

SUMMARY REPORT

INVESTMENT SUPPLY CHAIN

MANUFACTURE OF FABRICATED

METAL PRODUCTS IN VIETNAM

2024

* All data in the report in the Report has been updated up to 31/08/2024



CONTENTS

- I. OVERVIEW OF FABRICATED METAL PRODUCTS INDUSTRY
 - 1. Import and export situation
 - 1.1. Import situation
 - 1.2. Export situation
 - 2. Supply Chain of the Fabricated Metal Products Industry
 - 2.1. Overview of Supply chain of the Fabricated Metal Products Industry
 - 2.2. Stage of Metal manufacturing
 - 2.3. Stage of Manufacturing of the Fabricated Metal Products
 - 2.4. Overview of Markets for the Fabricated Metal Products
- II. OPPORTUNITIES AND CHALLENGES OF THE FABRICATED METAL PRODUCTS INDUSTRY
 - 1. Factors driving the Fabricated Metal Products Industry
 - 2. Challenges of the Fabricated Metal Products Industry
- III. SEVERAL PROMINENT FDI PROJECTS IN THE FABRICATED METAL PRODUCTS INDUSTRY



OVERVIEW OF FABRICATED METAL PRODUCTS INDUSTRY



INPUT MATERIAL

METAL MANUFACTURING

MANUFACTURE OF FABRICATED METAL PRODUCTS

OUTPUT MARKETS

Ores and raw materials from domestic mineral extraction

Imported ores and minerals

Recycled metal

The products in this stage include:

- Pure metals such as iron, steel, cast iron, alloys and non-ferrous metals manufactured from input materials
- Raw metals

Imported raw metals

Manufacturing and processing fabricated metal products. This is the process from raw metals, processing and treating it to create metal products:

- Some products in this stage include bolts, screws, cutlery, hand tools, etc. These are markets which include industrial sectors that use fabricated metal productss in their production processes.



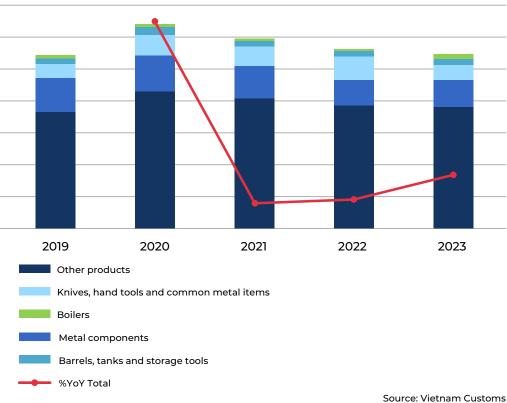
1. IMPORT AND EXPORT SITUATION

1.1. Import situation

Import of Fabricated Metal Products began decline in 2021

- Metal components and other metal products are the two most imported product categories into Vietnam, accounting for up to 90% of import value, with other metal products making up nearly 70% of this share on average.
- Imports of fabricated metal products have shown a slight decline during the period of 2021 - 2023. Specifically, import volumes decreased by 7% in 2021 and continued to decline by an additional 6% in 2022 compared to the previous year. Notably, imports of metal components decreased even more significantly, by 9% and 21% in those two years, respectively. The main reason for this decline was the impact of the Covid-19 pandemic, which led to a sharp reduction in demand for these products in the manufacturing and construction industries. In 2023, imports experienced a slight recovery, with a reduction of only 3%. While they have not yet returned to growth, the rate of decline has lessened.
- Currently, Vietnam remains heavily reliant on importing fabricated metal products, resulting in a significant trade deficit. However, the scale of imports is trending downward due to the development of domestic production investment projects. These projects not only enhance production capacity but also gradually meet local demand, reducing dependence on imported supplies.

IMPORT OF FABRICATED METAL PRODUCTS, 2019 - 2023, USD BILLION

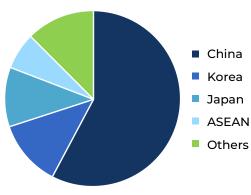




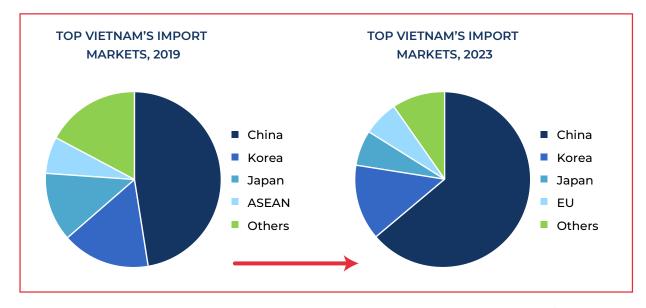
China dominates the import market for fabricated metal products

- From 2019 to 2023, fabricated metal products were primarily imported from China, accounting for over 50% of the import market, followed by South Korea, Japan and countries within the ASEAN.
- Vietnam has been increasing its imports of fabricated metal products from China. Observations show that the market share of imports from China has risen from 47% in 2019 to 63% in 2023. Additionally, the import value from this market has also increased, with the value in 2023 being 1.3 times higher than in 2019.
- Meanwhile, the market share of imports from South Korea, Japan and ASEAN is gradually declining, along with a decrease in import values. Notably, the scale of imports from South Korea has significantly decreased for these products.









