



**SOCIO-ECONOMIC  
RESEARCH CENTRE**

## **SEAISI Mega Event and Expo**

# **12th Malaysia Plan Shaping of the Steel Industry**

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**Executive Director**  
15 November 2022



## Malaysia's Future Economic Development Plan



## Prospects for the Iron and Steel Industry



## Challenges Ahead: Supporting the Sustainability Shift

# The 12<sup>th</sup> Malaysia Plan (12MP) (2021-2025)

*The start of a new phase in Malaysia's journey  
of development towards a high income nation  
by 2030*



# 12MP (2021-2025) – Accelerating towards a high-income nation by 2030



➤ **THREE (3)** Themes of the 12MP:

- 1** **RESETTING** the economy
- 2** Strengthening **SECURITY, WELLBEING** and **INCLUSIVITY**
- 3** Advancing **SUSTAINABILITY**

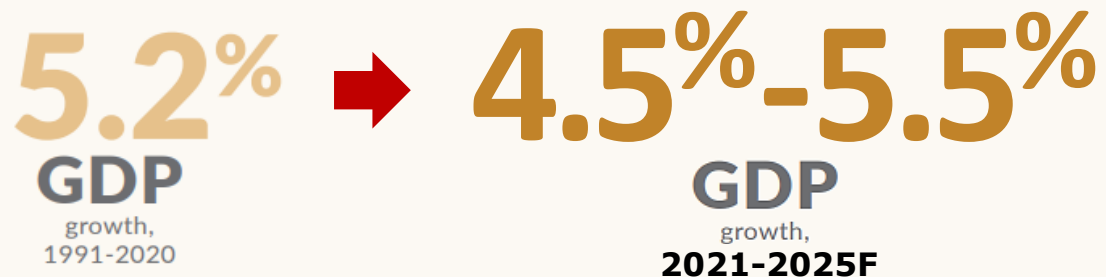
➤ **FOUR (4)** Catalytic Policy Enablers:

- Developing **FUTURE TALENT**
- Accelerating **TECHNOLOGY ADOPTION** and **INNOVATION**
- Enhancing **CONNECTIVITY** and **TRANSPORT INFRASTRUCTURE**
- Strengthening **PUBLIC SERVICES**

➤ **14** Game Changers represent bold and innovative actions to **SHIFT MINDSETS** and **CHANGE THE APPROACH TO NATIONAL DEVELOPMENT**

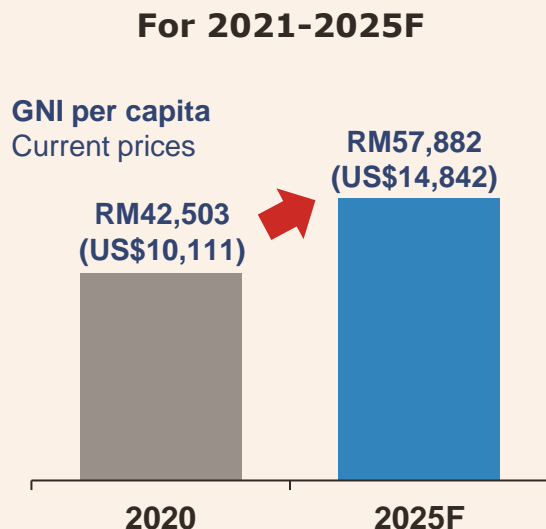
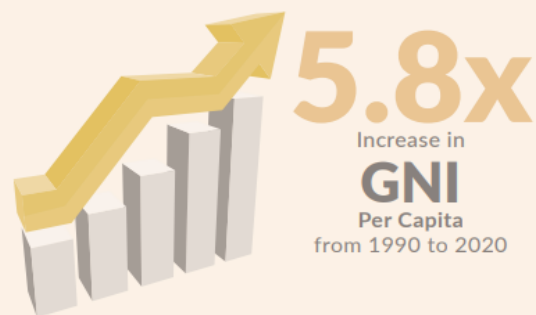
# 12MP's macro targets: Past and the next 5 years (2021-2025F)

## Gross Domestic Product (GDP)

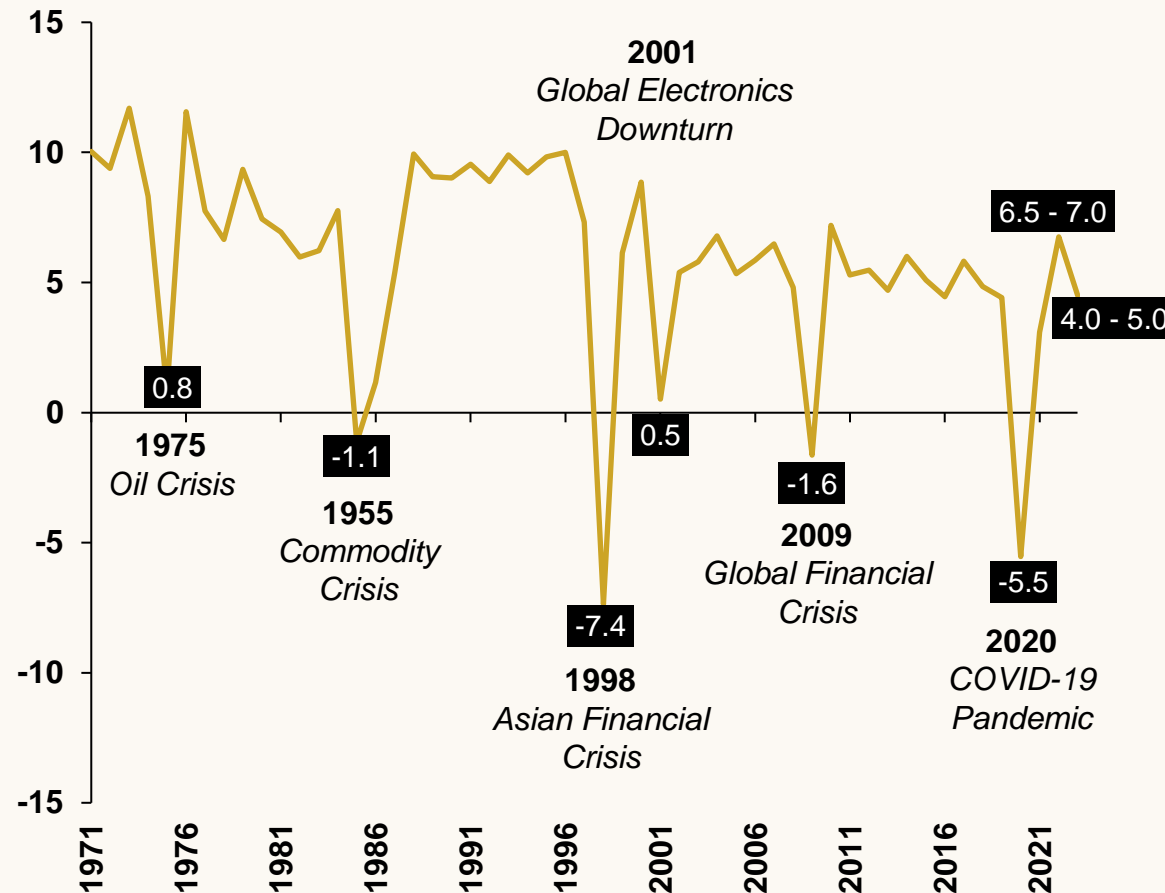


## Gross National Income (GNI) Per Capita

GNI per capita has expanded about sixfold from RM7,382 (US\$2,730) in 1990 to RM42,503 (US\$10,111) in 2020.



