Indonesia: Coal industry

<Industry overview> Production ranks 3rd in the world, top in ASEAN

In Indonesia’s coal industry, 2020 production scale is the third-largest in the world after China and India, and ranked first in the ASEAN region (* UK BP data).

Production has been expanding recently. It grew for four consecutive years from 2016 to 2019, reaching 616 million tons in 2019, an increase of 12.2% from the previous year. Although in 2020, it saw negative growth of 8.6%, falling to 563 million tons, compared to 2013, it has recorded a growth of about 20% in 7 years.

In Indonesia, the government has a Coal Supply Obligation (Domestic market obligation: DMO) system that determines the annual volume of coal production and supply based on the forecast of domestic coal demand. The goal is to stabilize the price of electricity and provide a stable supply to the smelting and other industries.

*The data is provided by BP of the UK and differs from the data presented by the Indonesia Coal Mining Association (APBI–ICMA) below.

(Data compiled by Ashu Research based on the Indonesia Coal Mining Association: APBI–ICMA data)
<Consumption> Expanding trend

As with production, coal consumption volume is on the rise. In 2017, it expanded to 97 million tons, an increase of 6.6% from the previous year, in 2018, it increased by 18.6% to 115 million tons, in 2019, it expanded to 138 million tons, an increase of 20.0%.

However, it shrunk in 2020. Full-year consumption volume fell 4.3% to 132 million tons. The Covid–19 outbreak stalled economic activity. The stagnation of economic activity led to a decrease the operating rate of coal-intensive power plants.

(Data compiled by Ashu Research based on APBI data)

<Exports> Recovery trend

Indonesia’s coal export volume is on the way to recovery on the back of increased domestic production. In 2019, it expanded to 455 million tons, an increase of 5.9% from the previous year. However, when compared to the most recent high in 2013, it is still only 90%.

In 2020, affected by the Covid–19 outbreak, it decreased by 10.9% to 405 million tons. This was mainly due to a decline in demand from China and India, the main export destinations.
The largest production capacity base is by privately owned Bumi Resources (annual production volume 81.1 million tons: 2020). This is also followed by privately-owned Adaro Energy (54.5 million tons: 2020), Delta Dunia Makmur (45.3 million tons: 2020), and Indika Energy (33 million tons: 2020). Among state-owned, Bukit Asam is a major player (24.8 million tons: 2020).

Foreign companies are also taking part of the market. In September 2019, Singapore’s coal developer Geo Energy Resources announced that it would acquire two coal mines in South Sumatra. It agreed to acquire all shares of Titan Global Energy (TGE) from two investing companies for 25 million dollars (2.7 billion yen). As a result, the coal reserves of the coal mine in which Geo Energy has a stake will increase from 33 million tons to 122 million tons.

Among Japanese companies, in May 2019, Mitsui Matsushima Holdings announced that it would conduct test coal mining at an underground coal mine in East Kalimantan in which Mitsui Matsushima Holdings has been investing. Commercial production will start in 2021, and the annual production is expected to be 1 million tons in 2023.
<Coal prices> Hit 10-year high in September 2021

The domestic reference price for coal, set monthly by Indonesia’s Ministry of Energy and Mineral Resources, hit 150.03 dollars per ton in September 2021, recording the highest price in a decade. A supply–demand imbalance caused prices to jump. First, on the demand side, the factor is the expansion of coal demand in China, South Korea, and Europe. The expansion of demand in China is due to following reasons: with economic recovery after the Covid crisis, coal–fired power plants have resumed; the demand for Indonesian coal increased, as Chinese government set out a policy to limit coal purchases from Australia in 2020, and other factors. Next, on the supply side, coal production was affected by the fact that Australia and Indonesia, large coal–producing nations, entered the rainy season, which led to a downturn in production. Since coal and palm oil account for about 25% of Indonesia’s total exports, higher commodity prices could accelerate the country’s economic recovery.
To break away from dependence on imports of liquefied petroleum gas (LPG), the Indonesian government plans to gasify coal to produce dimethyl ether (DME), an alternative fuel to LPG. In this context, state-owned Bukit Asam is working on a coal gasification project.

Bukit Asam began construction in February 2020 of a joint venture plant for coal gasification in Sumatra island, Riau province, with state-owned Pertamina and Air Products and Chemicals, a major US industrial gas company. According to a Pertamina spokesman in May 2021, the operation of the coal gasification plant is expected to produce 1.4 million tons of DME from 6 million tons of coal in one year. This will lead to a reduction in LPG imports of 1 million tons per year. Bukit Asam will supply the coal, Air Products will provide the technology, and Pertamina will use DME to make the final product.

In addition, in May 2020, the aforementioned US Air Products announced that it would build a coal gasification plant in Bengalon, East Kalimantan, in partnership with two local companies, Bakrie Capital Indonesia, part of the conglomerate Bakrie Group, and Ithacha Resources, part of AP Investment. It will invest 2 billion dollars for construction and is scheduled to start operations in 2024. It is expected to produce 2 million tons of methanol from 6 million tons of coal annually. Indonesian government will mandate the use of “B30”, a blended fuel consisting of 30% palm oil-derived biodiesel fuel blended with diesel oil, starting in January 2021. Since methanol is also used as a raw material, the operation of the plant is expected to reduce imports of methanol.