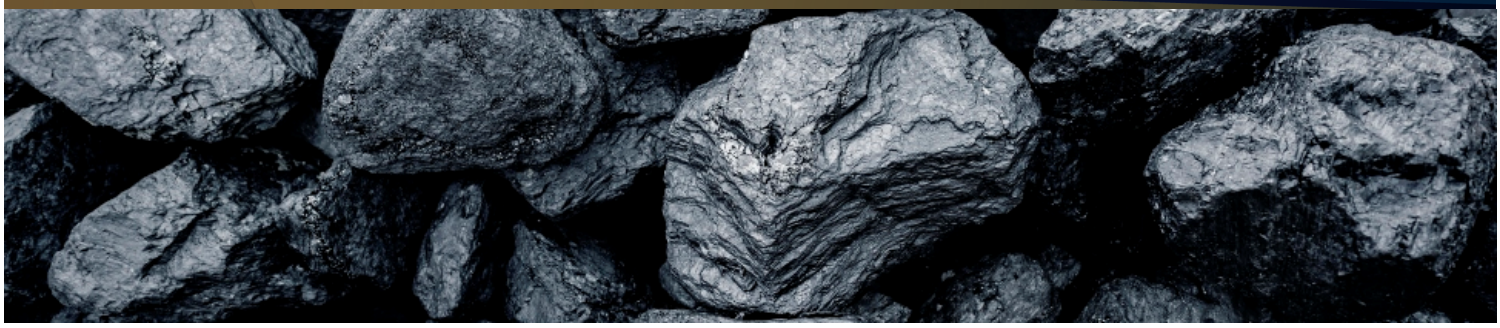

COAL SECTOR UPDATE

Starting to Calm Down

Domestic Coal Policy: PP No 37/2018 and PP No 23/2018

The Government of Indonesia has reduced coal mining company income tax to 25% from an original 45%, with an additional deduction of 10% from the acquisition of net profits for holders of Mining Operations Special Mining Permits (IUPK OP) listed in PP No. 37 of 2018. This new policy will alleviate coal mining producers' tax burden, thus definitely pumping up companies' net profits. In addition, the government plans to revise PP No. 23 of 2018 regarding coal mining licenses, where producers can extend their Contract of Work (Kontrak Kerja/KK) in 2 years before it expires. In this regard, the government plans to accelerate the extension of the permit to 5 years before the KK is completed, so that producers can extend their KK faster. Mining companies can also convert KK into IUPK OP, so they can benefit from declining corporate income tax.

Potential Demand from China, but...

China's coal production only increased1.62% YoY in 10M18, as a result of their policy to limit coal mine production – demand for coal was still high with winter is coming, reflected in China's coal imports which rose 11.07% YoY in 10M18. Production quotas tends to be limited, but a huge demand boosts more imports into China. Winter also has the potential to encourage the use of heating units, hence will increase electricity consumption, which is projected to potentially grow by 12.52% YoY to 7.10 trillion Kwh in FY18E (vs. 6.31 trillion Kwh in FY17).

...China Thermal Coal Cuts Import in the Early 2019

There is no strong catalyst to drive coal demand at this time. Even though Chinese coal imports is rising, but overall coal demand only grew by 1.62% YoY in 10M18. Thus, the prospect of more coal imports in 2019 is looking unlikely; China reportedly imposed coal import quota restrictions to extend until mid-1Q19. Coal imports this year were set at no more than 270.9 million tons of total in 2017. The quota limitation aims to limit thermal coal imports, which will have a significant negative impact on the price of thermal coal until the Chinese government fulfills its import quota. This not only has a negative impact on prices, but also has the potential to reduce the volume of Indonesia's coal export, because around 13% -20% of domestic coal companies' exports are allocated to China.

Neutral Recommendation with Top Picks: ADRO and PTBA

Coal issuers have the potential to achieve positive performance growth driven by a projected increase in demand for 2H18; the average price of coal is still above US$100/mt, and the USDIDR rate is at IDR14,600. However, China's coal import quotas and increased use of renewable energy have the potential to hamper coal consumption growth and decrease coal prices. Therefore, we recommend **NEUTRAL** for the coal mining sector with top picks **ADRO (TP: IDR1,900** and **PTBA**

Ticker	Market Cap (IDR billion)	P/E (x)		PBV (x)		Rec.	Target Price (IDR)
		FY18E	FY19F	FY18E	FY19F		
ADRO	39,982	6.04	5.74	0.61	0.58	BUY	1,900
PTBA	48,732	9.58	8.88	2.84	2.59	BUY	4,800

Sources: Bloomberg, MNCS (as of Dec 21, 2018)

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Potential Coal Demand Domestic: Progress of 35,000 MW Program

The Indonesian government expects the 35,000 MW power plant development program to be completed in 2019 to boost Indonesian economy. In that program, 23% of them (around 8,050 MW) consisted of renewable energy (Energi Baru Terbarukan/EBT) power plants and the rest were electric steam power plant (Pembangkit Listrik Tenaga Uap/PLTU) and gas power plant (Pembangkit Listrik Tenaga Gas/PLTG). This will certainly encourage domestic coal demand which is currently still less than 30% of domestic production. The realization is still bellow from the government's target of 60% of total domestic production.