## GDP growth, % p.a.



Source: MOF; EPU

# 12MP: Selected macroeconomic targets



## Consumption and Investment



Average Growth of Real Private Investment (2021-2025)

3.8%

Average Private Investment in Current Prices (per year)

RM258 billion

Average Growth of Real Public Investment (2021-2025)

2.6%

Average Public Investment in Current Prices (per year)

RM80 billion

Average Growth of Real Private Consumption (2021-2025)

5.8%

Average Growth of Real Public Consumption (2021-2025)

3.7%



## International Trade

Average Growth of Gross Exports (2021-2025)

5.0%

Trade Balance (2025)

RM191 billion

Current Account of the Balance of Payments (2025)

RM44 billion

2.2% of GNI

## Unemployment



Unemployment Rate (2025)

4.0%

## Inflation



Average Annual Inflation Rate (2021-2025)

2.7%

## Fiscal Balance

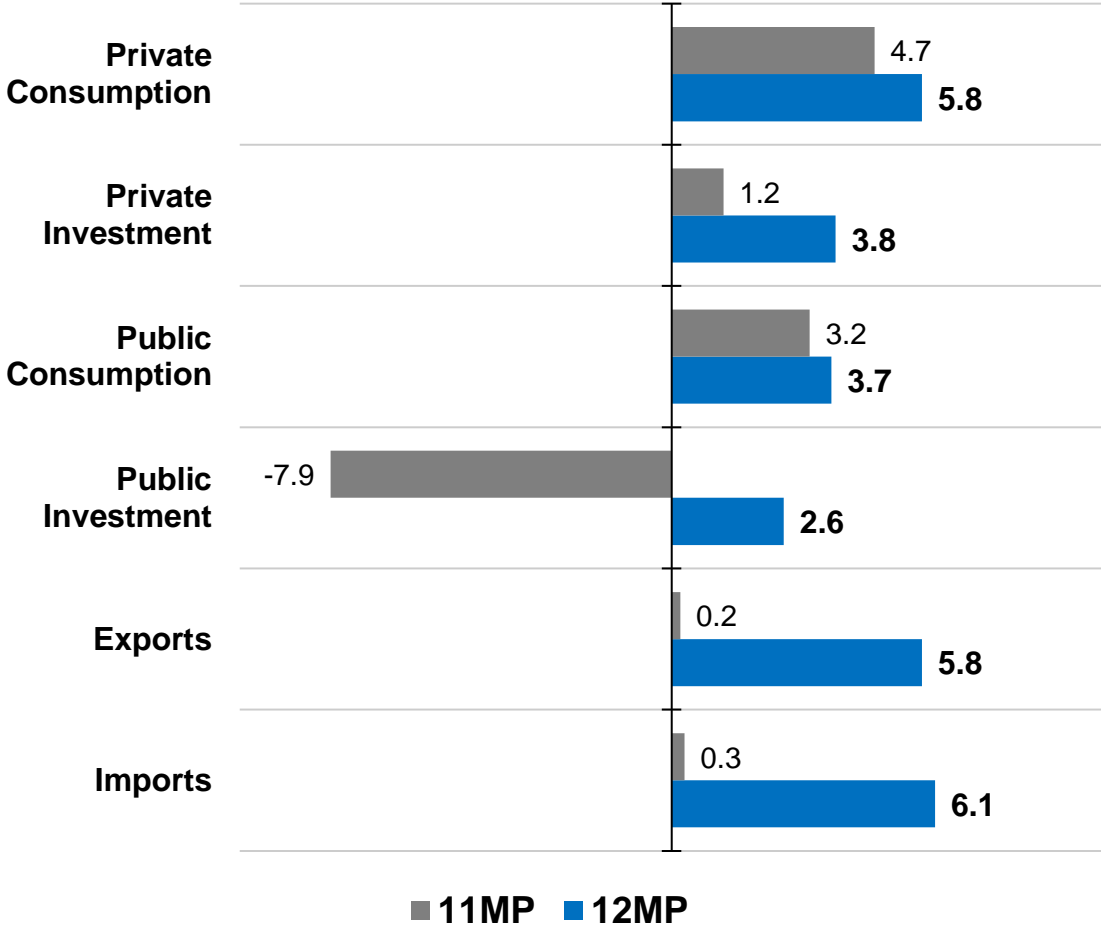


Percentage of Fiscal Balance to GDP (2025)

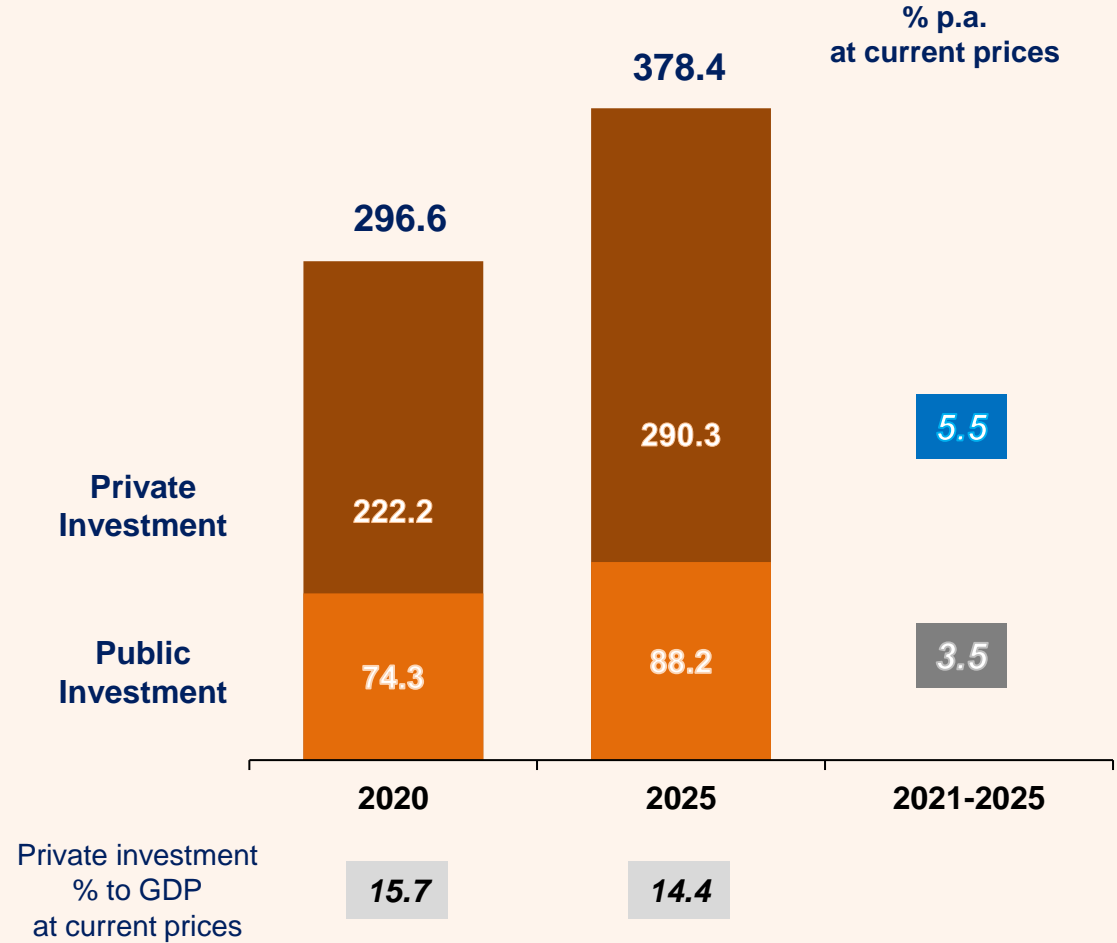
-3.5% to -3.0%

# GDP by type of expenditure: 12MP vs. 11MP

Real growth (%) per annum  
(2015=100)