Source: Vietnam Customs

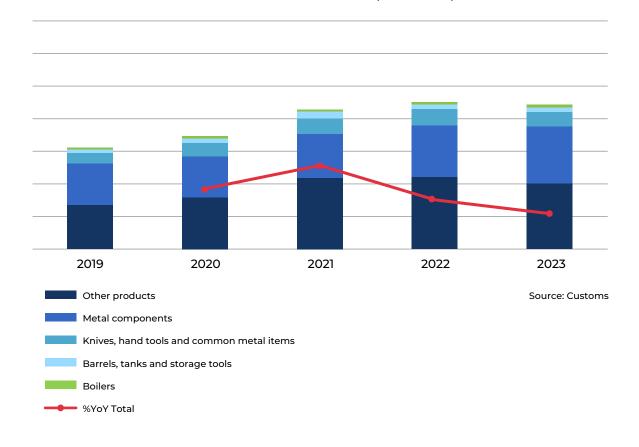


1.2 Export situation

The export of fabricated metal products has been on the rise from 2019 to 2023

- Exports of fabricated metal products have shown an upward trend from 2019 to 2023, with significant increases in 2020 and 2021 of 11% and 24%, respectively, compared to the same period the previous year. Metal components and other fabricated metal products account for the largest share of exports.
- In 2023, the export scale saw a slight decrease (Down 2% compared to 2022), but in terms of value, it remains higher than during the 2019 – 2021 period. This is mainly due to the impact of the global economic downturn, which has caused a slight drop in product demand in the industrial and construction sectors worldwide.
- Although the overall export scale experienced a slight decline in 2023, the export turnover of metal components still saw a strong increase, growing by 12% compared to 2022. This indicates Vietnam's ability to produce and supply high value-added products, effectively meeting international demand, particularly in the construction and industrial sectors. This growth reflects Vietnam's competitive potential and the opportunity to expand its market share in the global metal components export market.

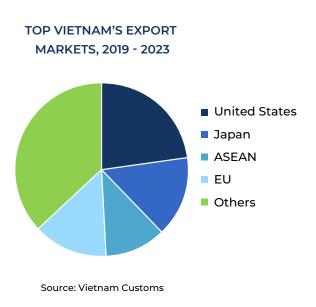
EXPORT OF FABRICATED METAL PRODUCTS, 2019 - 2023, USD BILLION





The share of export of fabricated metal products to the United States is steadily increasing

- The United States, Japan, ASEAN and the EU are the main export markets for Vietnam from 2019 to 2023.
- The share of Vietnam's exports of fabricated metal products to the United States is experiencing strong growth, rising from 18% in 2019 to 26% in 2023. Alongside this, the export value has also increased, doubling compared to 2019 by 2023. This demonstrates significant potential for development in the trade relationship between the two countries, particularly in the area of exporting processed metal products.
- Conversely, the share of exports to the EU and Japan has both declined. Exports to the EU dropped from 15% to 13%, while exports to Japan decreased from 13% to 12% during the same period. Although there has been a decrease in share, the export value to the EU market still shows a trend of growth.
- Notably, exports of fabricated metal products to ASEAN have experienced a significant decline. In 2019, ASEAN was the second-largest market with 17% share, following the United States. By 2023, this market's share has fallen to 12%, dropping to fourth place.





Source: Vietnam Customs



2. SUPPLY CHAIN OF THE FABRICATED METAL PRODUCTS INDUSTRY

In this section, we focus on analysing FDI and DDI investment projects within the supply chain of fabricated metal products industry based on HOUSELINK data. The DDI projects include only those with an investment capital of 2 million USD or more per project.

2.1 Overview of Supply chain of the Fabricated Metal Products Industry

"Projects in the fabricated metal products industry are showing a positive growth trend in both the number of projects and total investment"

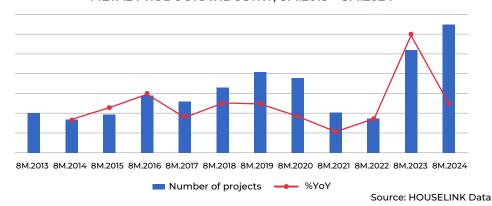
- Overall, the investment situation in projects of fabricated metal products industry is showing a positive growth trend in the number of projects. From 2013 to 2019, the CAGR reached 20%. A decline began during the three-year period affected by the Covid pandemic (2020 2022). However, in 2023, the number of investment projects showed a strong recovery, increasing by nearly 160% compared to 2022. Furthermore, looking specifically at the first 8 months of each year, the number of attracted investment projects in the first 8 months of 2024 recorded the highest figure since 2013 (Increase about 25% compared to the same period in 2023). It is forecasted that in the remaining months of 2024, the number of investment projects in the metal industry could exceed that of 2023.
- In terms of total investment, the capital invested in fabricated metal products market has shown a slight upward trend over the year. In 2020, total investment saw a significant increase (Ip about 350% compared to the same period in 2019) due to the involvement of the key player Hoa Phat with its steel plant expansion project. Additionally, following the impact of the Covid pandemic, 2023 also recorded a good growth rate (Up 90% compared to the same period in 2022).

THE INVESTMENT ATTRACTION SITUATION IN THE FABRICATED METAL PRODUCTS INDUSTRY



Source: HOUSELINK Data

INVESTMENT ATTRACTION IN THE FABRICATED METAL PRODUCTS INDUSTRY, 8M.2013 – 8M.2024





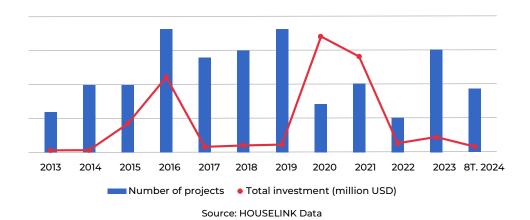
2.2 Stage of Metal manufacturing

The investment situation in the metal manufacturing stage remains quite sluggish, as the importation of raw metals from China significantly affects investors decisions when participating in production in Vietnam

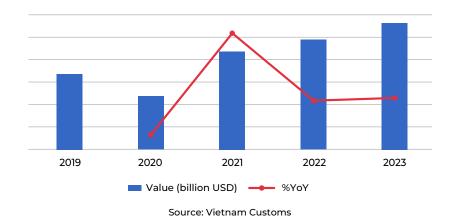
Investment projects in the metal manufacturing industry were showing good growth trends before the Covid pandemic, but post-pandemic, a slight decline began to emerge. In terms of project quantity, the period from 2013 to 2019 saw stable annual growth. However, at the time of recovery after the pandemic, the number of metal manufacturing investment projects started to show signs of recovery. In 2023, the number of projects increased by 200% compared to 2022.

