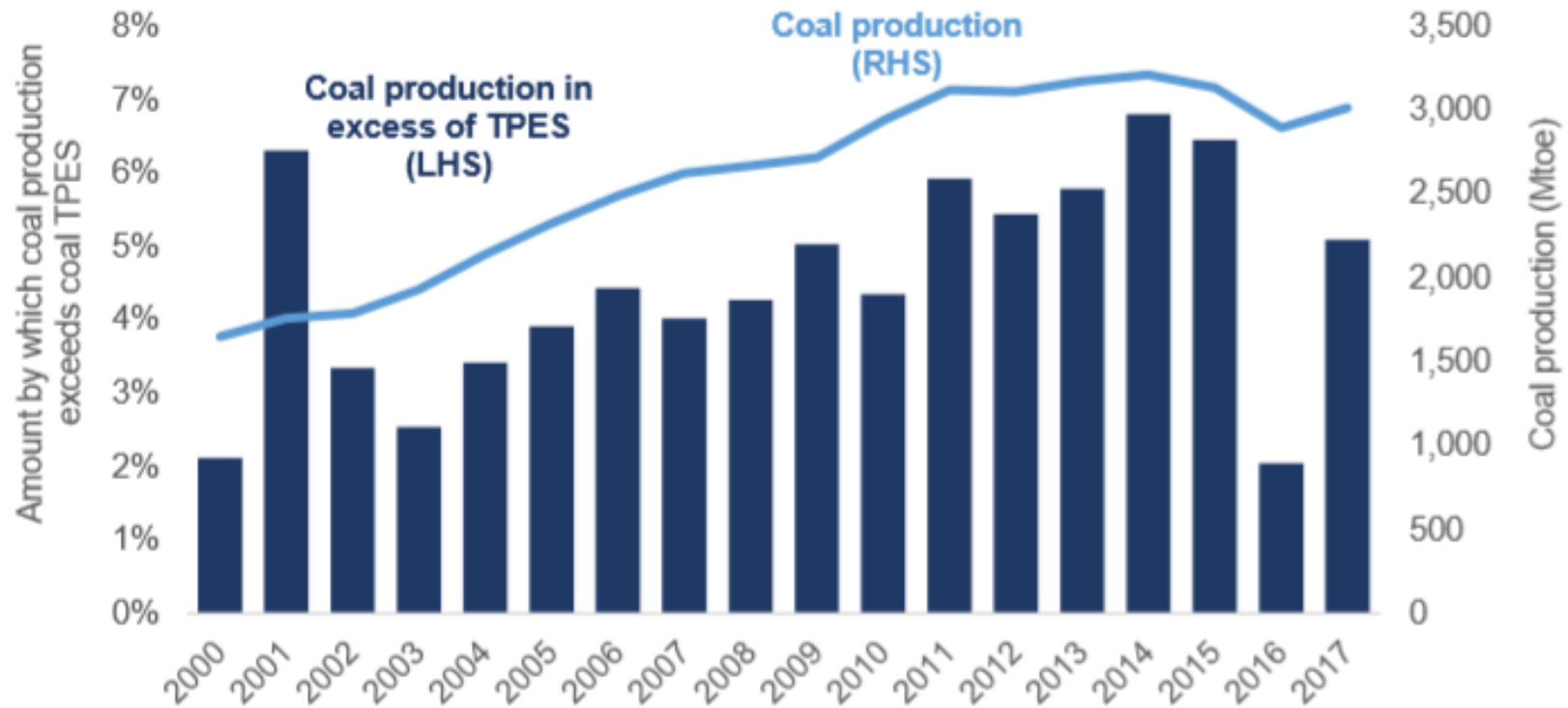
Five APEC economies produce almost all coal in APEC



Source: (IEA, 2019a) APERC calculations

Even with consistently large production levels, China is now a net importer of both thermal and metallurgical coal