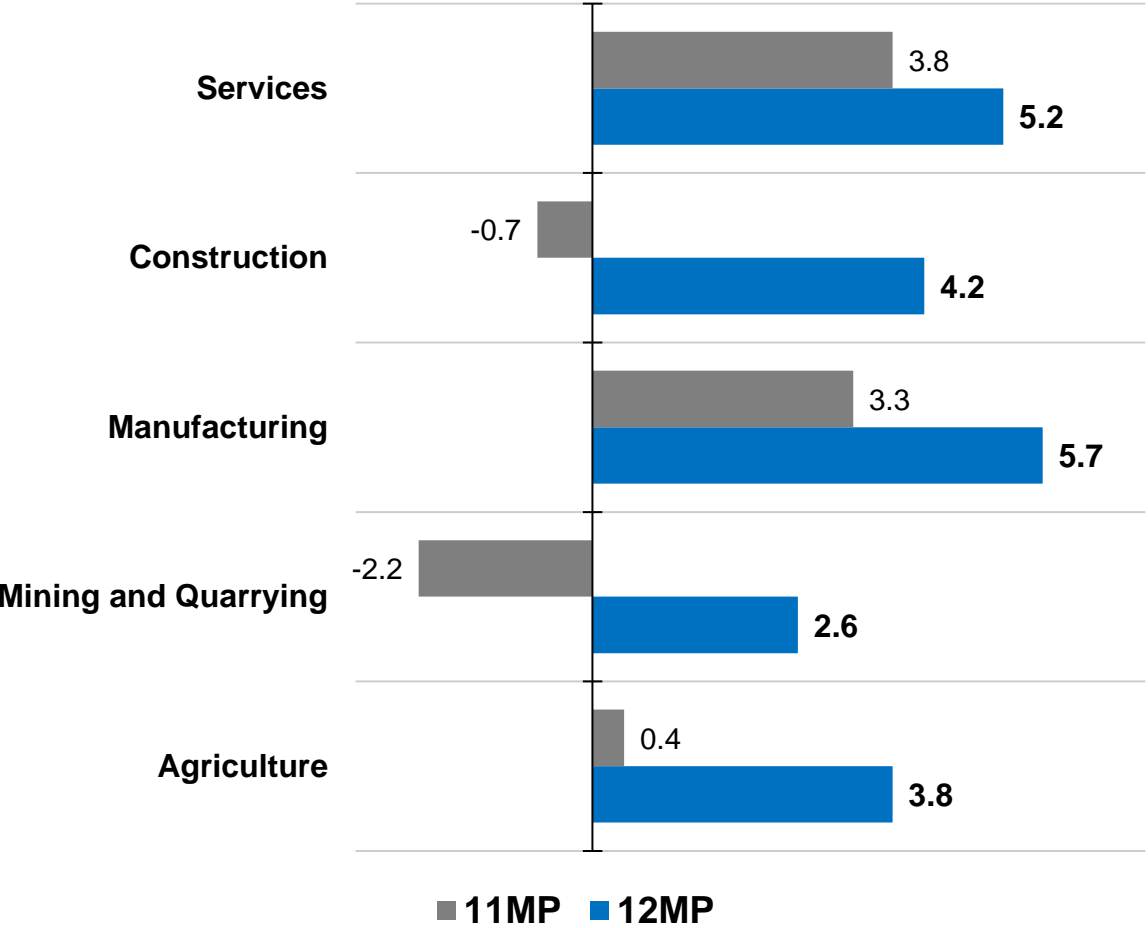
Nominal investment  
RM billion, current prices



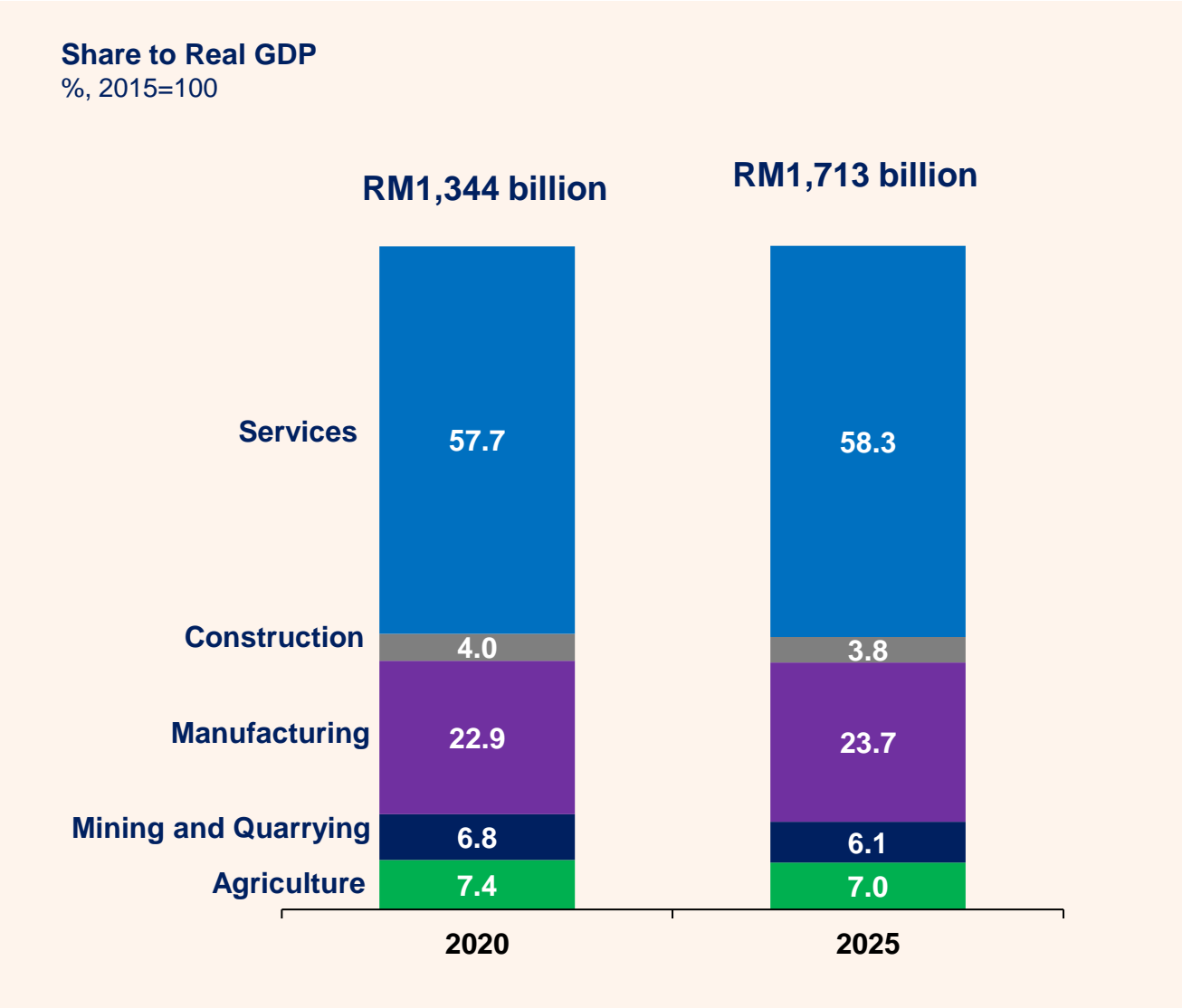
Source: DOSM; EPU

# GDP by major economic sector: 12MP vs. 11MP

Real growth (%) per annum  
(2015=100)



Share to Real GDP  
%, 2015=100



Source: DOSM; EPU



# Shaping the Iron & Steel Industry

## Drivers and Prospects



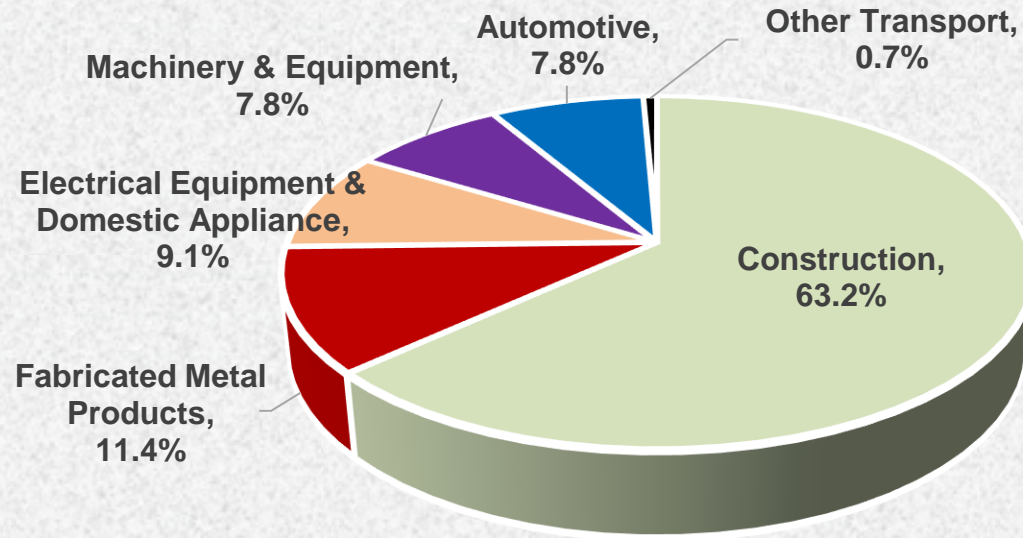
# An overview of Malaysia's iron and steel industry

- The iron and steel industry is a vital component in Malaysia's economic and industrial development, especially in the manufacturing and construction sectors.
- In 2021, the industry contributed to 0.6% of GDP\*; 1.7% of manufacturing output; 2.3% of total exports; and 0.4% of total employment (54,326 persons).