Additionally, according to research on the market for imported raw steel products, the value of raw steel imports has been rapidly increasing since 2021 (up 80% compared to 2019) to the present (with increases of 12% and 14% respectively). Meanwhile, the raw steel import market accounts for about 70% of the total raw metal import market across the industry. It is evident that the investment situation in metal manufacturing and raw metals is significantly influenced by imported steel from China. This situation leads to hesitance among investors when deciding to invest in projects at this stage due to fierce price competition in the domestic market. In terms of total investment, the overall capital for projects is not very large. Most of the substantial capital still comes from experienced domestic investors in the industry, such as Hoa Phat, VAS, Xuan Thien v.v.

THE INVESTMENT SITUATION OF METAL MANUFACTURING PROJECTS

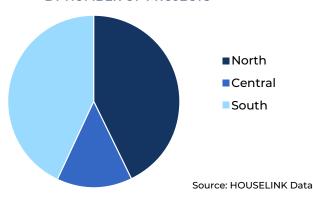


IMPORT OF RAW STEEL FROM CHINA, 2019 - 2023

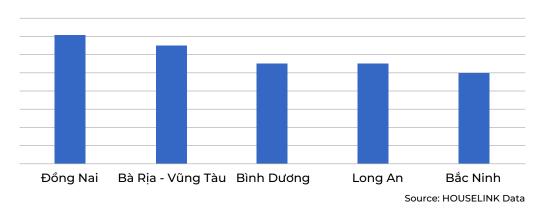


Northern and Southern are the two regions with the highest concentration of projects, with the number of projects in both regions showing no significant difference. Some provinces with a high concentration of projects include Dong Nai, Ba Ria – Vung Tau, Binh Duong, Long An and Bac Ninh.

ALLOCATION OF METAL MANUFACTURING PROJECT BY NUMBER OF PROJECTS

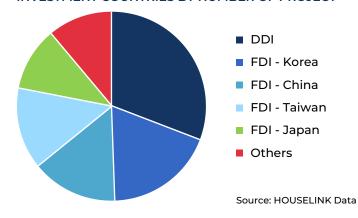


TOP 5 PROVINCES AND CITIES ATTRACTING METAL MANUFACTURING PROJECTS

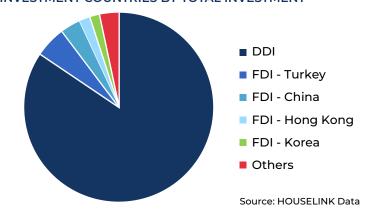


DDI capital accounts for a large proportion in both the number of projects and total investment, with DDI capital taking over 80% of the total investment share. DDI manufacturers are clearly very active in investing in large metal and raw metals manufacturing projects, benefiting from being local companies. The participation of major DDI enterprises will help ensure the supply of metals and raw metals for subsequent production stages in the industry's supply chain.

INVESTMENT COUNTRIES BY NUMBER OF PROJECT



INVESTMENT COUNTRIES BY TOTAL INVESTMENT

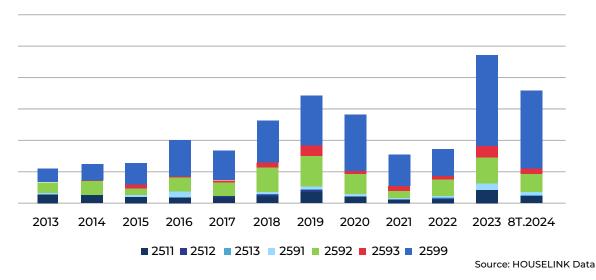


2.3 Stage of Manufacturing of the Fabricated Metal Products

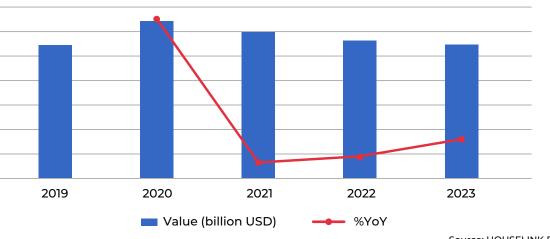
The investment situation of fabricated metal products projects is showing a positive growth trend. Specifically, from 2013 to 2019, the average growth rate reached 24%. The impact of the Covid pandemic led to gradual decline in the number of investment projects over the next three years, but a slight recovery began in 2022, with an increase of 12% compared to 2021. By 2023, investment in the fabricated metal products experienced strong growth, with an impressive increase of 169% compared to 2022, marking the highest level since 2013. In terms of production codes, projects producing other metal products (code 2599) account for approximately 60% of the total number of projects over the years.

Regarding the import situation, fabricated metal products are currently facing a trade deficit. Domestic production has not yet met local demand and export requirements, leading to a high value of imports to supplement gap in the domestic market and support exports. The Vietnamese market still holds significant potential for the development of fabricated metal products, both in domestic and export markets.

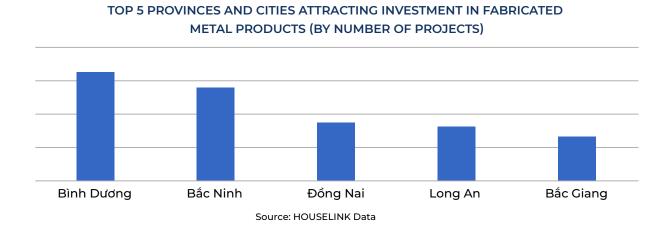
INVESTMENT SITUATION OF FABRICATED METAL PRODUCTS MANUFACTURING PROJECTS PER CATEGORY (BY NUMBER OF PROJECTS)

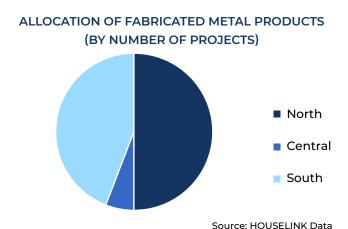


TÌNH HÌNH NHẬP KHẨU CÁC SẢN PHẨM TỪ KIM LOẠI ĐÚC SẮN

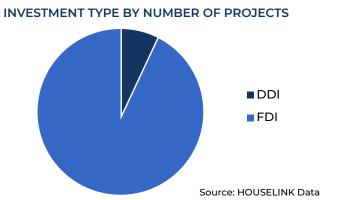


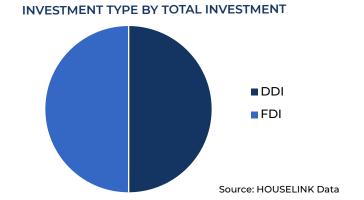
The projects are primarily concentrated in the Northern and Southern regions, focusing mainly on provinces or areas near metal and raw metal production projects, or locations close to facilities in downstream industries to facilitate supply chain connectivity.