In the 35,000 MW program, total contracted power plant reached 29,684 MW (84.81%) and the remaining 3,137 MW in the procurement and planning stages. As of August 2018, the construction of the power plant has reached 50.51% (17,678 MW), while around 7.47% (2,614 MW) have started its operation. We asses that this program will be a potential to strengthen domestic coal demand when the program is completed and starts operating fully. Domestic coal consumption has the potential to increase up to 200 million tons per annual because 25,000 MW electricity production will require around 100 million tons of coal. In addition to increasing coal demand, several coal issuers in Indonesia will also benefit from electricity sales to PLN, one of them is PT Adaro Energy Tbk (ADRO). ADRO is currently building 2 PLTUs, namely TPI and BPI with a capacity of 2x100 MW and 2x1,000 MW each, which will then distribute electricity to PLN. The need for coal at the power plant will also be fully supplied by ADRO. Therefore, we believe that this 35,000 MW program has the potential to have a long-term positive impact on the performance of coal issuers in Indonesia.

Exhibit 01. Progress of 35,000 MW Program

Source: PLN

Domestic Coal Policy Could Potentially Boost Coal Producers Financial Performance...

The Indonesian Coal Mining Association (Asosiasi Pengusaha Batu Bara Indonesia/ APBI) recorded Indonesian coal production of 319 million tons up to 9M18, or only 65% of the FY18E target of 485 million tons. This achievement does not include production data from holders of Regional Mining Permits (IUP) in July-Sept 2018. However, we consider this year's production target will be difficult to achieve, due to the addition of a production quota of 100 million tons, thus increasing the production target to 500 million tons in FY18E. Nonetheless, we forecast that coal mining companies' performance in FY18E will grow positively, supported by the current average coal price, which is still above US$100/mt and USD/IDR exchange rate at Rp14,600.

In addition, positive new policies issued by the Indonesian government have potentially raise the bottom line of coal mining companies in Indonesia. Referring to PP No. 37 of 2018, the government reduced the corporate income tax to 25% from an original 45% and added a discount to the net profit of 10% (government non-tax state revenue for the central government at 4% and local government at 6%) for holders of the Special Operations Mining (IUPK) Production Operations.

In addition to the income tax reduction policy, the Indonesian government also plans to revise PP No. 23 of 2018, regarding coal mining permits. The government plans to accelerate the extension of coal mining licenses with the aim of ensuring investment value for coal mining companies. From an initial extension carried out 2 years before the Contract of Work (Kontrak Kerja/KK) runs out, coal mining companies can now extend their KK of 5 years before the KK is matured. This revised policy, benefits several mining companies, including:

Exhibit 02. Mining Companies that Get Benefits from revised plan of PP 23/2018

No	Company Name	Year End of Constracts	Issuers
1	PT Tanito Harum	2019	HRUM
2	PT Arutmin Indonesia	2020	BUMI
3	PT Adaro Energy	2022	ADRO
4	PT KPC	2021	BUMI
5	PT Multi Harapan Utama	2022	MHU*
6	PT Kideco Jaya Agung	2025	INDY
7	PT Berau Coal	2025	BRAU

** Not listed Company*

Source: ESDM

This revision is expected to stimulate investment in the coal mining sector, which will result in increased coal production in Indonesia. Through PP No 23/2018, coal miners who have not yet held a license for the IUPK OP, can change their permits into an IUPK OP faster and will get the benefits of reduced corporate income tax as stated in PP No 37/2018.

One of the issuers who benefited from this policy was PT Adaro Energy Tbk (ADRO). ADRO's KK will be completed in 2022. Currently, ADRO holds a PKP2B permit, so the tax reduction in PP No. 37/2018 does not affect to ADRO's financial performance. However, with the acceleration of coal mining licenses extension, it is possible for ADRO to change its current coal mining licenses into an IUPK OP. Therefore, ADRO could potentially get the tax benefits in the future. With income tax falling to 25%, it will certainly alleviate the tax burden, so that net income can potentially rise. But right now, ADRO management has not stated whether it will change its coal mining licenses or not regarding the ADRO licenses extension will expire in 2020.

