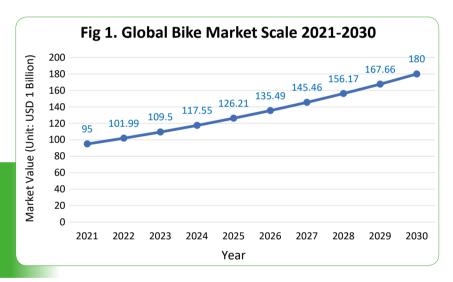
## **CAGR at 73.6%**

Precedence Research indicates the world's bike economic scale reached USD 95 billion in 2021 (**Figure 1**), and that the growth will continue in the future. By 2022 the number will reach USD 101.19 billion, and USD 109.5 billion by 2023, USD 117.5 billion by 2024, and USD 126.2 billion by 2025. Up till 2030, the scale is estimated to reach USD 180 billion at a CAGR of 7.36%. Bikes have a large market potential and it pulls up the demand for their fasteners.

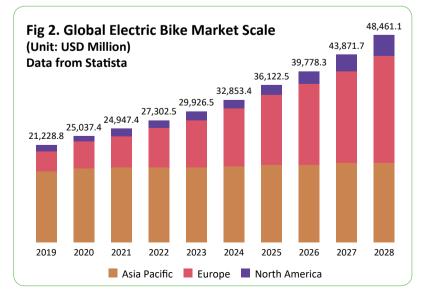
30% of the world's bike sales go to the Asia Pacific. Japan, Singapore and China invest a lot in commuting infrastructure for bikes. Furthermore, shared bike is common in Asia Pacific and health awareness is increasing among the public. These factors give Asia Pacific a high chance to dominate global bike use rate.



## **Europe & U.S. Have a Stronger Electric Bike Market**

The most intriguing part of Europe is that its bike market is in an exponential growth. Figure 2 shows little apparent growth in Asia Pacific between 2019 to 2028. While the North America has a small amount of steady growth and takes a smaller share, Europe has faster growth and an increasing share that is expected to tie with China by 2026. This shows that Asia Pacific (especially China) has the largest market share for now but could be overtaken by Europe in 5 years. By 2025, Europe's electric bike sales could surpass car (EVs and gasoline-powered vehicles) sales. The electric bike market potential is impressive.

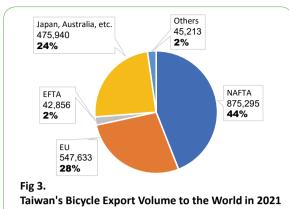
Although North America's growth is slower than Europe's, European Light Electric Vehicle Association's report shows that the U.S. imported 790 thousand electric bikes last year, much higher than 450 thousand in 2020 and 250 thousand in 2019. We can tell that the U.S. and Europe have a growing electric bike market.



## Asia Pacific: Heartland of Bikes

Including electric and manned bikes, the world's bike production mainly converges in China and Southeast Asia, but globally known brands are mostly in the U.S. and Europe. In other words, the heartland of production is in Asia Pacific which mostly supplies to the U.S. and Europe in the forms of OEM and ODM.

According to People's Daily (China press), China produced 117 million bikes in 2020, up 15.3%, and breached 120 million bikes in 2021, becoming the world's largest bike manufacturing and purchasing country. Additionally, the number of electric bikes owned by holders in China is already close to 300 million units. China is also the world's largest electric bike purchasing country. In 2020 China produced 44.36 million electric bikes, up 14.3%, and exported 2.01 million electric bikes, up 38.9%. By 2021 the production reached 48.27 million units, up 8.7%.

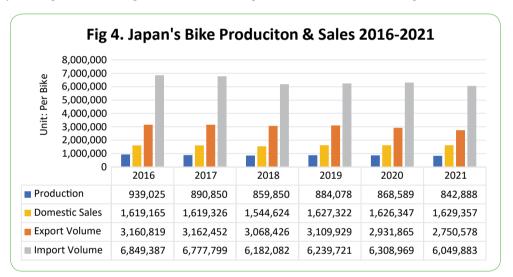


(Unit: Vehicle)

As for Taiwan, it is a bike exporting country, so we are going to look at the figures from Taiwan Bicycle Association. In 2021 Taiwan exported 1,986,937 bikes, up 16.9%. The export value was USD 1.31 billion, up 19.6%. Both the export volume and value accelerated and remained at a double-digit growth. North America is the largest bike export partner for Taiwan (Figure 3), followed by Europe, Japan and Australia. Although the bike industry is facing material shortages, Taiwanese bike companies have a handful of orders up to 2023,

particularly orders for electric bikes and and high-end bikes. They have hit revenue records for 3 consecutive years. It shows a vast demand for Taiwan's bike capacity.

Lastly, we will look at Japan (Figure 4). The country's bike production continued to drop slightly in the past 6 years. While domestic sales remained flat, the export and import volume continued to decline. In other words, Japan's domestic bike sales were flat and the demand for import decreased. The same was also true for export. Japan's bike market has been decreasing over the years and its share is taken by Taiwan and China.



## **We Could See Stronger Bike Sales in the Future**

Global bike statistics tell us that market momentum will become stronger. The U.S. and Europe not only have an unceasing purchase momentum, their electric bike sales can be described as having an exponential growth. This is especially true for France. According to French Cycling Federation, France only sold 56 thousand electric bikes in 2013 but increased sales to 514 thousand in 2020 (19% of the total bike sales reaching 2.7 million units), up 33% from 388 thousand units in 2019, a growth exceeding 800% in just 7 years.

Taiwan and China in Asia Pacific both had excellent bike production and export records. Despite a sign of dwindling in the Japanese bike market, overall the bike manufacturing momentum in Asia Pacific remains robust. The world's bike demand is expected to grow for at least the next 5 years which will lift the world's demand for bike fasteners.