APEC is a net exporter of coal to the rest of the world



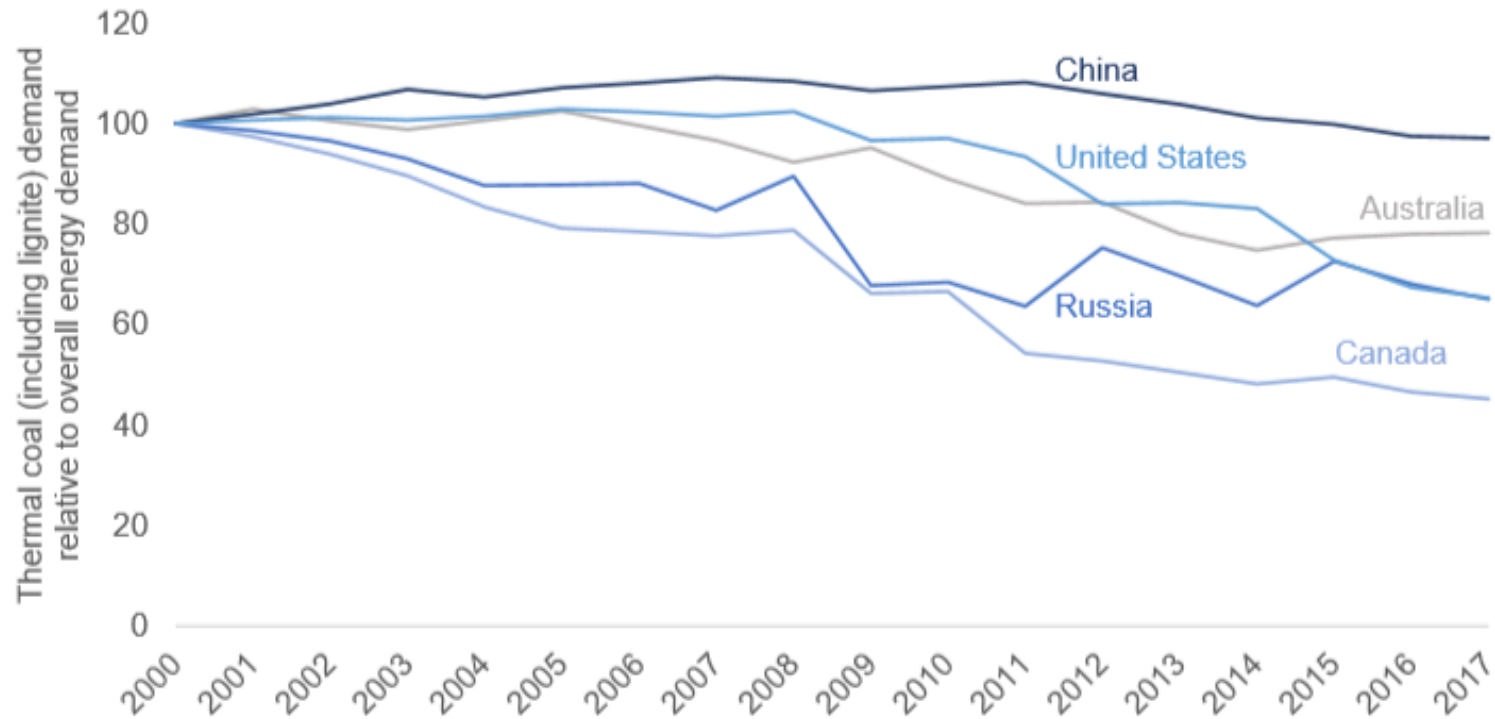
Source: (IEA, 2019a) APERC calculations

A primary reason for lower coal production in 2016 were temporary policies in China to limit coal mine operations



Thermal coal in APEC

Thermal coal demand relative to all energy demand

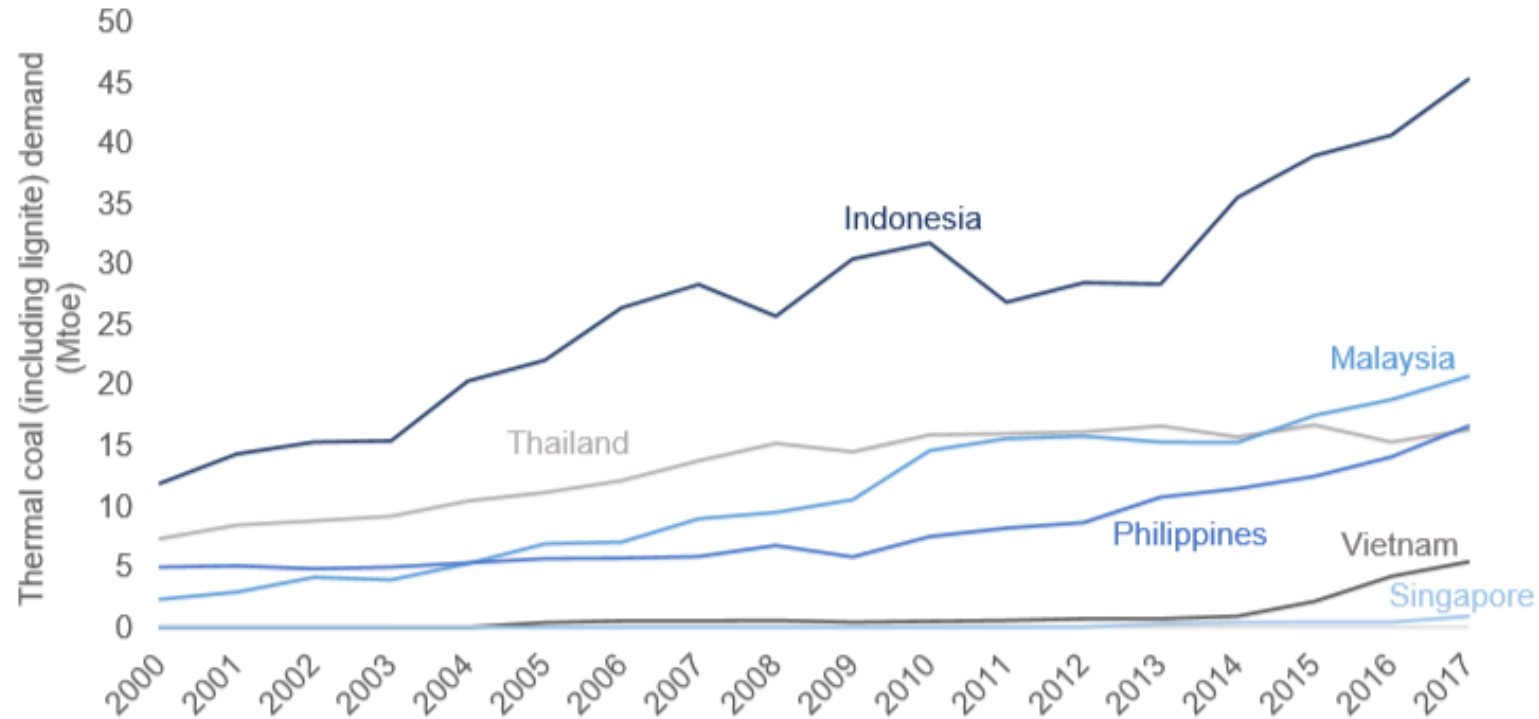


Source: (IEA, 2019a) APERC calculations

China's demand for thermal coal relative to demand for all energy has been decreasing

