# Green and Exorbitant Steel

Is the Fastener Industry Ready for the Change?

by Dean Tseng, Fastener World

#### **Steel Price** Goes Through the Roof

China exported 7.974 million tons of steel this April and hit a monthly record high that had never been recorded since the end of 2016. The first 4 months saw a 25% increase to 25.65 million tons in export and a 17% increase to 4.89 million tons in import.

However, people were caught unprepared as the Ministry of Finance of China announced close to the end of this April to retract the 13% VAT rebate on export of certain steel products including wire rods, effective from May 1. In a backdrop of escalating steel demand worldwide, China removed the VAT rebate on export of certain steel products and took measures to increase steel import, in order to make up for the shortage of supply resulting from decreased domestic crude steel capacity. This brings China's steel export to a halt and signifies urgent demand for steel in the country.

In May, ShaGang Group, Yonggang Group, Liuzhou Steel Group, Guangzhou Iron and Steel as well as other steel plants in China raised their steel prices at the same time, leading to an overall steel price which is likely to surge to RMB 6,000 per ton in a later time frame. Even billet, a raw material for steel, saw its price up 3 times in a day, which is termed by the media as "mad billet price" and "skyrocketing steel price". Some of the downstream companies couldn't take it and said the material price had exceeded the price when they received orders. They would rather go as far as to breach or cancel contracts and compensate customers than lose money in manufacturing products, in order to avoid massive deficits. The material price surge already forced some of the Chinese companies to raise the price charged on their clients.

2021 marks the year when the price for everything goes up, and steel is just one of the materials in a price uptick. This is once again a wake-up call of inflation. Fastener companies as a steel-consuming industry must swiftly adjust or control the cost of orders they take before being devoured by the "colossus" of price surge. The status quo gives no one a definite answer for how long the "colossus" will stay or whether it will continue to grow. Fastener companies have to tighten up their belts or go for high-unit-price, high-profit orders to minimize deficits and weather the price surge.

### Carbon Credit and Green Steel Production is on the Table

The new U.S. administration gives the world a boost of confidence in the scrutiny over the effort on environmental protection, putting "carbon emission" back in the spotlight during the talks among nations. Earlier, the EU already announced the target to scale up carbon reduction, which is slated to slash at least 55% of greenhouse gas by 2030. Not only a lot of mainstream carmakers in the world have declared a manifesto of zero carbon emission, but also steel plants have been on the path of green production.

For example, the U.S will have its first steel plant completely driven by wind power, at an investment scale of USD 250 million. It is located in the State of Missouri and is owned by Nucor, the second largest steel company in the U.S. This wind-driven steel plant will use wind power to drive the electric arc furnace to melt steel scrap into recycled steel. In Colorado, the first 100% solar-driven steel plant in the U.S. utilizing photovoltaic technology is expected to be operational in 2021.

China released "Measures for the Administration of Carbon Emissions Trading" on December 25 last year and officially launched a carbon credit exchange system that will encompass the steel industry during the 14th five-year period of the nation. Clearly, the trend of carbon credit and green steel production has extended deep into the Chinese steel industry. China Baowu Steel Group has kick-started at the end of 2019 a collaboration with a third party in developing nuclear-driven hydrogen production to replace fossil fuel used in steel making. HBIS Group, the second largest steel company in China joined the race and announced a project at the end of 2019 to build a model plant of hydrogen-driven metallurgy at an annual capacity of around 1.2 million tons. China has taken its first step in reducing carbon emission.

## Will the Era of High-Price Fasteners Ensue?

### It's Time to Complete Checkup on Your Corporate Structure

Whether it is driven by wind, sun, nuclear or hydrogen, the technologies for steel production require tremendous costs for development. According to sources, the cost for hydrogen-driven steel production is at least more than 5 times the cost for conventional production using furnaces. How much out of that cost or whether it will be shifted onto the steel price remains a mystery.

The steel price is just one of the factors affecting the cost. The manufacturing industry has the impact of surging overseas shipping price to cope with. As is known, there is an issue of jam-packed ports coupled with the problem of container shortage, and as a result, 92 shipping lines in both the U.S. and Europe were canceled during the ends of March and May. Up to May, the shipping fee per large container in Europe hiked by USD 1,000 to 1,400. The highest shipping price was up to USD 10 thousand per container.

To tackle these costs, downstream companies including the fastener industry must do a checkup over the manufacturing process (including handling materials, inventory and shipment), financial status, operation, distribution channels, and selection of clients, in order to plan their costs a few years ahead. Furthermore, they can consider taking orders for small-batch production and diversified products to make for a highly adaptive manufacturing and order intake. The current situation leaves no room for any slip that may result in a deficit. Any failure due to carelessness may lead to the elimination of a business. 