...but, It Can Give more Pressure to Gross Profit Margin of Mining Companies when Coal Prices Fall Down

The changes in PP No. 37 2018 not only on tax treatment, but also an increase in royalty fees to 15% from the previous 13%. This of course will burden the gross profit of mining companies, especially when coal prices get a deep decline. The decline in prices will have an impact on decreasing revenue while higher royalty fees have the potential to increase cost of revenue, so that both of these will further suppress coal issuers' gross profit margins. Nonetheless, we consider the policy of reducing income tax has the potential to increase the Company's bottom line as reflected in the higher level of net profit margin in the treatment of PP No. 37 of 2018 compared to the previous treatment. In the table below, we assume the calculation of the new PP scheme with the previous one using the assumption of cost of revenue and other costs the amount is the same. When the price of coal is at the level of USD100/mt, when using the old scheme, the GPM is at the level of 56.50% and the NPM is at the level of 22.83%. Meanwhile, when it uses the new scheme, the GPM level drops to 55% but the NPM increases to 27%. Likewise when coal prices fall to the level of USD80/mt. When using the new scheme, GPM and NPM are at the level of 49.00% and 16.64%, whereas when using the new scheme, the GPM level drops to the level of 47.50% but the NPM increases to 19.41%. It proves that this change in PP No 37 of 2018 will potentially increase the net profit margin for mining companies that have IUPK.

Exhibit 03. Comparison of tax and royalty treatment of PP No. 37 2018 (High Coal Price)

Old Scheme		New Scheme	
Royalty	**14%**	**Royalty**	**15%**
PPh	**45%**	**PPh**	**25%**
		Tax of NI	**10%**
Sales Volume (mt)	50,000,000	Sales Volume (mt)	50,000,000
Coal Price (USD/mt)	100	Coal Price (USD/mt)	100
Revenue	5,000,000,000	Revenue	5,000,000,000
Royalty	675,000,000	Royalty	750,000,000
Cost of Revenue	1,500,000,000	Cost of Revenue	1,500,000,000
Gross Profit	2,825,000,000	Gross Profit	2,750,000,000
Expenses	750,000,000	Expenses	750,000,000
Pretax Income	2,075,000,000	Pretax Income	2,000,000,000
PPh	933,750,000	PPh	500,000,000
Net Income	1,141,250,000	Profit of the year	1,500,000,000
NPM	**23%**	Tax of NI	150,000,000
GPM	**57%**	Net profit	1,350,000,000
		NPM	**27%**
		GPM	**55%**
Government Revenue	**1,608,750,000**	**Government Revenue**	**1,400,000,000**

Sources: ESDM, MNCS

Exhibit 04. Comparison of tax and royalty treatment of PP No. 37 2018 (Low Coal Price)

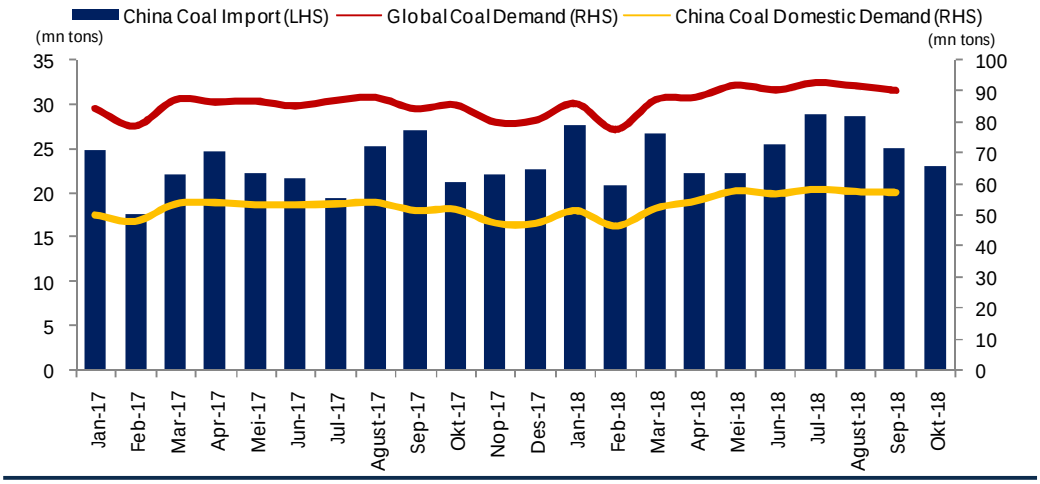
Old Scheme		New Scheme	
Royalty	**14%**	**Royalty**	**15%**
PPh	**45%**	**PPh**	**25%**
		Tax of NI	**10%**
Sales Volume (mt)	50,000,000	Sales Volume (mt)	50,000,000
Coal Price (USD/mt)	80	Coal Price (USD/mt)	80
Revenue	4,000,000,000	Revenue	4,000,000,000
Royalty	540,000,000	Royalty	600,000,000
Cost of Revenue	1,500,000,000	Cost of Revenue	1,500,000,000
Gross Profit	1,960,000,000	Gross Profit	1,900,000,000
Expenses	750,000,000	Expenses	750,000,000
Pretax Income	1,210,000,000	Pretax Income	1,150,000,000
PPh	544,500,000	PPh	287,500,000
Net Income	665,500,000	Profit of the year	862,500,000
NPM	17%	Tax of NI	86,250,000
GPM	49%	Net profit	776,250,000
		NPM	19%
		GPM	48%
Government Revenue	**1,084,500,000**	**Government Revenue**	**973,750,000**