The relative decline is more pronounced for other select APEC economies

APEC southeast Asia thermal coal demand was strong through to 2017



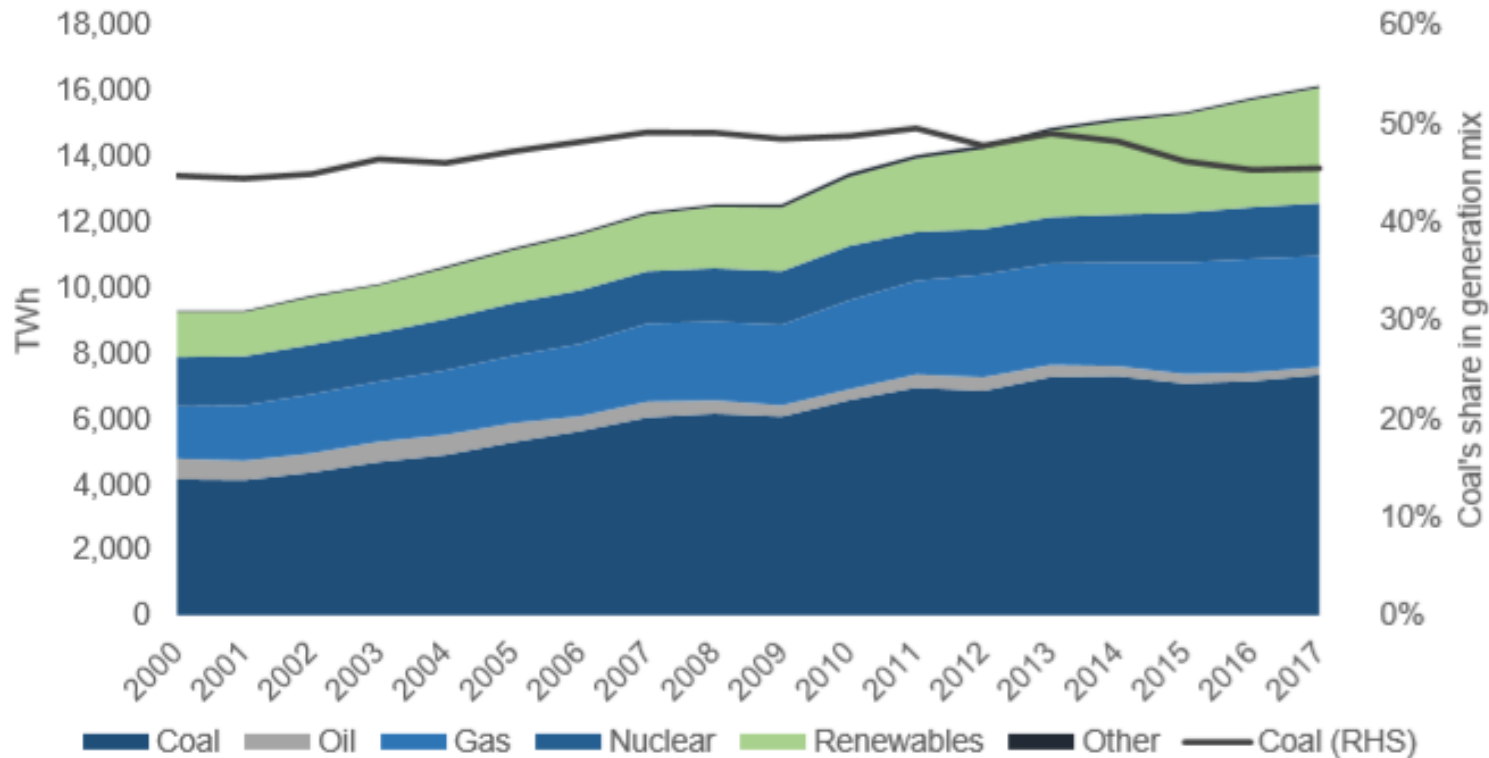
Source: (IEA, 2019a) APERC calculations

Notes: Brunei Darussalam does not consume coal before 2019.

Despite strong growth in demand for thermal coal in southeast Asia, it's uncertain whether this will continue through the 2020s.

