

# Development of Indonesian Steel Industry and Its Investment Opportunities

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## Introduction

The steel industry, one part of the base metal industry, which is included in the upstream industry, is one of Indonesia's strategic industries. The steel industry has a strategic role as the “mother of industries” which produces to meet the needs and developments of other industrial sectors. This sector plays a major role in supplying vital raw materials for development in various fields, ranging from the provision of infrastructure (buildings, roads, bridges, electricity, and telecommunications networks), production of capital goods (factory machinery, supporting materials, and spare parts), transportation equipment (ships, trains and their rails, and automotive), to weapons.

The Indonesian Iron and Steel Industry Association (IISIA) projects that steel consumption in 2022 will grow 7–8% to 16.3 million tons. This projection follows the growth of national steel consumption in the first semester of 2021 which is calculated by the apparent steel consumption (ASC) formula. IISIA noted, ASC in the first half of this year grew 36% to 6.7 million tons from the same period in 2020 of 4.9 million tons. Meanwhile, steel imports increased 12.5% to 3.6 million tons, while export volume decreased 25% to 2.3 million tons. Consumption growth in the steel industry is still driven mainly by growth from the construction sector, which is around 78%.



In sales of steel products, it was noted that there was an increase in sales of less than 1% to 15.20 million tons in 2021. The details of these sales were 8.29 million tons for the domestic market and 6.91 million tons for export to some countries (45.46% of total sales).

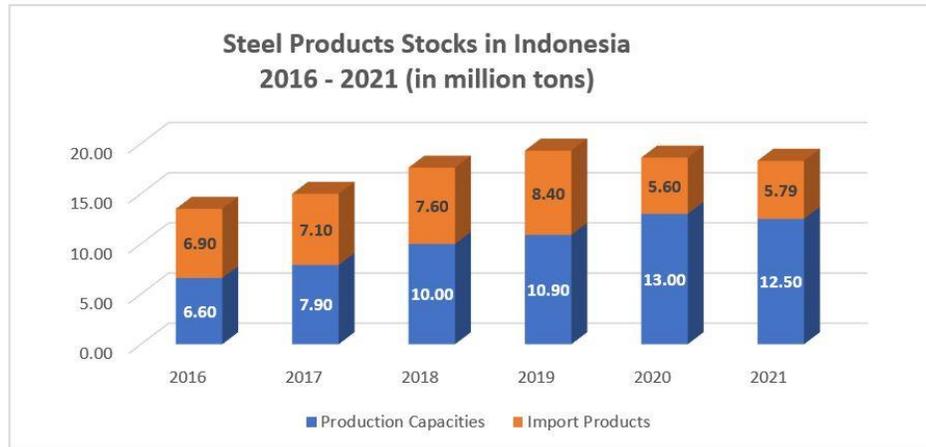
(Source: <https://www.iisia.or.id/>)

The gap between steel consumption and national production is quite large, and this gap is filled by imported products from China (about 55% of national demand). Meanwhile, the utilization of national steel production capacity is only around 48%, so that many domestic steel industries are unemployed because their products are not absorbed by the market. Apart from the onslaught of imported steel, the growth of our steel industry is also hindered by the difficulty of obtaining imported used steel raw materials which are categorized as B3 waste while local iron ore is exported, the high cost of primary energy used, and the low exchange rate of the rupiah against the US dollar. Regulation of the Minister of Environment and Forestry which excludes imported used steel instead of B3 waste, Regulation of the Minister of Energy and Mineral Resources so that the steel industry gets special prices for primary energy, and so on.

A comprehensive policy is needed to support the steel industry as in other countries. The existence of policy support, both fiscal and non-fiscal, should not reduce state revenues or fair competition with imported products. The policy in question must be effective in benefiting the domestic steel industry, and benefiting the national economy from various aspects, especially because of the large multiplier effect of the steel industry. Moreover, Indonesia has initiated the Making Indonesia 4.0 roadmap to accelerate the application of Industry 4.0, and has been widely adapted by various industrial sectors, including the steel industry. It is hoped that from the upstream to downstream sectors, they must become leaders in increasing innovation and capabilities for the user industry.

### **Steel Industry Development in Indonesia**

Domestic products from the steel industry are now able to compete with imported products and are competitive in the global market. Potential iron ore whose prospects are inventoried in South Kalimantan. The total resources are estimated at around 500 million tons. The quality of iron ore in this area is sufficient for further processing in iron making with output for the supply of steel making plants. Local iron ore processing from mining, beneficiation to pelletizing will provide cost savings which will contribute to lower raw material costs. These things are taken into consideration in the plan for the development of the iron-steel industry in South Kalimantan, which is an effort towards the independence of a national strategic industry based on local raw materials.



Based on data from various sources, in 2021, Indonesia imported up to 5.79 million tons of steel.

(Source: <https://www.iisia.or.id/>)

With a production capacity of 3.15 million tons per year, PT Krakatau Steel Tbk (PT KS) produces several superior products such as hot sheet steel, cold sheet steel, and wire rod steel. Through its subsidiaries, the company also produces steel products for the special industrial sector, including spiral pipes, ERW pipes, reinforcing steel, and profile steel. The ability to produce steel with special specifications, especially in supporting national defense infrastructure, the company is known as one of Indonesia's strategic industries. Currently, the company has targeted to increase its production capacity to 4.65 million tons in 2017. This is done by increasing the production capacity of hot sheet steel by 1.5 million tons. In addition to controlling the domestic market share, the company also relies on exports of steel products to increase its sales volume.