\* Basic metals over overall GDP, which includes iron and steel products and other non ferrous metals

## Malaysia's Steel Consuming Sectors in 2021

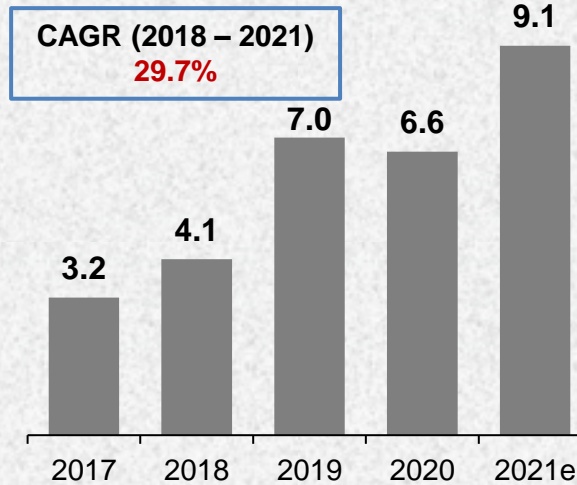
Out of 7.0 million MT ASC...



Source: MISIF; DOSM

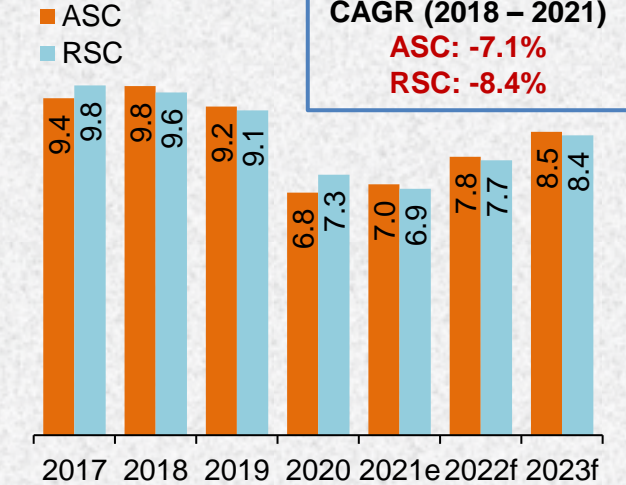
## Crude Steel Production

Million MT



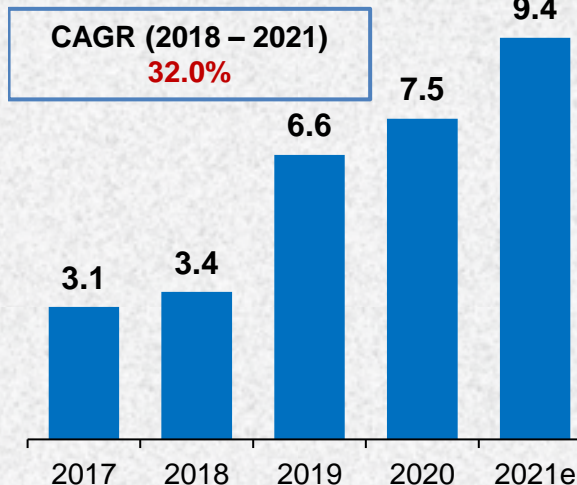
## Steel Consumption (SC)

Million MT



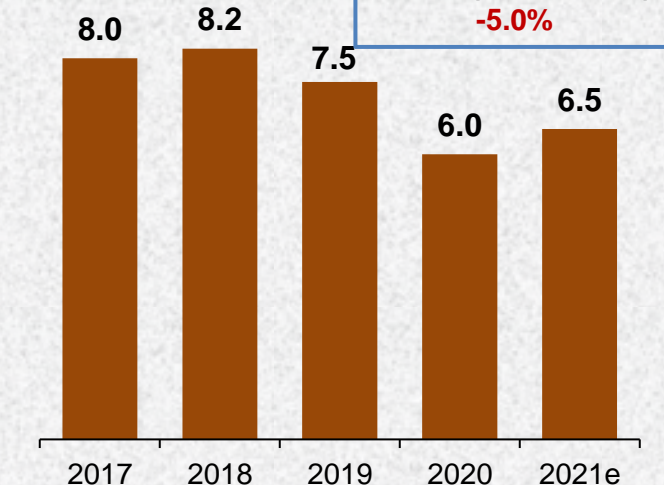
## Iron and Steel Exports

Million MT



## Iron and Steel Imports

Million MT

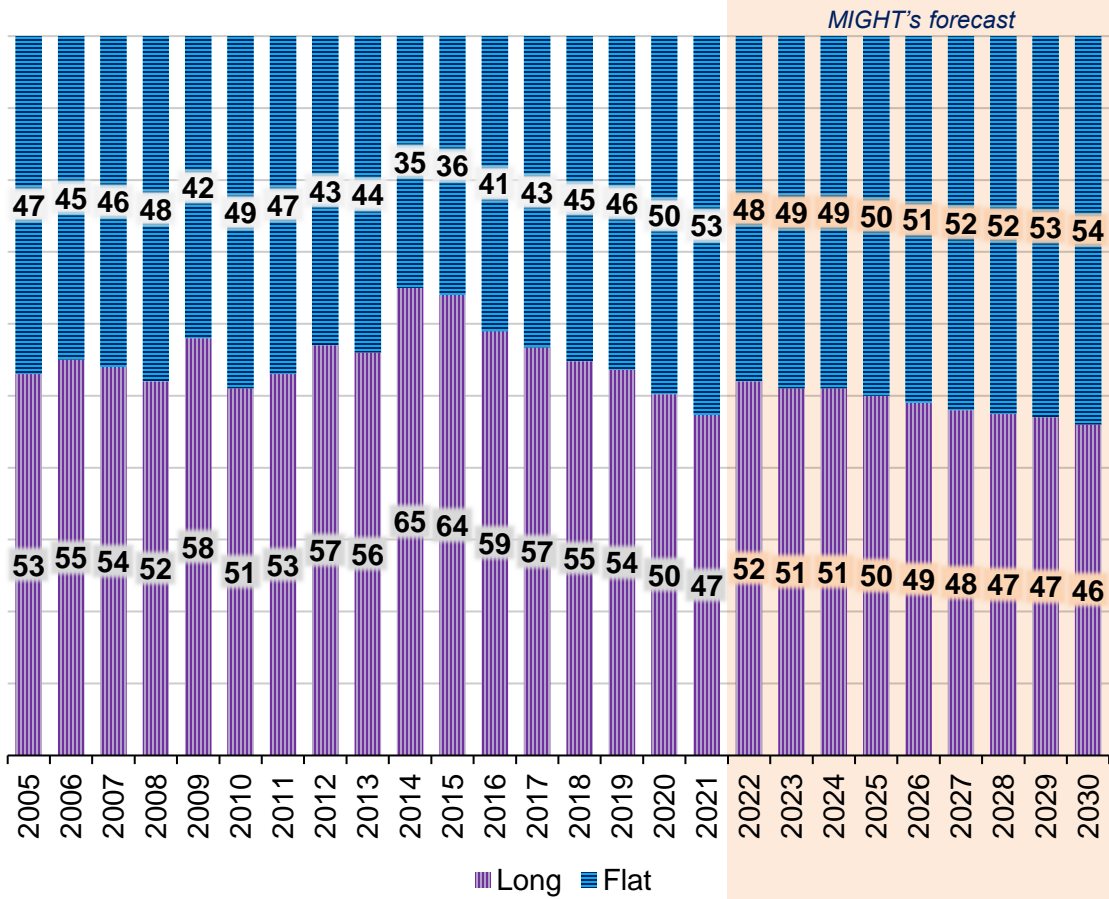


Note: Apparent Steel Consumption (ASC) = Hot rolled production + Finished imports – Finished exports  
Real Steel Consumption (RSC) = Final use of steel products, adjusted for the stock cycle