Limited financing options, competitive alternative generation technologies, and policy is bringing about a shift away from thermal coal

APEC power generation

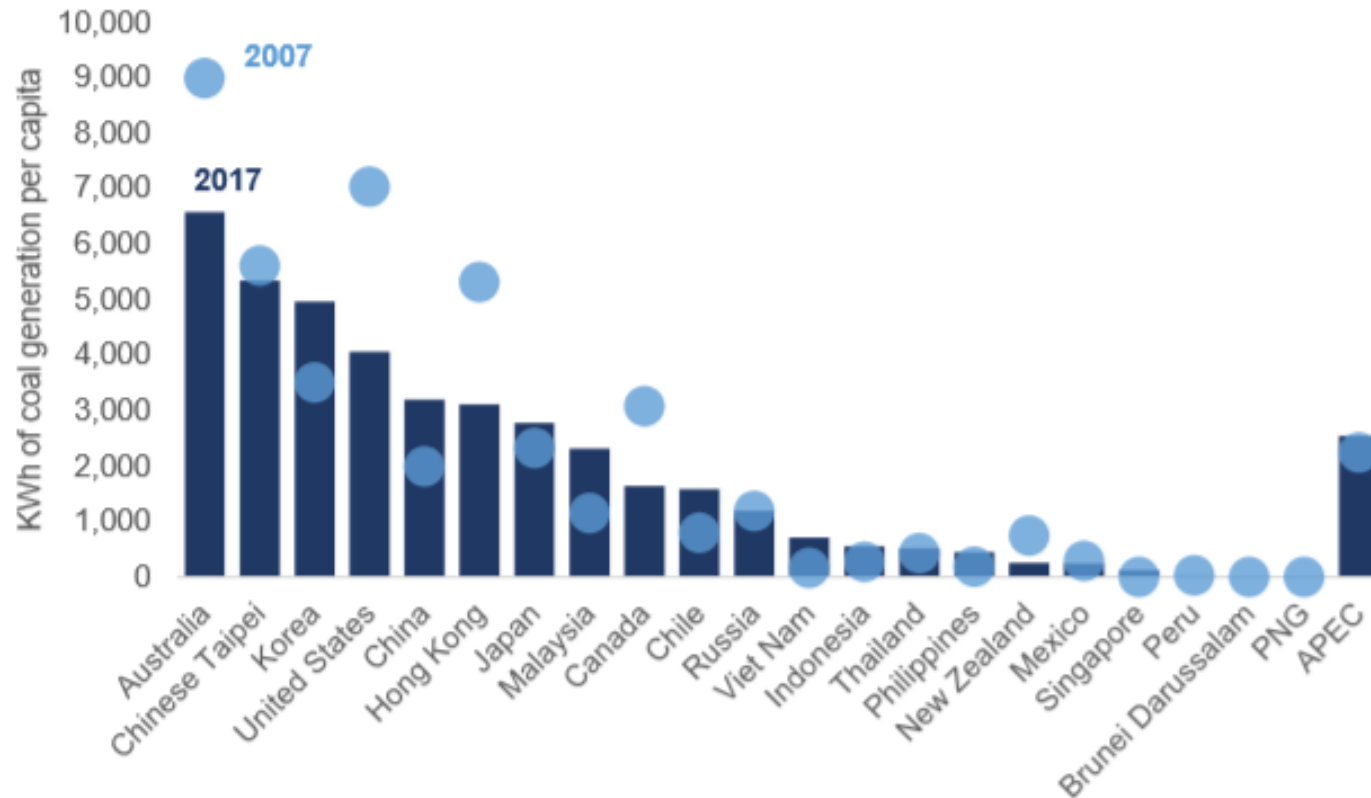


Source: (EGEDA, 2019), APERC calculations.