Sources: ESDM, MNCS

Are Coal Price Going Up Next Year?

The steps taken by the Indonesian government are solely aimed at increasing coal exports to maintain Indonesia's trade balance. APBI estimates that coal exports in FY18E can rise by 7 million tons to 371 million tons. However, as this adds volume to global coal supply, there could be a negative impact on coal price, particularly considering that there is no strong catalyst to drive global coal demand. Although China's imports rose, China's overall coal demand only grew by 1.62% YoY in 10M18.

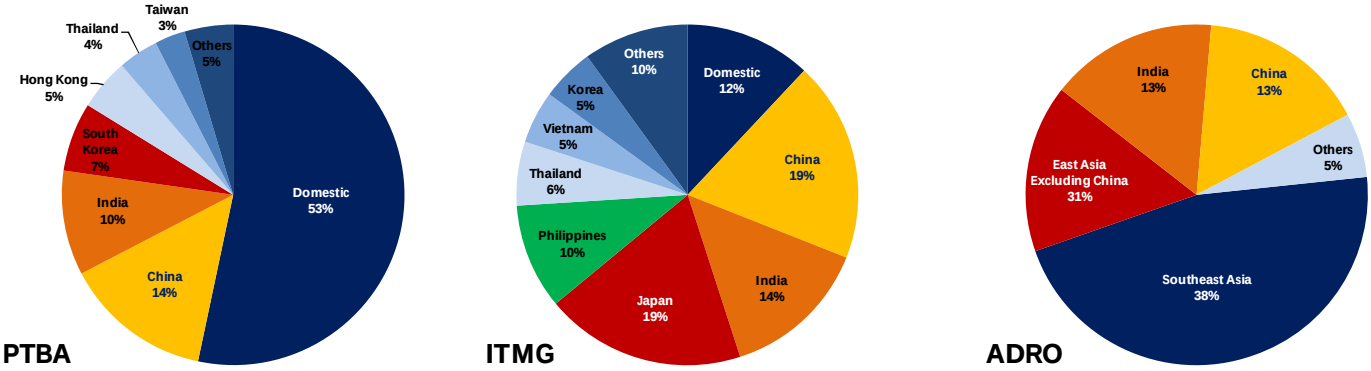
Exhibit 05. Coal Demand of Global vs China



Source: Bloomberg

China's 2019 coal imports are expected to slow down, because their government is rumored to be maintaining coal import quota restrictions until mid-1Q19. China's coal imports this year were set at no more than the total last year which amounted to 270.9 million tons, while coal imports in 10M18 reached 251.4 million tons. The Customs General Administration emphasized that only 9 million tons of coal imports remained for all ports in China this year. The quota limitation aims to limit thermal coal imports, which will have a significant negative impact thermal coal price, until the Chinese government ensures its import quota. This not only has a negative impact on prices, but also has the potential to reduce the volume of Indonesia's coal export, because around 13% -20% of domestic coal companies' exports are allocated to China.