FDI capital accounts for over 90% of the total number of projects, but in terms of total investment, there is little difference between the two types of investment. Most FDI projects entering the Vietnamese market are small to medium-sized, with only a few projects having an investment of over 100 million USD (approximately 2% of the total projects of fabricated metal products). Additionally, major DDI players in the industry are starting to initiate large-scale investment projects. DDI companies are gradually increasing their participation in enhancing the supply chain in Vietnam.



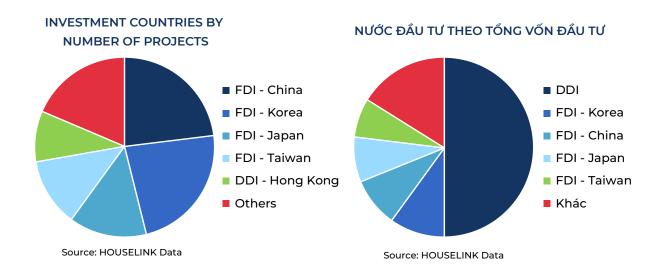




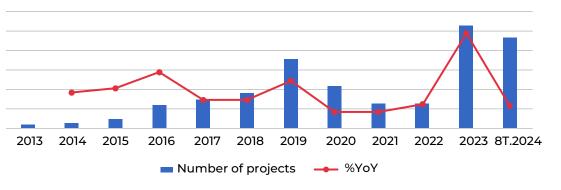
Foreign Direct Investment (FDI) from China accounts for the largest share in terms of the number of investment projects, followed by South Korea and Japan; however, most of these projects are small to medium-sized.

China and South Korea are the two largest sources of investment in terms of the number of projects, accounting for approximately 45% of the total projects. Following them are Japan, Taiwan, and Hong Kong. In terms of total investment amount, while not appearing in the top five for project quantity, the DDI (Domestic Direct Investment) is the largest source of capital. These large investment projects come from major players in the industry, such as Hoa Phat, Hoa Sen, and Nam Kim, followed by South Korea, China, Japan, and Taiwan. Although China leads in the number of projects, it ranks third in total investment, accounting for only 10% of the total. This indicates that most Chinese manufacturing enterprises are small to medium-sized.

Chinese manufacturers are gradually shifting their factories to Vietnam. From 2013 to 2019, Chinese FDI projects showed significant annual growth. Notably, post-COVID, 2023 saw a 308% increase in Chinese FDI projects compared to 2022, and in the first 8 months of 2024, the number of Chinese FDI projects reached about 80% of the total number attracted throughout 2023, with further growth expected.

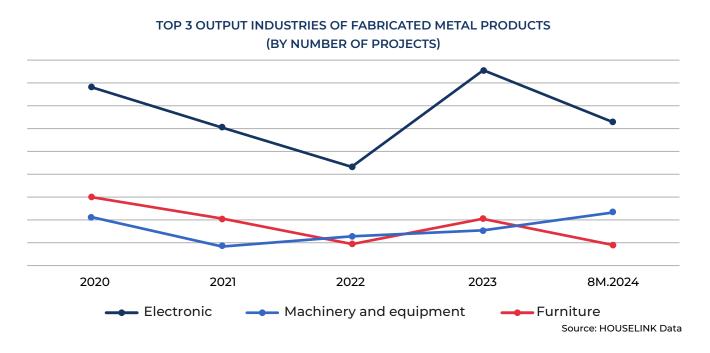


FDI-CHINA INVESTMENT PROJECTS IN VIETNAM



2.4 Overview of the Markets for the Fabricated Metal Products

For the metal products industry, end products such as bolts, screws, and metal components serve as raw materials for various manufacturing and assembly industries. The top three industries that directly apply products from metal casting and are seeing significant investment in the Vietnamese market include Electronics, Machinery and Equipment, and Metal Furniture. These industries have shown good growth rates over the past five years. Among them, the electronics and machinery sectors are primarily focused on using metal parts and components, and they also report strong investment growth, with nearly complete supply chains in the Vietnamese market. Therefore, in this section, based on data from HOUSELINK, we will focus on analyzing an overview of some investment factors in the Electronics and Machinery and Equipment sectors, such as Investment Forms, Investing Countries, and Geographic Locations.



In this section, we choose to analyze the Electronics and Machinery and Equipment sectors to depict the customer profile as the output industries of the supply chain for the metal casting products industry.

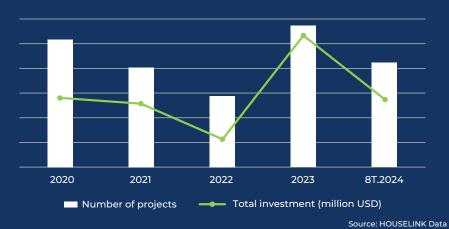


Overview of Investment Situation

ELECTRONICS

Projects in the Electronics industry are showing strong recovery following the pandemic. In 2023, the growth in both the number of projects and total investment reached impressive figures (98% and 360%, respectively, compared to 2022). Furthermore, the number of projects in the first 8 months of 2024 is also trending positively, with the number of projects reaching two-thirds of the total projects for the entire year of 2023.