Coal maintained a high plateau in APEC power generation to 2017

...But coal's share in the APEC generation mix began to fall from 2013 to 2017

APEC coal-fired power generation per capita

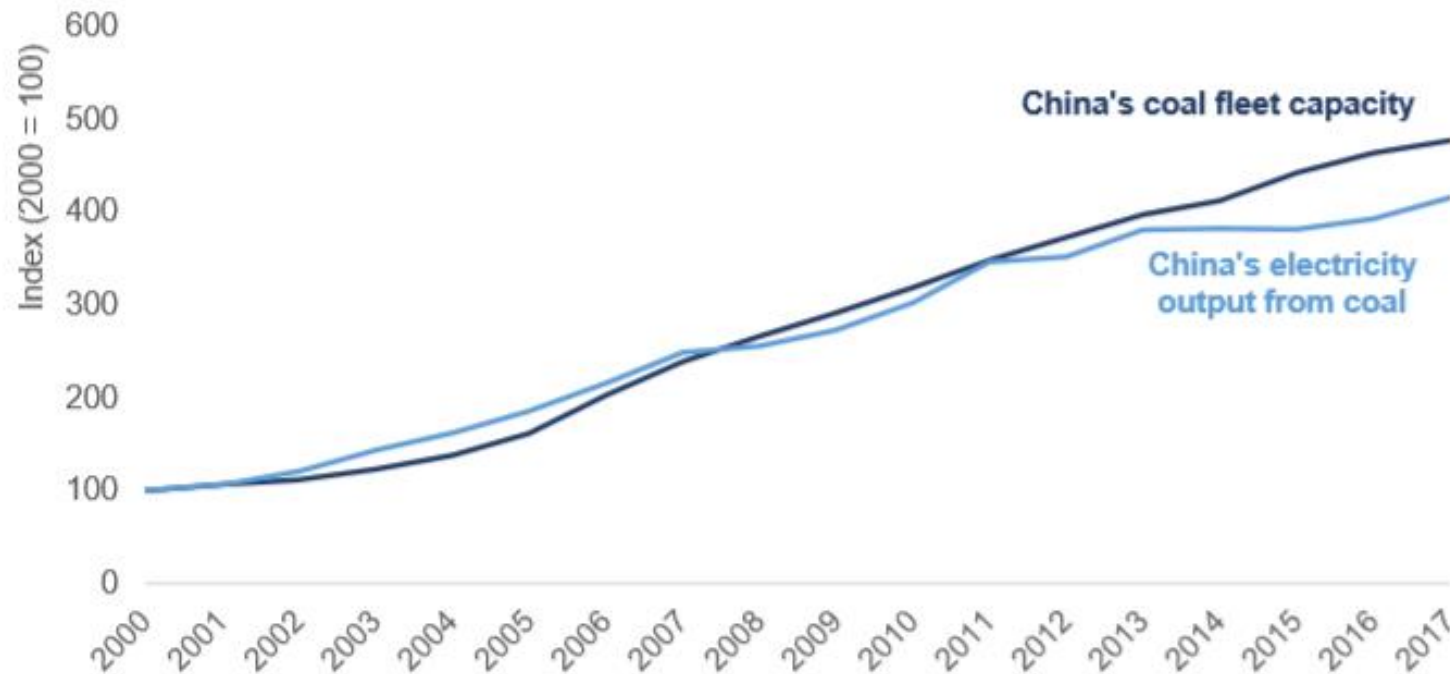


Source: (EGEDA, 2019), APERC calculations

Per capita coal-fired generation trends are mixed across APEC economies

There has been an overall increase in per capita generation in the decade to 2017

China continued to build coal-fired power plants but utilisation rates began to fall



Source: (APERC, 2019).

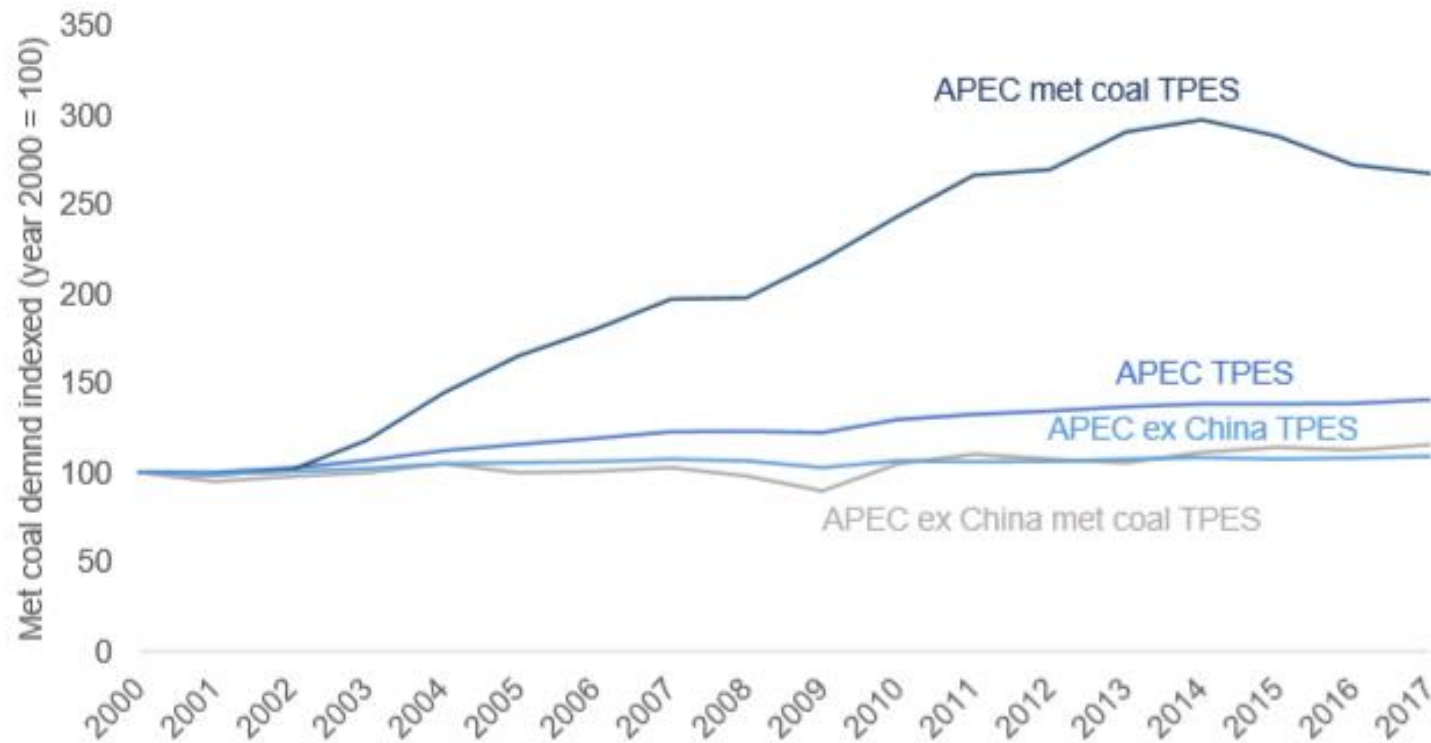
China coal-fired power capacity decoupled from coal-fired electricity generation in 2013