Exhibit 06. Sales Breakdown by Country



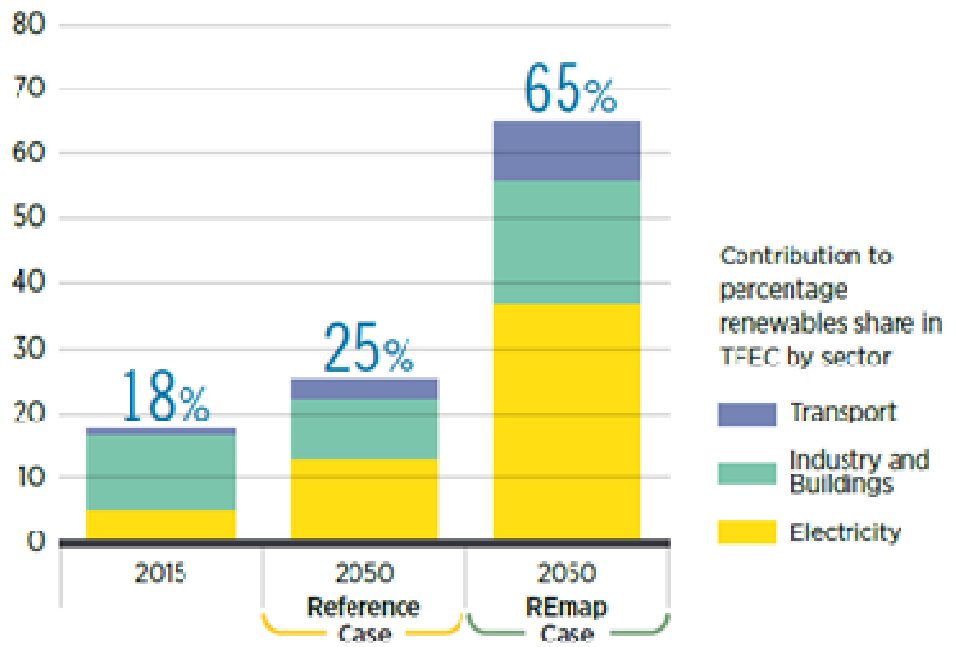
Sources: Companies, MNCS

The International Energy Agency (IEA) projects global coal demand to grow moderately, by an average of 0.5% per year until FY22, while coal supply is projected to increase slightly higher at 0.8% per year to FY20. This shows that there is a potential for oversupply in the coal industry in the future, which could suppress coal prices. We forecast that coal prices will be at a level of US$100 / US$95 per ton in FY18E / FY19F.

Renewable Energy is Rising

The other factor that impairs coal demand is the shifting to renewable energy, which is steadily increasing. This can be seen in the increase in global renewable energy power capacity of 167 gigawatts (GW) or 8.3% YoY higher in FY17, dominated by solar & wind power which were increased by 94 GW in photovoltaic (PV) and 47 GW in wind power (including 4 GW of offshore wind power). In fact, renewable energy power plants currently comprise around ± 25% of total global electricity generation. The International Renewable Energy Agency (IRENA) revealed that the cost of building renewable power plants is lower, so that the scale and speed of their adaptation will be expedited. Renewable power tends to be environmentally-friendly, a key point, particularly in developed regions such as the European Union and China. We thus conclude renewable energy will dominate the power generation industry in the future; IRENA forecast its contribution will reach 85% by FY50. Thus, renewable energy growth will impact a decline in coal demand over long term, followed by a weakening of commodity prices.

Exhibit 07. Forecast of Renewable Consumptions



Source: IRENA

Neutral Recommendations with Top Picks: ADRO and PTBA

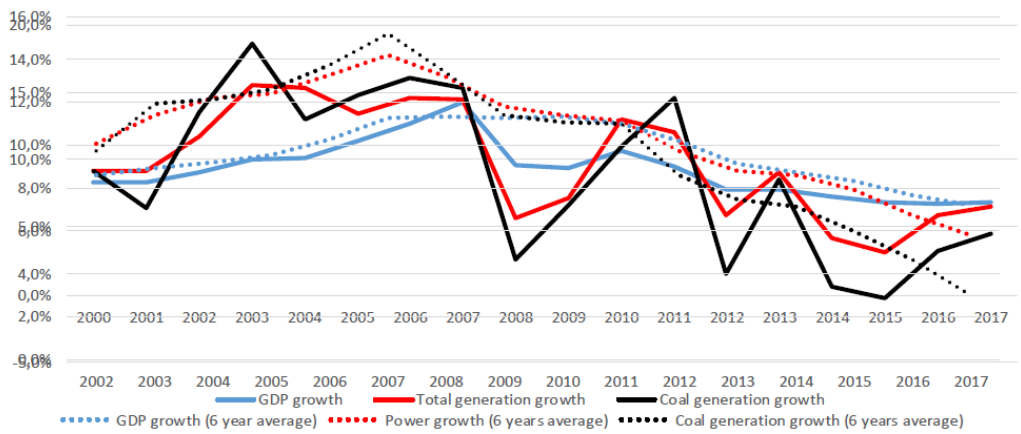
Coal issuers have the potential to achieve positive performance growth driven by a projected increase in demand for 2H18; the average price of coal is still above US$100/mt, and the USDIDR rate is at IDR14,600. However, China's coal import quotas and increased use of renewable energy have the potential to hamper coal consumption growth and will surpassed coal prices. Therefore, we recommend **NEUTRAL** for the coal mining sector with top picks, **ADRO (BUY; TP: IDR1,900)** and **PTBA (HOLD; TP: IDR4,800)**. We cut our TP for ADRO to IDR1,900 (vs IDR2,300) due to uncertainty over China's import quota which would affect coal demand especially at ADRO. We project ADRO's revenue on FY18E / FY19F to USD3.59 bn /USD3.66 bn down about 0 %/-3.04% from the previous USD3.59 bn /USD3.78 bn. On the other hand, we increased the TP for PTBA to IDR4,800 (vs IDR4,550) because we believe that the acquisition of Freeport by Inalum, as the holding of PTBA, would have a long -term positive impact on PTBA's performance. We project PTBA's revenue on FY18E / FY19F to IDR22.37 tn/IDR23.56 tn or down about 0%/3% from the previous projection of IDR22.37 tn / IDR24.29 tn.