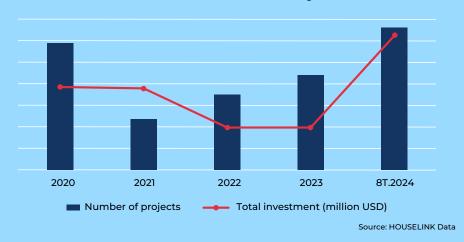
INVESTMENT SITUATION OF ELECTRONIC INDUSTRY



MACHINERY & EQUIPMENT

Investment in machinery and equipment projects is experiencing good growth in both the number of projects and the scale of investment is also trending upward. Specifically, during the period from 2021 to 2022, while the number of projects saw a significant decrease in 2021 (about 60% compared to 2020), there was a slight increase in 2022 (approximately 47% compared to 2021), and this trend continued to rise in the following years. Notably, in the first eight months of 2024, both the number of projects and total investment increased significantly (51% and 210%, respectively).

INVESTMENT SITUATION OF MACHINERY AND EQUIPMENT PROJECTS



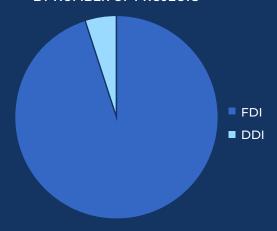


Mode of Investment

ELECTRONICS

FDI companies in the electronics sector hold a significant share of the market in Vietnam, accounting for about 97% of the total number of investment projects, whereas domestic direct investment (DDI) companies represent only around 3%.

INVESTMENT TYPE OF ELECTRONIC INDUSTRY BY NUMBER OF PROJECTS

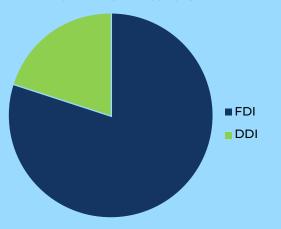


Source: HOUSELINK Data

MACHINERY & EQUIPMENT

Investment projects in the machinery and equipment sector are primarily from FDI companies, which account for about 80% of the total number of projects, while domestic direct investment (DDI) projects represent around 20%.

INVESTMENT TYPE OF MACHINERY AND EQUIPMENT PROJECT BY NUMBER OF PROJECTS



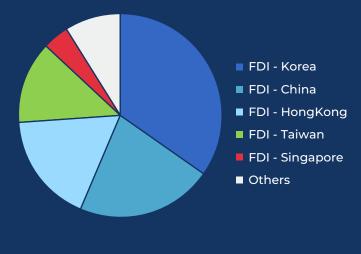


Investing Country

ELECTRONICS

FDI from South Korea is the largest source of investment projects in the electronics sector, accounting for about 35% of the total number of projects. This is followed by FDI from China, Hong Kong, Taiwan, and Singapore.

INVESTMENT COUNTRIES BY NUMBER OF PROJECTS

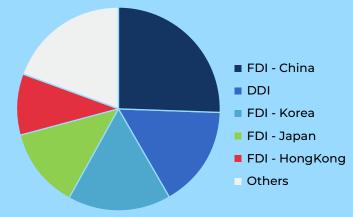


Source: HOUSELINK Data

MACHINERY & EQUIPMENT

The machinery and equipment industry mainly attracts FDI from China, accounting for 25% of the total number of projects. This is followed by domestic investment projects (DDI), FDI from South Korea, Japan, and Hong Kong.

INVESTMENT COUNTRIES BY NUMBER OF PROJECTS



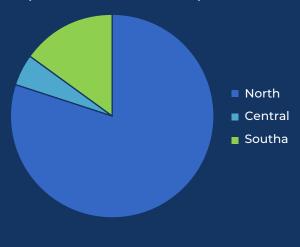


Investment Location

ELECTRONICS

With the advantage of a well-established electronics supply chain in the North, this region has become a focal point for attracting investors in the electronics industry. According to data from HOUSELINK, over 80% of the number of projects are concentrated in the northern region, followed by the southern and central regions.

ALLOCATION OF ELECTRONIC PROJECTS BY REGION (BY NUMBER OF PROJECTS)

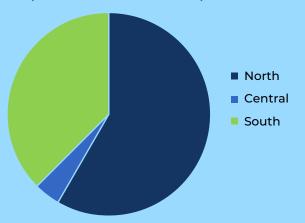


Source: HOUSELINK Data

MACHINERY & EQUIPMENT

Projects in the machinery and equipment sector are also primarily concentrated in the northern region (nearly 60%), followed by the southern and central regions.

ALLOCATION OF MACHINERY AND EQUIPMENT PROJECTS BY REGION (BY NUMBER OF PROJECTS)





OPPORTUNITIES AND CHALLENGES OF THE FABRICATED METAL PRODUCTS INDUSTRY



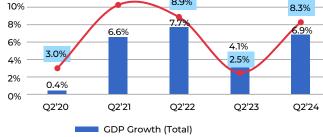


1. FACTORS DRIVING THE FABRICATED METAL PRODUCTS INDUSTRY

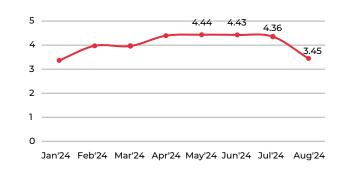
From a macroeconomic perspective, Vietnam promises to be an ideal destination for investment and market expansion decisions thanks to its stable and well-managed economic growth

GDP GROWTH, Q2 2020 - Q2 2024 10.3% 8.9%

GDP Growth of Construction & Industry Sector



YOY CPI AND CORE INFLATION (%), JAN'24 - AUG'24



VND/CNY EXCHANGE RATE, JAN'24 - AUG'24



Source: General Statistics Office, State Bank of Vietnam

In Q2 2024, Vietnam's total GDP growth reached 6.9%—a significant increase compared to 4.1% in Q2 2023, and second only to Q2 2022, in the context of the global economy still facing headwinds due to political instability, armed conflicts, and supply chain disruptions. This growth exceeded the expected 6.6% outlined in the Government's Resolution 01/NQ-CP and led the economic growth in Southeast Asia during the second guarter. The GDP of the Industry & Construction sector in Q2 2024 recorded an impressive growth of 8.3%.

Compared to the same period last year, the consumer price index had been steadily increasing from the beginning of the year until May. However, inflationary pressure has gradually eased since June, with a sharp decline in August, reaching 3.45% year-on-year. The overall decrease in prices will help lower the costs of factors in the production of fabricated metal products, thereby reducing general production costs. At the same time, it will boost consumer and business purchasing power, helping manufacturers and traders gradually improve their business efficiency.