This accords with falling average coal-fired power plant utilisation rates in China



Metallurgical coal in APEC

Metallurgical coal demand relative to all energy demand

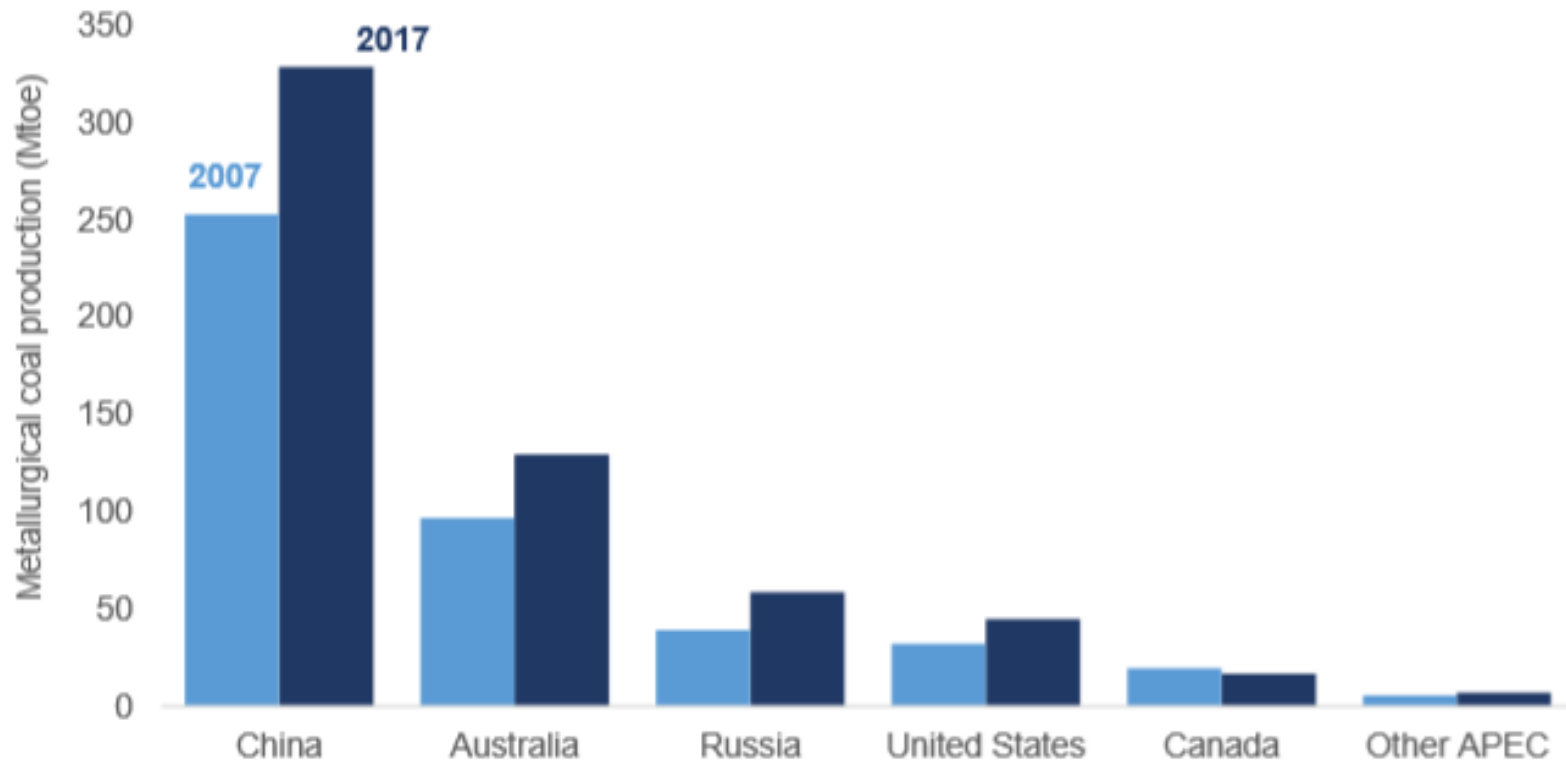


Source: (IEA, 2019a) APERC calculations.

Growth in metallurgical coal consumption has been fueled by China's rapid industrialization

...though this growth turned negative from 2014 to 2017

Metallurgical coal production



Source: (IEA, 2019a) APERC calculations.