IEA Coal Forecast to 2023

Lower Demand from Western Europe and China

Coal is the largest energy source used as global energy or around 27% of total global energy and the most widely used energy source for electricity (~38%). While coal is considered as a source of cheap electricity generation and abundant reserves, it causes CO2 emissions which contributes air pollution on a large scale. Therefore, countries in the world, especially Europe and China, increase the use of alternative energy such as renewable energy to create healthy air. This certainly has the potential to reduce coal demand. The IEA forecast that coal demand will be stable until 2023. A gradual decline in coal consumption will occur in Europe, the United States and China driven by the rampant reduction in coal energy power plants in these countries. Most Western European countries have specific policies to reduce coal-fired power plants and accelerate the expansion of renewable energy. These efforts further suppressed coal demand from Europe. While the "Blue Sky in China" program has pushed the growth of China's coal power plants to slow down by 2020. Environmental policies in particular create clean air, increasing the consumption of renewable energy in power plants in China. Not only in power plants, the program also applies to industrial sectors such as cement and steel producers. The actions taken include replacing the use of coal into gas use in the industrial sector and renewable use in the power plant. The IEA estimates that China's coal demand has decreased by 3% until 2023.

Exhibit 08. GDP, Power Demand and Coal Generation Growth in China

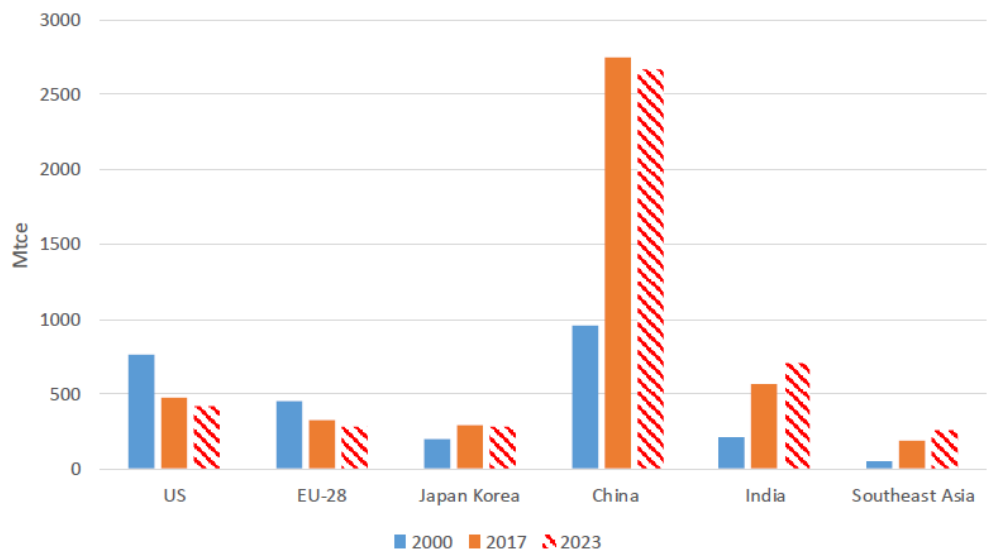