# Shift in consumption of steel product mix

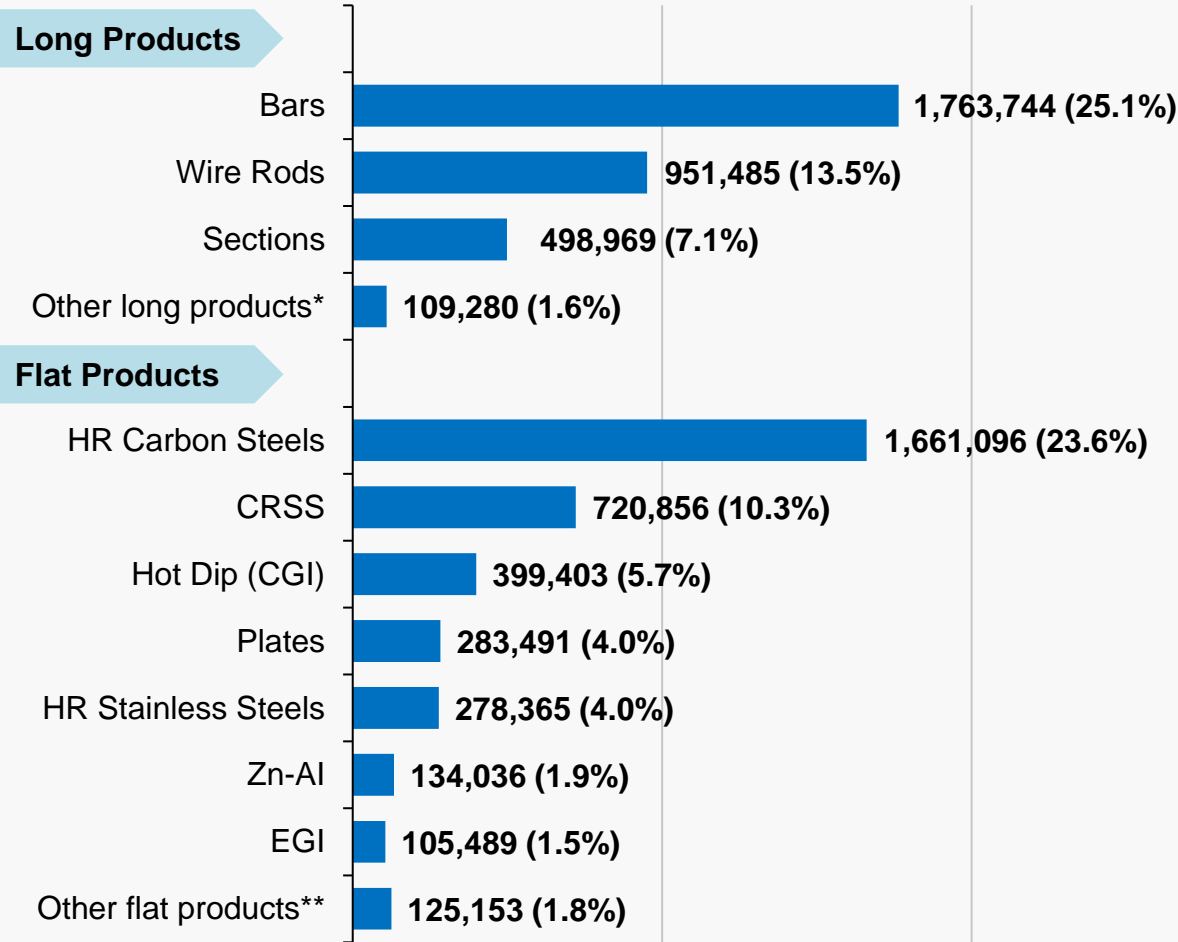
- Flat products have exceeded long products in 2021.

Apparent Steel Consumption by Type of Product (%)



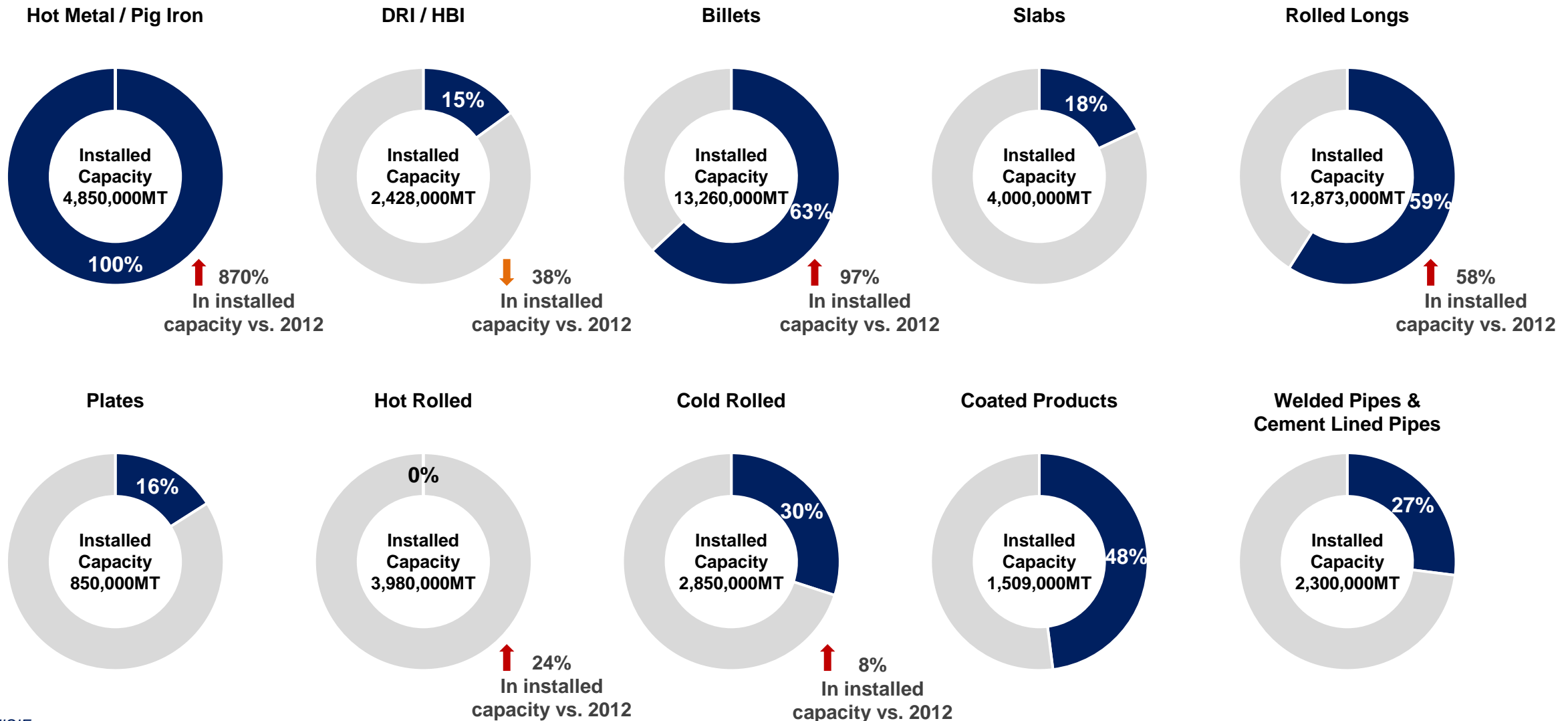
Source: MISIF; The Malaysian Industry-Government Group for High Technology s (MIGHT) calculation

ASC by long and flat products in 2021  
MT



\* Incl. Rails & accessories, steel sheet piles; and tyre & wheels  
 \*\* Incl. Color Coated; Tinplates; etc. with adjustments  
 Figure in parenthesis indicates share of total ASC