The Ministry of Industry appreciates PT Gunung Raja Paksi Tbk (PT GRP) for making a new investment of IDR 1 trillion for the utilization of the light section mill machine with a production capacity of 500 thousand tons per year. The company also made a new investment in the upstream steel sector, namely the construction of the blast furnace facility. Products of PT GRP already meet international quality standards as evidenced by various international product certificates. The most recent one is the EPD (Environmental Product Declaration) certification. Several other strategic policies, including the application of product standards that are always updated according to industry capabilities and user needs. Currently, for metal products, 28 SNIs (Indonesian National Standards) have been enforced mandatory. In addition, optimization of the program to increase the use of domestic products (P3DN) across sectors, determination of trade remedies through consideration of the supply chain of upstream to downstream industries, as well as export support.

## Indonesia's Steel Market Potential

The increasing demand for steel in the country is still supplied from abroad or imported. In 2020, Indonesia's steel production was around 13 million tons, while steel needs will reach 15 million tons. The difference in demand is met by imports of 2 million tons. The demand for steel in Indonesia continues to increase. However, the utility of the national steel industry is still low, at around 57%. The ideal utilization rate for a profitable and sustainable industry is above 80%. The challenges faced in developing iron commodities into downstream industries such as steel do not only lie on the downstream side. In contrast to other commodities where the upstream side has developed, but on the iron side, the upstream side is still a challenge. Resources and reserves of iron sand in Indonesia have not been measured optimally.



The recovery in steel demand in 2021 is faster than previously thought. Based on this fact, Worldsteel expects steel demand worldwide to recover as it was before the pandemic, except in China.

(Source: <https://www.iisia.or.id/>)

President Jokowi's plan to move the Indonesian capital from Jakarta to East Kalimantan is seen as a great opportunity for potential growth in steel demand in the long term. With this relocation plan, of course the need for infrastructure and transportation, both land, sea, and air will be very much needed on the island of Kalimantan. The government plans to start construction of the new capital in 2021 and is targeted to start relocating government offices in 2024. The growth in demand for steel in Indonesia could reach 22.7 million tons in 2024, in other words, an increase of more than 50% compared to 2018. Currently, iron-concrete consumption in Indonesia reached 3.4 million tons in 2018 or an increase of 64.3% from 2014. Meanwhile, the demand for HRC (hot rolled steel) and CRC (cold rolled steel) reached 8.38 million tons in 2018, an increase of 5% from 2014.

In line with the improvement in the economy and the development of infrastructure projects, national steel production is projected to increase by the end of this year. The Ministry of Industry estimates that steel production will reach 12.27 million tons this year or a 6.05% growth compared to last year's 11.57 million tons. In the medium term, the target for steel production capacity is projected to reach 17 million tons by 2024. The combined production capacity is contributed by, among others, PT KS of 2.5 million tons per year, PT Krakatau Posco 3 million tons per year, and PT GRP 1.7 million tons per year. In addition, there is also PT Dexin Steel Indonesia at 1.5 million tons per year, as well as a combination of several billet producers of 4 million tons per year. Based on the Ministry of Industry's records, the average utilization of the base metal industry so far this year has reached 66.25%. Meanwhile, the average utilization of the non-metal goods industry and its equipment reached 73.99%.

### **Korea's Investment and Technology Prospects on Steel Industry**

The Indonesian government is also encouraging foreign companies to invest in Indonesia, one of which is the steel industry. The cooperation with foreign companies is expected to increase the demand for steel in Indonesia. Currently, South Korea has just agreed on a trade pact at the end of last November. The agreement, called the South Korea-Indonesia Comprehensive Economic Partnership Agreement, allows Indonesia to waive tariffs on various commodities, including steel, cars, and vehicle parts. Not only that, the Hyundai Group also announced its investment in Indonesia of USD 1.55 billion in a vehicle manufacturing plant with a capacity of 250,000 units per year by 2030.

Other investments are also in the steelmaking industry. POSCO plans to invest an additional USD 4 billion into PT Krakatau Posco—a venture company between POSCO and Krakatau Steel—to increase its steel-making capacity to 10 million tons/year by 2025. PT Krakatau Posco also intends to start marketing their 750.00 tons/year HRC product next year, while negotiations for CRC products are still ongoing. This plan allows Krakatau Steel and POSCO to produce high value-added steel products such as automotive steel as a support for the government's plan to make Indonesia the basis of the world's electric car industry.

President Jokowi conveyed that South Korean investment in Indonesia is also experiencing rapid growth and good prospects, especially in several fields including the steel industry, petrochemicals, electric vehicle batteries, electric cable, and telecommunications industries, as well as garments and renewable energy. During the meeting with President Yoon, Jokowi specifically encouraged investment cooperation from Korea, especially in the field of accelerating the development of the electric car ecosystem in Indonesia, including the battery industry project integrated with mining and the automotive steel industry for electric vehicles. Indonesia welcomes the increasing trend of bilateral trade and agrees to continue to open market access, overcome trade barriers, and promote superior products from the two countries.

## Conclusion

The iron and steel industry are one of the priority industries that plays an important role. This industry is one of the raw material supply sectors for the shipbuilding industry, oil and gas industry, heavy equipment industry, automotive, and electronics in Indonesia. In addition, the steel industry is a major supporter of infrastructure development in Indonesia. PT Krakatau Steel Tbk and Pohang Iron and Steel Company (POSCO) will start adding investment worth USD 3.5 billion or IDR 52.57 trillion in 2023. The fresh funds will be used to expand production capacity, steel production specifically for electric vehicles, and steel for the new state capital or IKN Nusantara project. Since now, Indonesia is a promising country for Korea investment to expand iron and steel industry in the world.

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