Source: IEA

...meanwhile, Coal Demand Growth Strongly in India and SEA

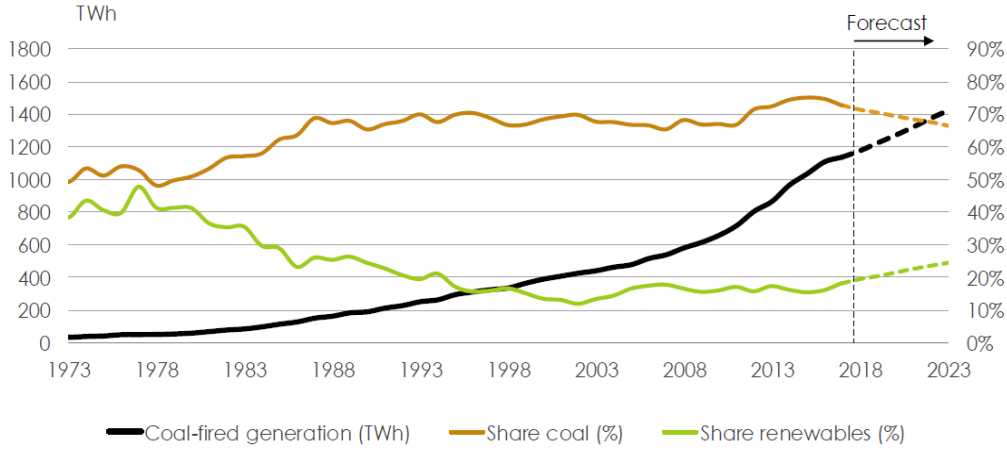
The decline in coal demand in Europe and China will be offset by coal demand in India along with the growth of power plants that have continued to grow since 1974. The IEA projects power plants in India will grow by more than 8% per year until 2023 and electricity consumption is expected to increase by more than 5 % per year. India is also developing renewable energy use in its power plants so that it has the potential to slow the growth of coal demand which is projected to grow by less than 4% per year until 2023. However, India's coal consumption will be supported by consumption in steel and cement production along with economic growth and infrastructure development in India.

Exhibit 09. Coal Demand in Select Countries/Regions in FY00, FY17 and FY23F



Source: IEA

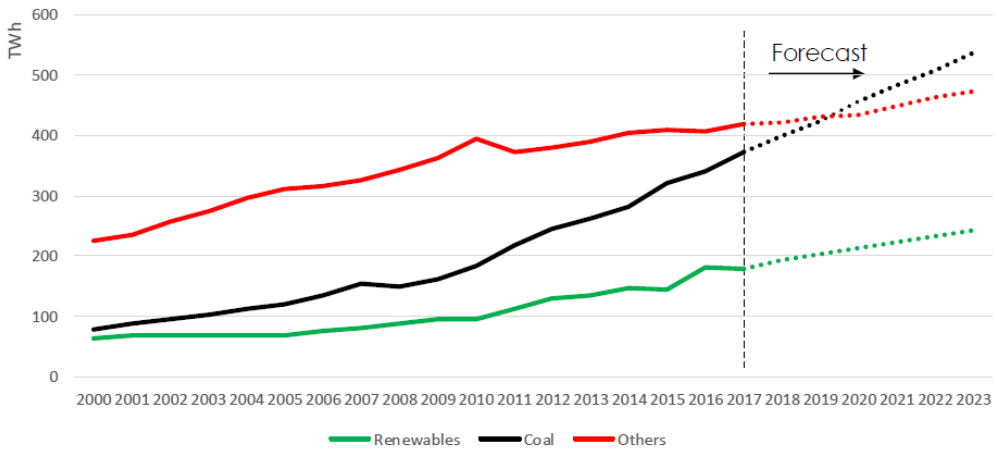
Exhibit 10. Coal Power Generation in India is Set to Continue to Grow



Source: IEA

Beside India, global coal demand will also be supported by coal consumption in South and Southeast Asia such as Indonesia, Pakistan, Bangladesh, Philippines and Vietnam with annual electricity consumption of only one-eighth of the EU28, which is around 800 kWh. The large-scale power plant development program will drive coal demand in these countries. IEA projects coal growth in SEA will reach more than 5% per year until 2023. Although coal consumption is stable, the IEA predicts the contribution of coal to the global energy mix has the potential to decline from 27% to 25% due to growth in the use of renewable energy and natural gas.