# Low capacity utilisation levels across all steel product segments in 2021



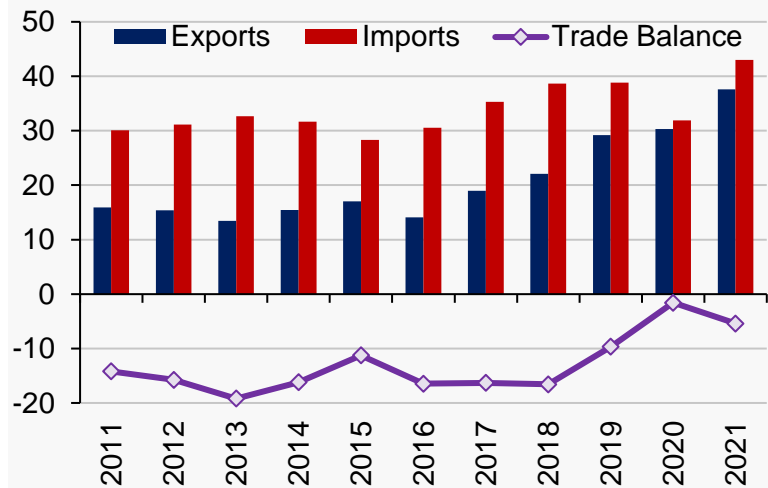
Source: MISIF

# Malaysia is the world's 25<sup>th</sup> largest exporter & 23<sup>rd</sup> largest importer of iron & steel

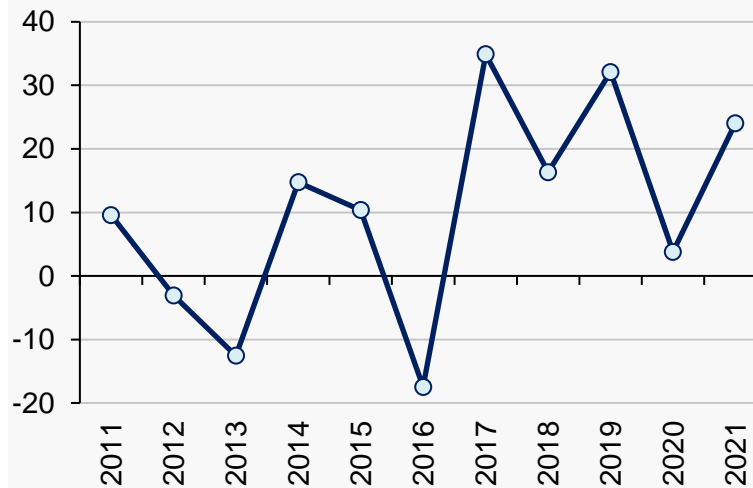
- In 2021, Malaysia **exported RM37.6 billion** of iron and steel products (HS Code 72 & 73), making it the **25<sup>th</sup> largest exporter** in the world.
- Main **export destinations** are China (34.8%), Singapore (9.5%), Thailand (7.6%), United States (7.4%), Indonesia (5.6%) and South Korea (5.0%).

- In 2021, Malaysia **imported RM43.0 billion** of iron and steel products (HS Code 72 & 73), making it the **23<sup>rd</sup> largest importer** in the world.
- Main **sources of imports** are China (26.6%), Japan (15.0%), South Korea (8.6%), Indonesia (8.4%), Taiwan (8.3%), Vietnam (6.9%) and United States (6.5%).

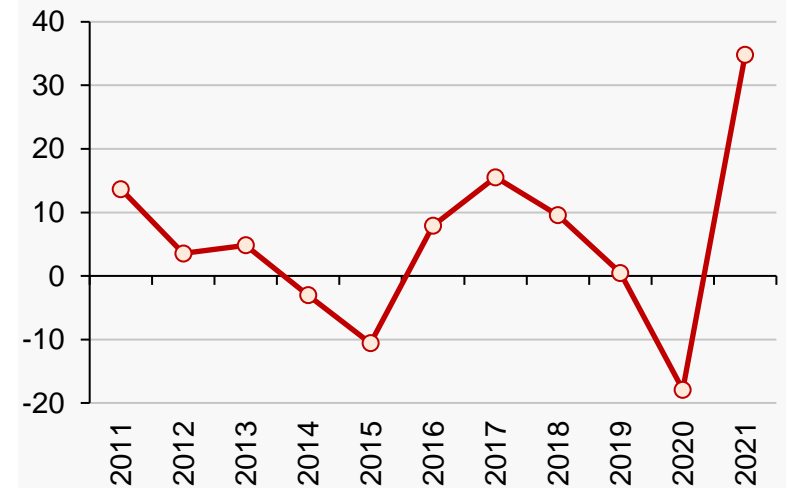
**External trade in iron and steel and the products**  
RM billion (HS Code 72 & 73)



**Exports of iron and steel and the products**  
% Growth (HS Code 72 & 73)



**Imports of iron and steel and the products**  
% Growth (HS Code 72 & 73)

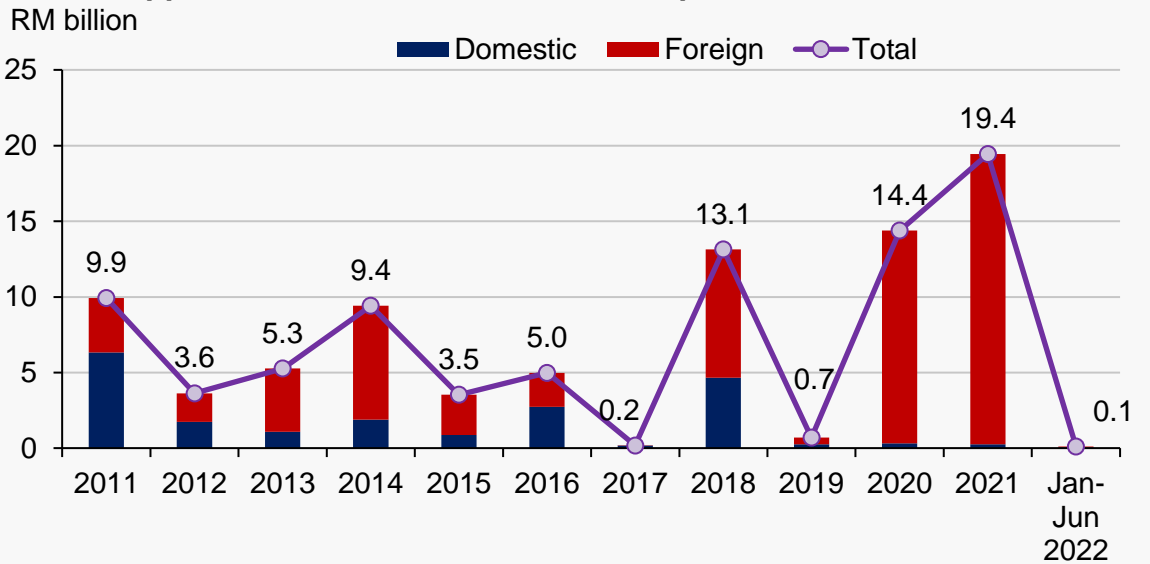


Source: DOSM; UN Comtrade

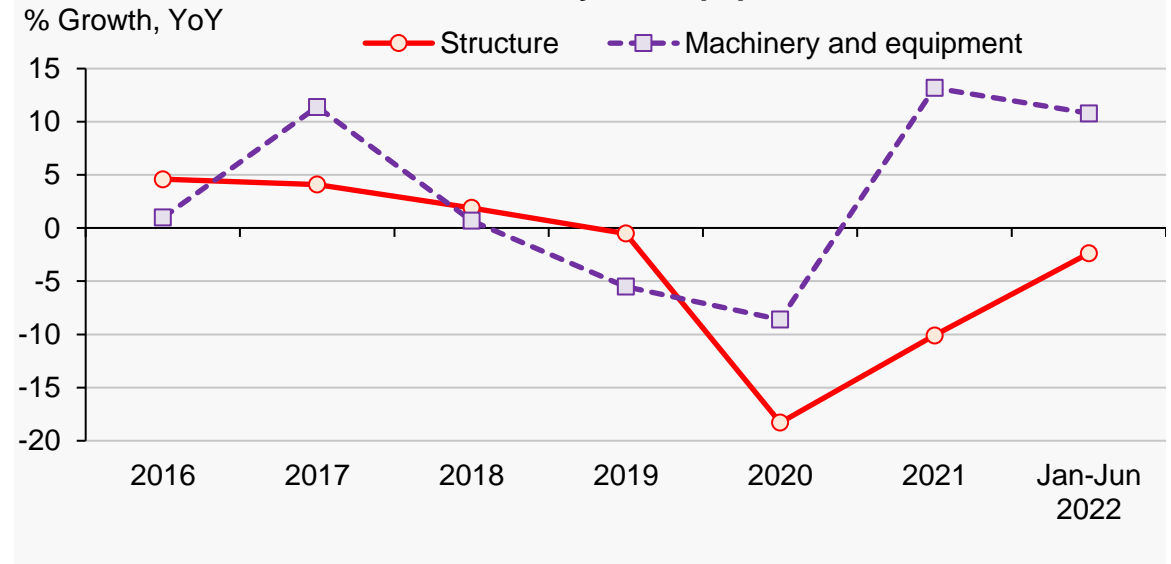
# Investment in basic metal products

- Approved manufacturing investment in basic metal industry recorded **an average of RM7.7 billion per year in 2011-2021**. It is the second largest approved investment in manufacturing sector in 2021.
- **The investment projects are dominated by foreign investments, specifically from China.** Domestic investments only accounted for merely RM264.7 million, equivalent to 1.4% of overall RM19.4 billion in 2021 (2.3% in 2020).
- In the first six months of 2022, approved investment for the entire basic metal products was sluggish at RM105.9 million.