The VND/CNY exchange rate has been on the rise since the beginning of the year, reaching 3.507 VND/CNY by the end of August, despite a slight decline in June. This upward trend presents challenges for Vietnamese manufacturers in the fabricated metal products sector, as China is a major supplier of raw materials. The increased exchange rate could either reduce price competitiveness or put pressure on profit margins. Nevertheless, with domestic costs on a downward trend, the impact of rising import prices is expected to be partially offset, ensuring a generally positive business outlook for the industry.

12%



The increase in orders in August, along with the strongest production growth in the fabricated metal products sector during the first 8 months of the year, offers promising opportunities for business expansion and attracting investment projects in the industry.

Jan'24

Feb'24

2.9%

8M.2020

2% 0% Mar'24

8M.2021

According to August 2024 data from S&P Global, Vietnam's Purchasing Managers' Index (PMI) reached 52.8, indicating good overall health in the manufacturing and service sectors, including the fabricated metal products industry. This growth is reflected in improvements across areas such as output, order volumes, pricing, delivery times, and hiring. Notably, this marked the third consecutive month of positive PMI after five months of fluctuating just around 50. This indicates that the fabricated metal products sector is showing signs of recovery and growth, offering promising prospects for business expansion in the industry.

56 54.7 54.7 54 52.8 52 50.3 50.4 50.3 50.3 49.9 50 48 46 42 40

PURCHASING MANAGERS' INDEX. JAN'24 - AUG'24

In the first eight months of 2024, the Industrial Production Index (IIP) for the fabricated metal products sector grew by 12.6% compared to the same period last year. This represents the highest production growth since 2020, highlighting a highly favorable and positive manufacturing environment for the sector in Vietnam. This strong performance is expected to further enhance Vietnam's ability to attract investment projects in the industry.

PRODUCTION, 8M.2020 - 8M.2024 12% 12% 9.8%

Apr'24

May'24

THE FABRICATED METAL PRODUCTS INDUSTRY'S INDEX OF INDUSTRIAL

Jun'24

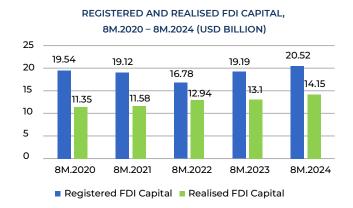
Jul'24

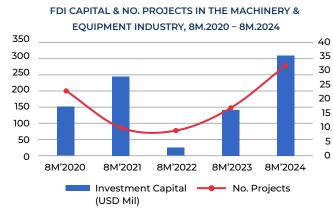
Aug'24

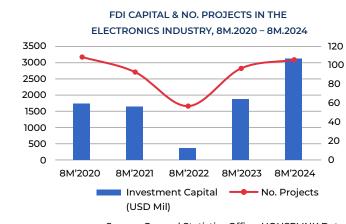
8M.2022 8M.2023 8M.2024

Source: General Statistics Office, S&P Global

FDI inflows into Vietnam reached their highest value since 2020, with strong investment growth in the Electronics and Machinery sectors—two key "outputs" of the prefabricated metal products industry. This surge opens up significant potential for business expansion for companies within the sector







Source: General Statistics Office, HOUSELINK Data

FDI inflows into Vietnam reached their highest level in the first eight months of the 2020-2024 period. Total registered capital exceeded \$20.52 billion, a 7% increase year-on-year, while implemented capital reached \$14.15 billion, up 8% from the same period. New capital inflows grew in both registered capital (\$12 billion, up 27%) and the number of projects (2,247 projects, up 8.5%), with average investment size increasing to over \$5.3 million per project compared to \$4.6 million in 2023. Adjusted capital also rose, with total registered capital reaching \$5.71 billion (up 14.8%) and the number of projects growing to 926 (up 11.6%). These figures highlight Vietnam's attractiveness to foreign investors, driven by advantages such as numerous free trade agreements, a large workforce, competitive labor costs, and stable economic and political conditions.

In terms of the supply chain, the Electronics and Machinery sectors serve as key "outputs" for the fabricated metal products industry. Investment performance in these sectors directly impacts the industry's overall performance. In the first 8 months of 2024, investment in the Machinery sector surged by 115.7% year-on-year—the highest growth since 2020. Similarly, foreign capital in the Electronics sector increased by 66.1%, also marking the highest growth in the period. Efforts to attract further investment, such as developing diverse and widespread industrial real estate infrastructure located near highways, seaports, and airports, will continue to boost investment in these sectors. These factors are expected to unlock substantial potential for market entry and business expansion in Vietnam's fabricated metal products industry.

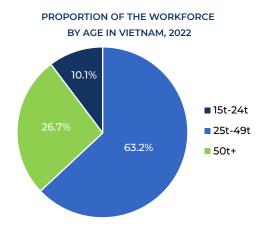


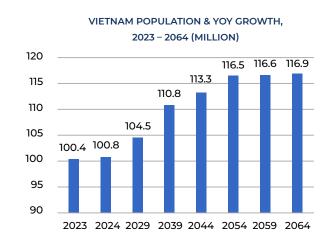
An open economy with 16 signed Free Trade Agreements, coupled with favorable investment policies, provides a strong foundation for investment, market expansion, and business growth in Vietnam, as well as for export activities.