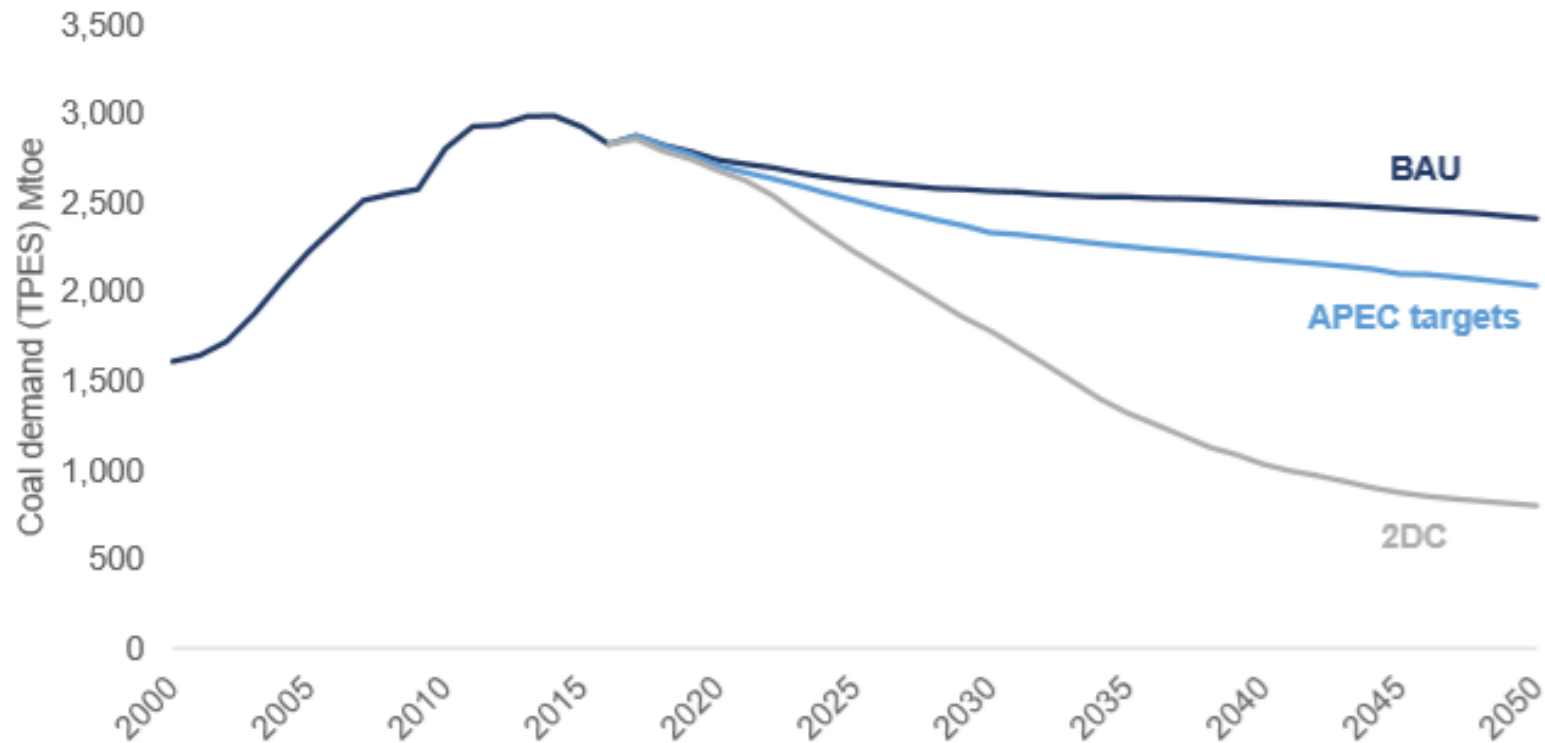
China uses almost all metallurgical production domestically

Whereas Australia, the US, Canada and Russia are all metallurgical coal exporters