**MIDA's approved investment in basic metal products**



**Investment in structures & machinery and equipment**



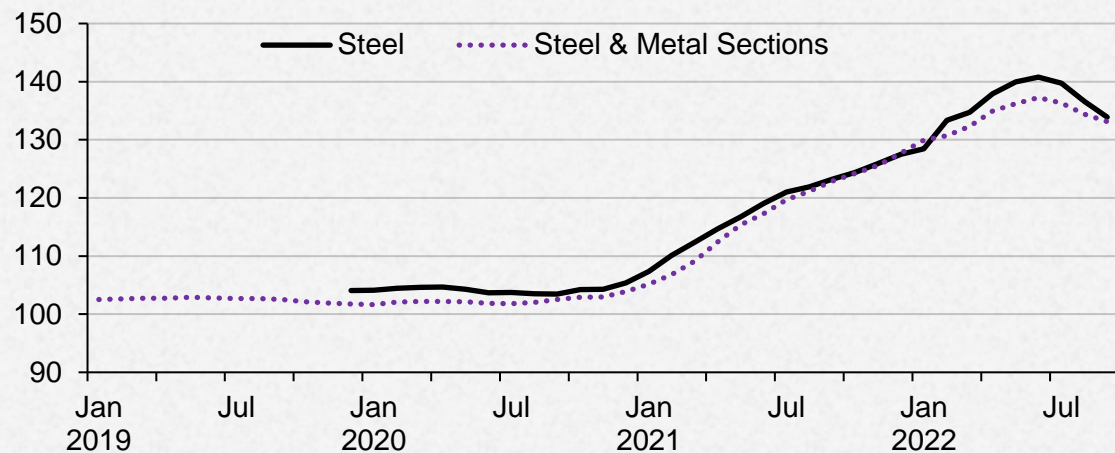
Source: MIDA

Note: Basic metal products cover both ferrous products and non-ferrous products.

# Price trend of the iron and steel industry

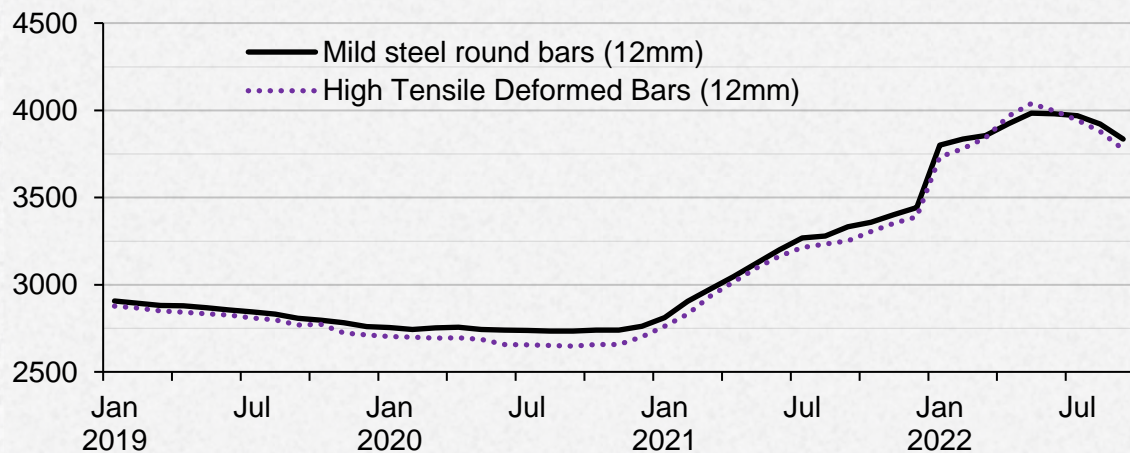
## Unit price index for building and structural works

Jul 2017=100



## Average unit prices for steel bars for civil engineering

RM per MT

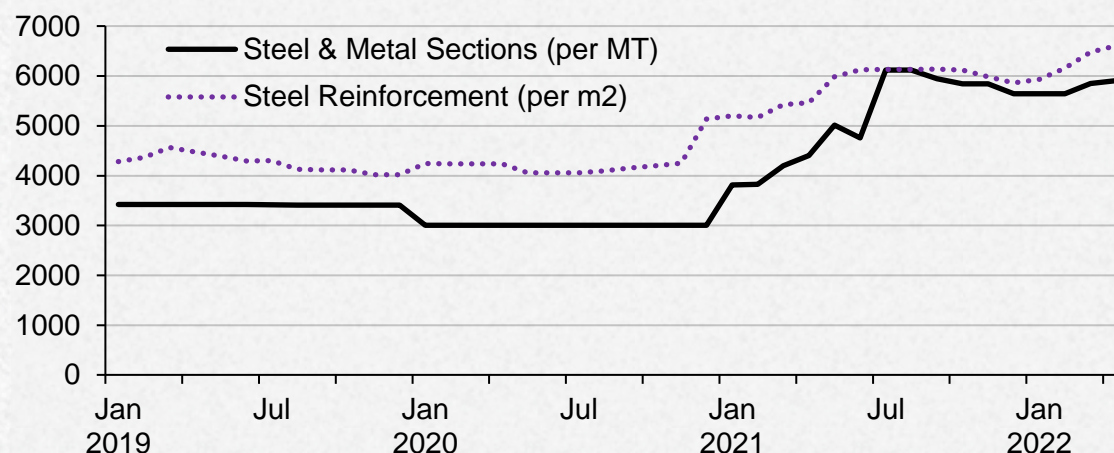


Note: Price index / level is calculated via simple average of available regional data

Source: DOSM

## Iron and steel related building material price

RM



Source: CIDB

Average price (RM)	2019	2020	2021	2022	CAGR (2020-2021)
Mild Steel Round Bars (12mm)	2,843	2,745	3,179	3,901	5.8%
High Tensile Deformed Bars (12mm)	2,807	2,676	3,129	3,885	5.6%
Steel & Metal Sections (per MT)	3,416	3,008	5,128	5,761	22.5%
Steel Reinforcement (per m2)	4,257	4,247	5,813	6,296	16.9%

# Malaysian iron and steel industry: National ambitions

**1**  
Ensuring Industry Sustainability

**2**  
Enhancing SEA Competitiveness

**3**  
Growing Global Steel Player

Targets	By 2025	By 2030
Apparent Steel Consumption (ASC) ASC per Capita	12.05 million MT 334kg	14.65 million MT 385kg
Production	11.05 million MT	18.31 million MT
Average Capacity Utilisation	65%-75%	65%-75%
Production as a % of ASC	92%	125%
% Flat vs. Long Production (hot rolled only)	35% vs. 65%	65% vs. 35%
Imports	5.37 million MT	3.67 million MT
Imports as a % of ASC	45%	25%
Exports	4.37 million MT	7.33 million MT
Exports as a % of ASC	36%	50%
% TISP Exports to ASEAN Countries	40%	55%
Market Penetration	+Automotive +E&E +Oil and Gas	+Medical Equipment +Engineering +Heavy Machinery
IBS Adoption		
Government Projects	80%-85%	85%-90%
Private Projects	80%-85%	85%-90%
Economic Contribution		
Value Added	RM21.43 billion	RM26.68 billion
Employment (Number of Workers)	181,160	189,226
Productivity (Value Added per Worker)	RM118,321	RM141,013

TISP=Total iron and steel products

Source: MISIF (White Paper by Iron & Steel industry: The Roadmap Back to Regional Competitiveness 2021 – 2030)



# Drivers of the iron and steel industry in Malaysia



## Recovery on track

Real steel consumption (RSC) is projected to grow by 11.6% to 7.7 million MT in 2022; and increase further by 9.1% to 8.4 million MT in 2023.

This is still below pre-pandemic level at an average of 9.5 million MT in 2017-2019.



## Improvement in household incomes

Higher demand for manufacturing (especially automotive segment – 7.8% of steel consuming) and durable goods.