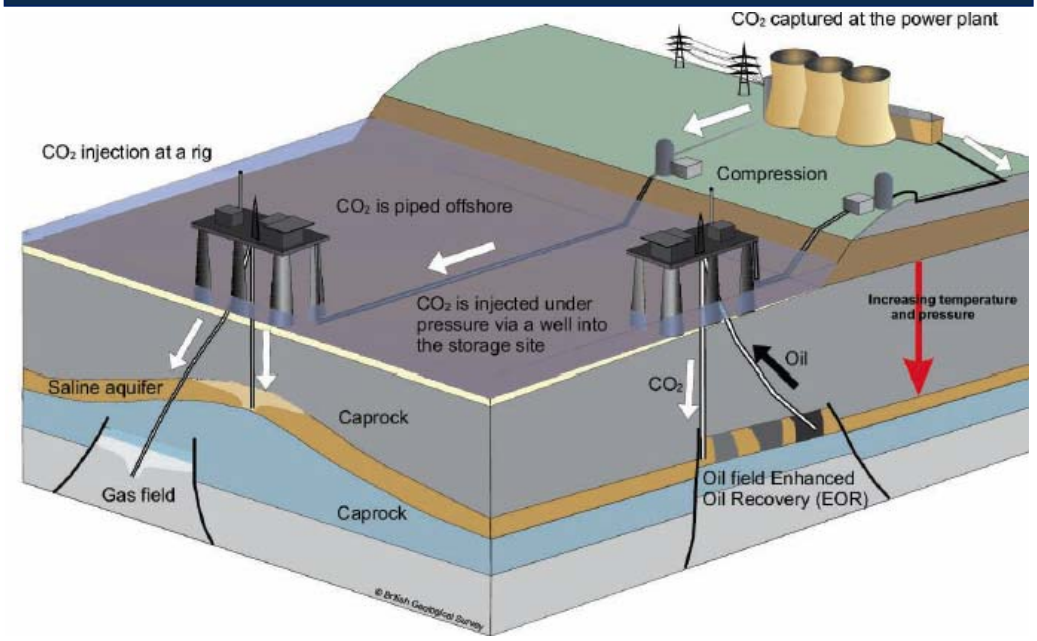
Exhibit 11. Electricity Generation by Source in SEA



Source: IEA

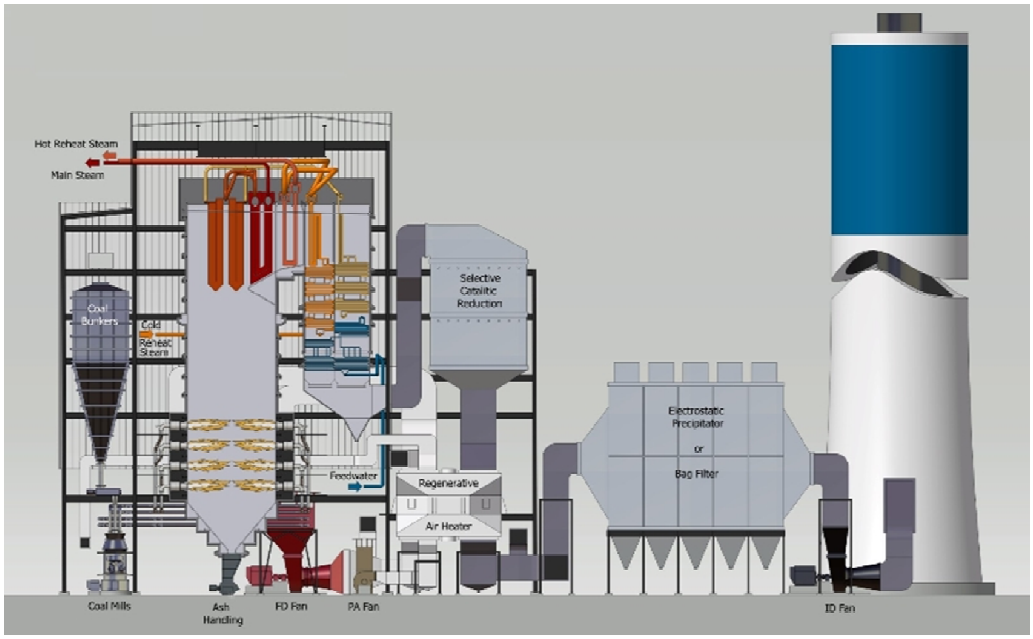
Although the use of coal causes air pollution, in some countries in Asia, coal will play an important role in the energy industry because it is a very affordable energy source. The technology such as Carbon Capture, Utilization and Storage (CCUS) as a tool that bridges future energy, needs to face future climate conditions and reduce air pollution arising from the use of coal. The way CCUS works is by capturing carbon dioxide emitted during production and sealing it in the soil. This method is considered very effective for reducing CO2 gas emissions and preventing the release of CO2 into the atmosphere. Other technologies are using Supercritical (SC) or Ultra Supercritical (USC) boilers. The advantage of using USC boilers is that the emissions generated are lower than subcritical boilers and lower fuel costs which can reduce operating costs. With the existence of these technologies, we assess coal consumption will still remain an important role in the electricity industry because CO2 emissions that arise will decrease along with the use of USC and CCUS as a whole.

Exhibit 12. Carbon Capture, Utilization and Storage (CCUS) Technology



Source: British Geological Survey

Exhibit 13. Supercritical (SC) or Ultra Supercritical (USC) Boilers



Source: AC Boilers

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