APEC coal outlook

Coal outlook – demand scenarios from the 7th Outlook

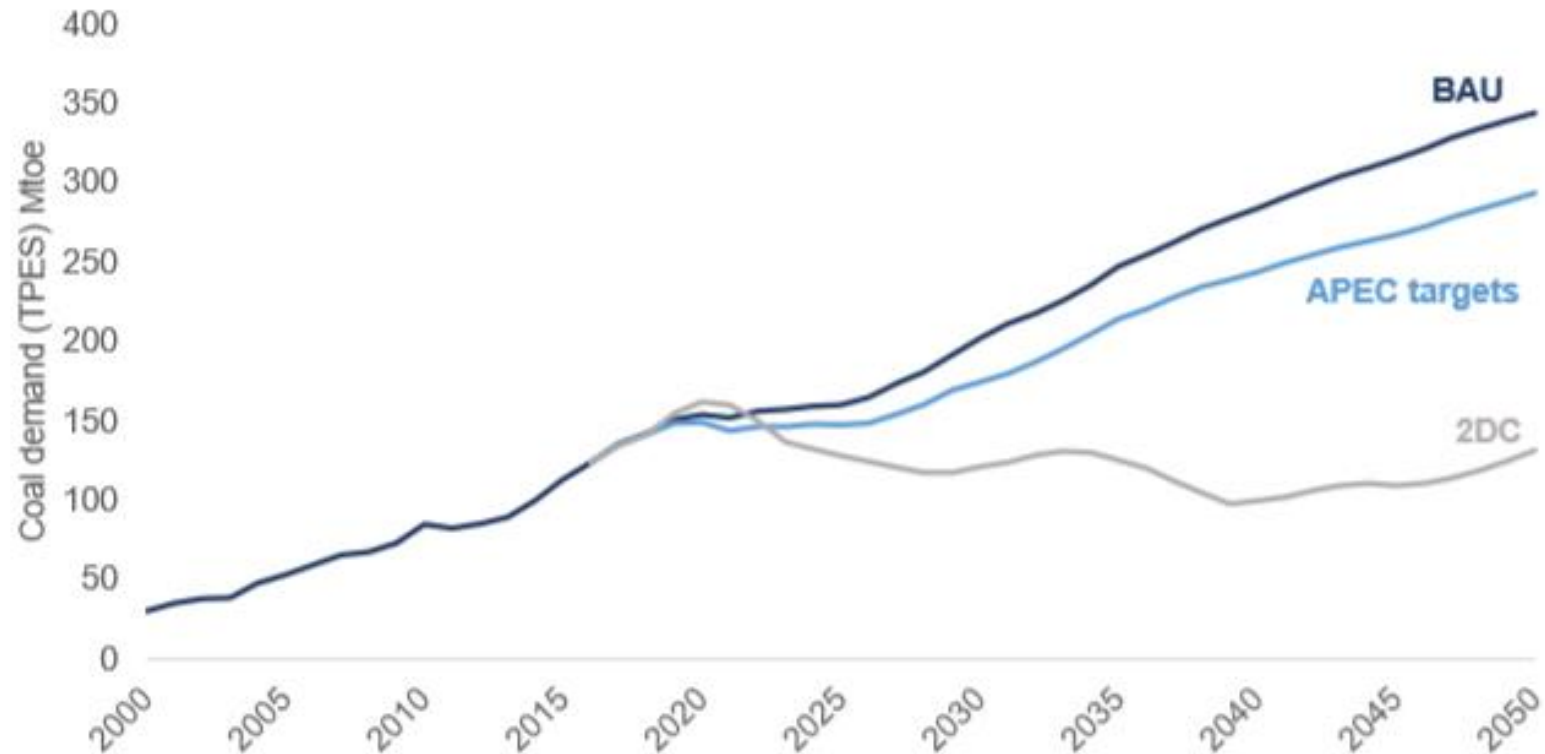


Source: (APERC, 2019).

The 7th APEC Energy Demand and Supply Outlook (2019) presents three scenarios with differing trajectories for APEC coal demand

Growth in coal is unlikely, even in a BAU scenario world

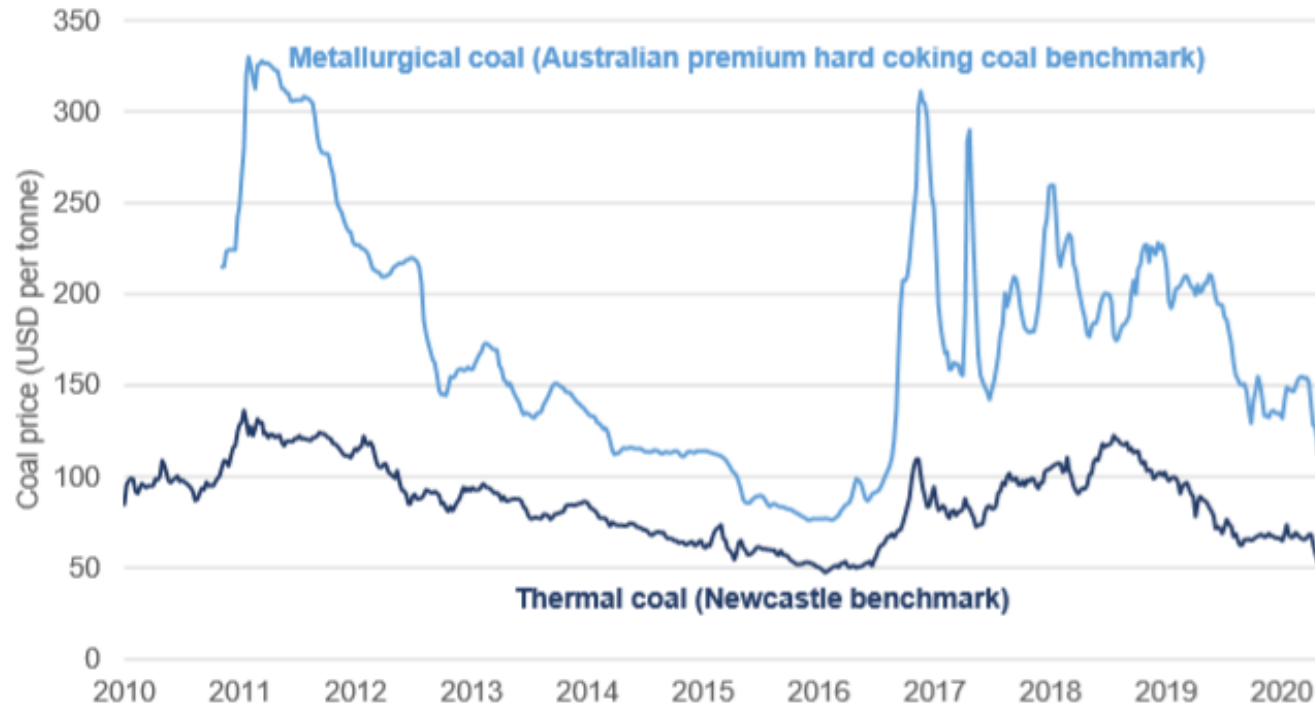
Southeast Asia coal demand projections



Source: (APERC, 2019).

In 7th Outlook scenarios with low ambitions for climate mitigation, coal demand continues to grow in Southeast Asia

Coal prices are forecast to recover from the COVID-19 impacts



Source: globalCOAL, IHS

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

USD per tonne	Actual			Projection	
	2018	2019	2020	2021	2022
Thermal coal	106	77	60	65	70
Metallurgical coal	207	176	120	140	155

Source: IEEJ



Thank you

<https://aperc.or.jp/>