INCENTIVES & POLICIES	DESCRIPTION	IMPACTS
Trade Agreements	16 FTAs have been signed, both bilateral and multilateral. Vietnam has established FTAs with key markets such as the EU, Japan, and the ASEAN	> Encouraging trading companies to expand their markets through exports from Vietnam
General Investment Incentives	Corporate income tax incentives of 0% are granted for FDI projects in the first two years and for loss-making projects in industrial zones. Additionally, for high-tech projects and scientific research and technology initiatives with capital exceeding 6 billion VND in economic zones, the 0% tax rate applies for the first four years	> Providing financial support for new businesses entering and operating in high-tech sectors, with a focus on research initiatives
Investment incentives for businesses producing steel billets from iron ore, high-quality steel, and alloys	Investment incentives under the Investment Law (2020) include: - Corporate Income Tax Incentives - Exemption from import duties for goods imported to create fixed assets, as well as raw materials, supplies, and components for production - Exemption or reductions in land use fees, land rental fees, and land use taxes - Accelerated depreciation and increased deductible expenses when calculating taxable income	> Laying a foundation for the entry of FDI companies in the midstream and downstream segments of the supply chain, including: 1. Manufacture of semi-finished matal products, metals, and raw materials 2. Manufacture of fabricated metal products
Investment incentives for businesses producing products for the supporting industries	The government provides support of up to 75% of technology transfer costs for projects producing materials that use over 85% of raw materials derived from the deep processing of domestic minerals, including metallic and non-metallic ores, to serve the production of supporting industrial products	
Investment incentives for businesses producing high-quality steel	A preferential corporate income tax rate of 16% is applied to the income of businesses from investment projects in industrial zones	

Source: HOUSELINK Research

A large population, along with highly competitive labor and operational costs compared to other countries in the region, makes Vietnam attractive for both trade and manufacturing purposes.

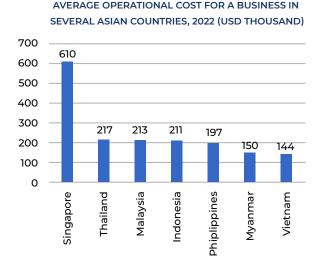




In 2023, Vietnam's population reached 100.4 million, ranking third in Southeast Asia, following Indonesia (278.8 million) and the Philippines (112.9 million). With this impressive population size, the demand for products in Vietnam is expected to have significant room for expansion. Notably, Vietnam is currently experiencing a "golden demographic" period, with 68% of the population in the working age group. Among them, 63% are aged 25 to 49, an age range characterized by accumulated work experience and skilled expertise, expected to directly contribute and quickly create value for businesses. Additionally, this age group serves as the main driver of consumer spending in the economy. Their substantial numbers present enormous potential for companies in the fabricated metal products sector.

SEVERAL ASIAN COUNTRIES, 2023 (USD) 6000 4985 5000 4000 3000 2000 1000 600 565 545 450 290 135 0 Indonesia Malaysia Philippines Thailand Vietnam Myanmar

AVERAGE LABOUR COST PER MONTH IN



According to a report from Wagecenter (2023), Vietnam has one of the lowest average labor costs in Asia, at \$290 per month, compared to neighboring countries like Thailand (\$450), the Philippines (\$545), and Indonesia (over twice the cost of Vietnam). Similarly, Vietnam also has one of the lowest average operational costs for businesses in the region, at \$144,000 per month. Therefore, the large population, a ready workforce capable of generating value, and low labor and operational costs are key factors driving investment and trade activities for fabricated metal products in Vietnam.

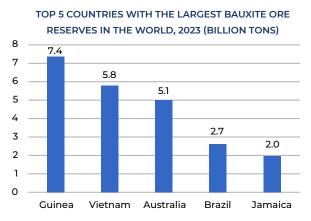
Source: General Statistics Office, United Nations, WageCenter, TMX

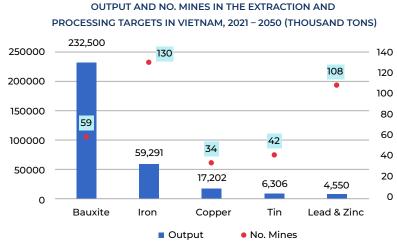
Vietnam is intensifying its involvement in the upstream segments of the supply chain, paving the way for the participation of downstream FDI companies

Vietnam ranks second globally in bauxite ore reserves, with 5.8 billion tons, according to a study by the U.S. Geological Survey published in 2023. This resource is essential for the extraction and refining of aluminum metal, a crucial raw material for manufacturing metal castings and products.

Under Decision No. 866/QD-TTg by the Prime Minister, which approves the exploration, extraction, and processing of various minerals for the period 2021–2030, with a vision toward 2050, Vietnam aims to enhance the mining and processing of raw metal ores. Notably, the plan includes 232,500 tons of bauxite from 59 mines, 59,291 tons of iron ore from 130 mines, and 17,202 tons of copper ore from 34 mines. This decision is currently being implemented and promises to provide a substantial supply of raw materials for metal production within the industry's supply chain.

Additionally, strong participation from the domestic capital sector significantly contributes to the industry's supply chain. Notable projects include the Hoa Phat II Steel Plant, launched in 2020 by Hoa Phat Group, with a total investment of \$3.4 billion, supplying iron, steel, and cast iron products. Another example is the Xuan Thien Steel Plant project in 2021, which has a total investment of \$2.7 billion and provides iron, steel, and green cast iron products.







Source: U.S. Geological Survey, Vietnam Government



> 2. CHALLENGES OF THE FABRICATED METAL PRODUCTS INDUSTRY

The Carbon Border Adjustment Mechanism (CBAM) requires exporting companies in the sector targeting the EU to invest substantial amounts in reducing carbon emissions during the production process



The European Union (EU27) ranks among the top five markets for exports of prefabricated metal products from Vietnam by value, accounting for 13.2% of the market share from 2019 to 2023. This is one of the key markets generating a significant trade surplus for Vietnam in this sector. To achieve its ambition of becoming a carbon-neutral continent by 2050, the EU is concerned that EU businesses may relocate high-carbon-emission production processes abroad, which could severely undermine both the EU's and global climate neutrality goals. To prevent this, the Carbon Border Adjustment Mechanism (CBAM) has been established.

This mechanism will impose carbon taxes on all goods imported into EU member countries based on the greenhouse gas emission intensity of their production processes in the exporting country starting in 2026. The EU categorizes goods into two types for calculating actual emissions: simple goods and complex goods. For complex goods, the emissions from the raw materials used will also be taken into account. Therefore, the emissions calculated will not only include the production phase but also encompass the raw materials stage.