## Government-backed infrastructure spending

Large amount of development projects/expenditure in the pipeline in construction sector (63.2% of steel consuming), covering infrastructure building across transport sector, energy and public utilities, health and housing sectors, etc.

- Allocated development expenditure under 12MP: RM400 billion (remaining est. RM260 billion for 2023-2025)



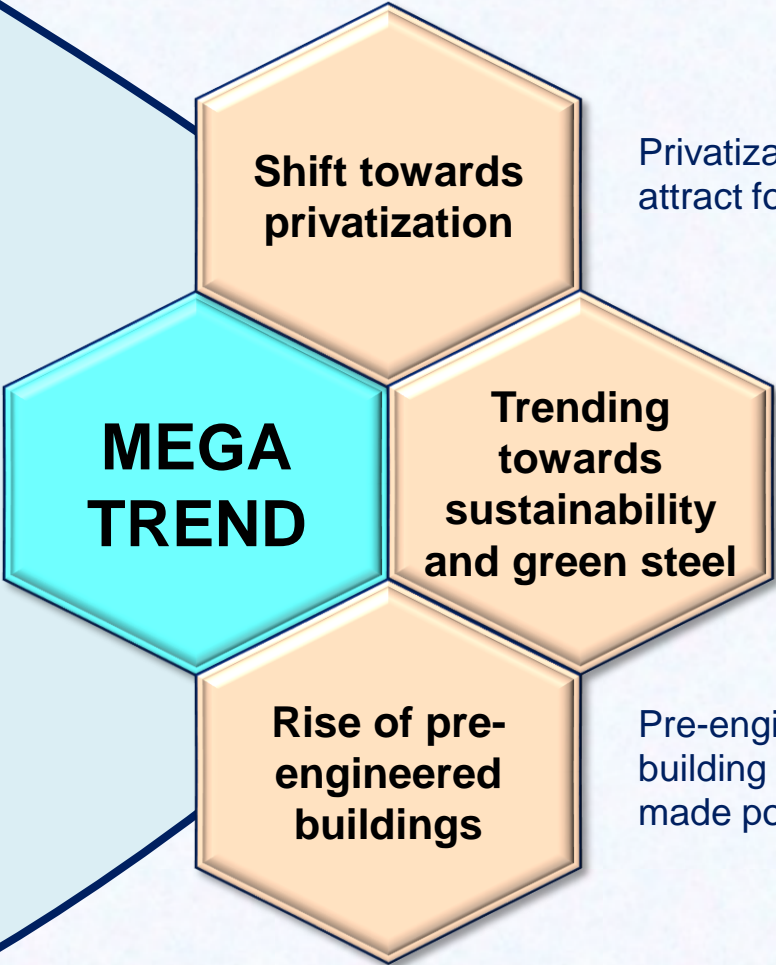
## Reducing import dependency and strengthening export capabilities

Increasing capacity and investment in the past few years would further reduce import dependency, while export capabilities is further supported by the catalytical multilateral free trade agreements, i.e. RCEP and CPTPP

# Challenges faced by the iron and steel industry



# Mega trends shaping the future of global iron and steel industry



Privatization of industries is slowly becoming a norm today for governments across the globe to attract foreign investments, and steel industry is no exception to this.

With growing concerns over conserving natural resources and climate change, steel players are emphasizing the reuse of scrap iron in order to decrease the carbon footprint. This helps to improve the ecological balance by minimizing the requirement of iron ore extraction for the process generation of steel. Hence, scrap iron has become a preferred raw material for steel producing companies.

Pre-engineered buildings which save up to 50% of time and cost when compared to traditional building construction methods are gaining traction. A wide range of customization options is made possible with welding of steel bars has contributed to the rise of pre-engineered buildings.

**Demand for steel across the globe is expected to reach 2.0 billion tons by 2035, growing at a CAGR of 1.4% \***

\* Accenture Strategy's presentation to OECD – Baseline forecast made in 2017

# Challenges and issues faced by the iron and steel industry in Malaysia

On global perspective ...

## Global Recessionary Risk

- Lowering demand
- Reducing supply

## China's Policy Direction

- Slowing down economic engine
- Demand plunge from property stress
- Steel scrap as strategic resource → global shortage

## Technology Progression

- Critical investment decisions on steel-making technologies
- Requiring renewable energy source (hydrogen) to cut emission

## Green: Decarbonisation & Carbon Tax

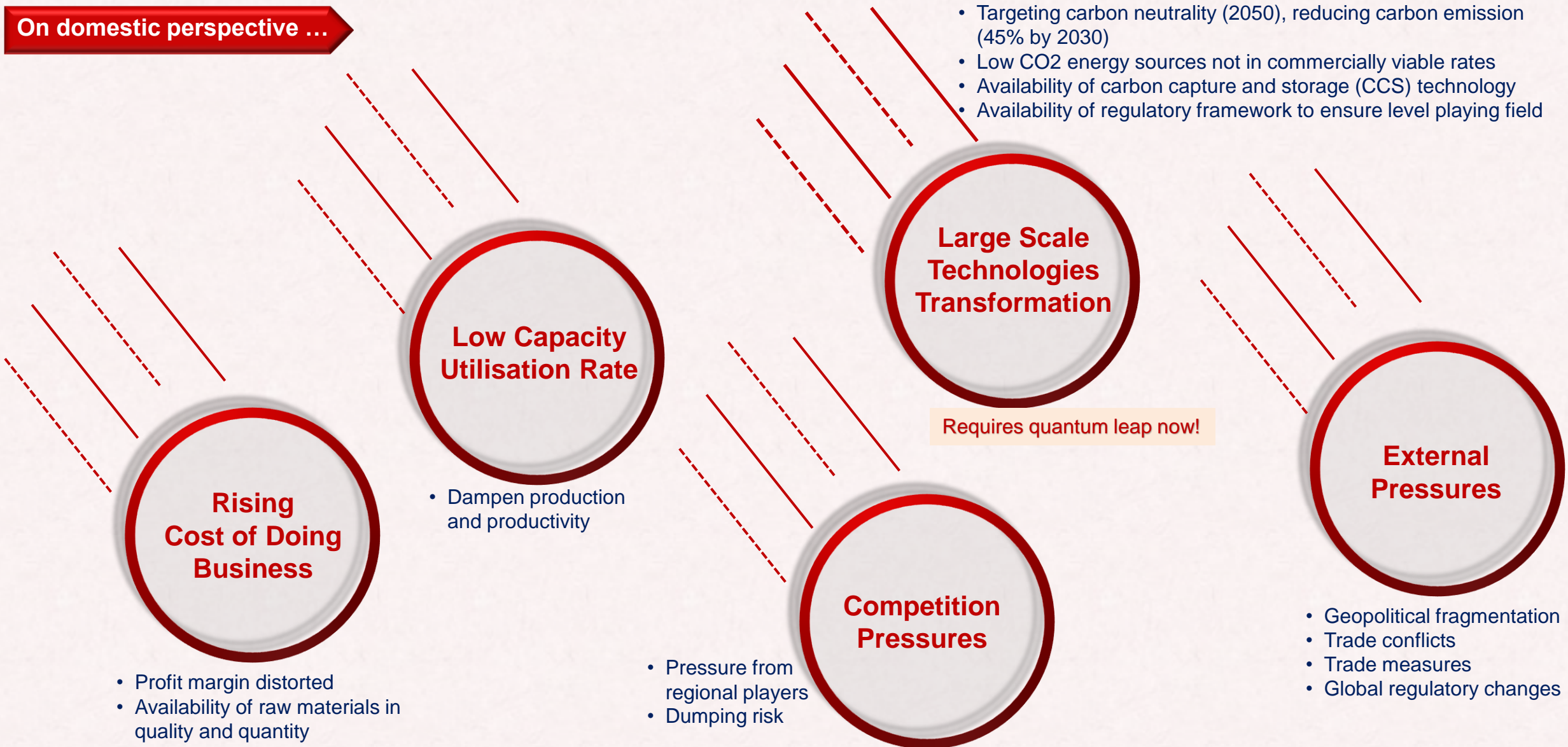
- Cost impact
- New materials required
- Natural trade barriers

## Deglobalisation

- Protectionism: Higher trade barriers; lower trade activities
- Widening cross-border supply-demand gap
- Hike in raw material and steel prices
- Worsening global overcapacity

# Challenges and issues faced by the iron and steel industry in Malaysia

On domestic perspective ...





**SERC**

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## **THANK YOU**

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