This means that the fabricated metal products sector will face significant impacts, as the production of metals and raw materials within the industry generates high emissions, particularly in the manufacturing of steel and aluminum. Manufacturers or traders targeting the EU market will need to purchase CBAM certificates starting in 2026. The cost of these certificates will depend on the average weekly auction prices from the EU's Emissions Trading System (ETS), expressed in EUR per ton of CO2 emitted.

In the context of fabricated metal product manufacturers and traders in Vietnam, CBAM will reduce the price competitiveness of goods entering this potential market, forcing them to seek alternative markets unless they implement timely measures to reduce emissions in their production processes and material sourcing. Naturally, transitioning to and implementing these emission reduction solutions will require substantial investments in green process research and development, posing financial challenges and necessitating other long-term strategies for these businesses..



SEVERAL PROMINENT FDI PROJECTS IN THE FABRICATED METAL PRODUCTS INDUSTRY





SOME TYPICAL PROJECTS



1. AGRICULTURAL FOOD PROCESSING FACTORY

- Investment type: DDI
- Location: Tan Phu Trung Industrial Park, Cu Chi, Vietnam
- P.E.B Contractor: PEB Steel Buildings Co., Ltd.
- Contact: (+84) 908 883 531 | marketing@pebsteel.com.vn

PROJECT NAME: AGRICULTURAL FOOD PROCESSING FACTORY



2. ADHESIVE TAPE MANUFACTURING FACTORY

- Investment type: FDI
- Location: Marine and Service Industrial Park (DEEP C2B), Hai Phong City, Vietnam
- P.E.B Contractor: PEB Steel Buildings Co., Ltd.
- Contact: (+84) 908 883 531 | marketing@pebsteel.com.vn

PROJECT NAME: ADHESIVE TAPE MANUFACTURING FACTORY



SOME TYPICAL PROJECTS



PROJECT NAME: VINA KYOEI

3. VINA KYOEI

- Location: Phu My 1, Vung Tau City, Vietnam
- Scale: 32,000 m2 3,500 MT
- Industry: Construction Materials Client: Vina Kyoei Japan
- Scope of work: Design, manufacturing, erection
- Contact: +84 28 3926 0666 | sales@atad.vn



4. HOA PHAT - DUNG QUAT STEEL PRODUCTION COMPLEX

- Industry: Buiding Materials
- Location: Dung Quat Economic Zone, Quang Ngai Province, Vietnam
- Client: Hoa Phat Group
- Main Contractor: ATAD
- Scale: 144,000 m2 63,000 ton
- Contact: +84 28 3926 0666 | sales@atad.vn

PROJECT NAME: HOA PHAT - DUNG QUAT STEEL PRODUCTION COMPLEX



SOME TYPICAL PROJECTS



PROJECT NAME: GOERTEK VINA FACTORY

5. GOERTEK VINA FACTORY

- Location: Nghe An
- Investor: GOERTEK VINA LLC
- Materials: COLORBOND® steel (for wall) & ZINCALUME® steel (for roof)
- Contact: (+84) 28 3821 0066 | colorbond@bluescope.com.vn

6. ELECTRICAL CABLE MANUFACTURING FACTORY



- Investor: KOREAN ELECTRICAL EQUIPMENT JOINT STOCK COMPANY
- Material: ZINCALUME® (roof)

- Location: Hung Yen

- Profile: LYSAGHT® KLIP-LOK® OPTIMA™ (roof part)
- Contact: (+84) 28 3821 0066 | colorbond@bluescope.com.vn

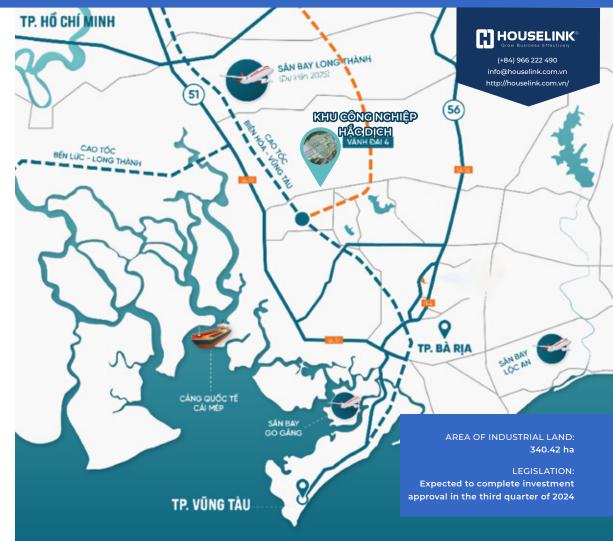
PROJECT NAME: ELECTRICAL CABLE MANUFACTURING FACTORY



POTENTIAL NEW INDUSTRIAL PARKS PROJECTS IN VIETNAM

HAC DICH INDUSTRIAL PARK, BA RIA – VUNG TAU PROVINCE

Ba Ria – Vung Tau province is strategically positioned as a key connecting hub of the Southeastern region within the Southern key economic zone of Vietnam. The Hac Dich Industrial Park, spanning an area of up to 450 hectares, is poised to become operational. It is envisioned as a high-tech industrial park with exceptionally favorable connectivity, located in close proximity to seaports, river ports, and airports, providing easy access to Ho Chi Minh City. In addition to benefiting from its advantageous location, the Hac Dich Industrial Park is designed with modern administrative and service areas, featuring amenities such as ample parking space, exhibition centers, vocational training centers, cultural facilities, and services catering to the workforce within the park, thus providing an optimal experience for investors.



GEOGRAPHICAL ADVANTAGES

- Distance to Cai Mep Port Cluster: ~23km
- Distance to Can Gio Seaport: ~40km

INVESTMENT - ATTRACTING FIELDS

- High technology sectors
- Pharmaceutical industry Biotechnology
- Distance to Long Thanh Airport: ~10km
- Distance to Ho Chi Minh City: ~60km
- Medical equipment and healthcare
- Electronics component assembly
- High-tech industries Logistics



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HOUSELINK JOINT STOCK COMPANY

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