

# VIET NAM ENVIRONMENTAL

# AND

# SAFETY COUNTRY REPORT



htranh-G

PART  
1

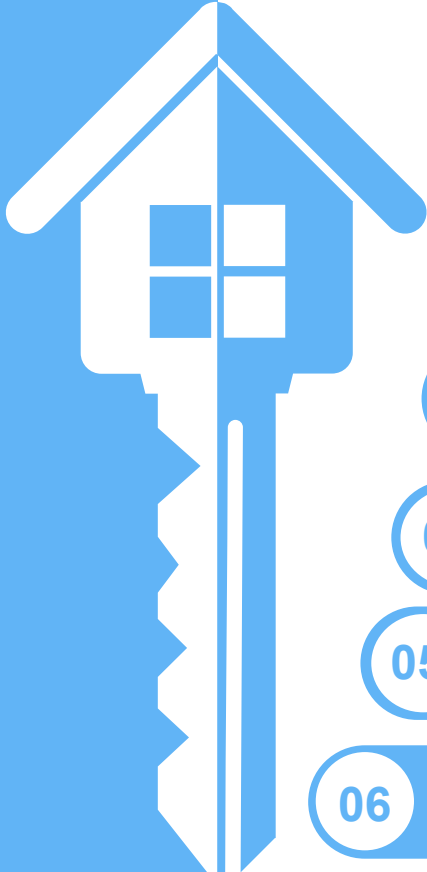


Climate Change Responses

MITIGATION & ADAPTATION

CLIMATE CHANGE SG

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# PARIS CLIMATE AGREEMENT

Historical document that legally binds the whole World to participate in climate change fight.

196  
countries

## Adopted the Agreement

officially recognizing human influence on climate

2020

## Will come into force by 2020

If signed by **55 countries** covering **55%** of global emissions

## Finance

Rich countries will provide minimum of **\$100 billion** to developing ones for climate change adaptation by 2020

## Goal

Holding the increase in the global average temperature well below

2°C

Pursue efforts to limit the temperature increase to

1.5°C

## Role of forests

The Agreement binds saving and increasing forest area in order to capture GHGs from the atmosphere

## Climate neutrality 2050

The balance between emissions and sinks should be reached in the second half of XXI century

## Clean technologies

The Agreement urges to speed up clean tech development and international technology transfer

5  
years

## Ambitious

Every 5 years countries shall revise their emissions reduction targets and measures

## Climate damage

For the first time ever the Agreement defines climate loss and damage terms **but** liability and compensation are not mentioned

# 1. Regulations on Environmental Protection Law

The Law on Environmental Protection in 2020 has 03 articles on responding to climate change that the Government assigns detailed regulations.

I. Article 91. Mitigation of greenhouse gas emissions.

II. Article 92. Protection of the ozone layer.

III. Article 139. Organization and development carbon market.



## 2. Decree 06/2022/D-GV

Chapter I. General provisions.

Chapter II. Mitigation of greenhouse gas emissions, Organization and development of domestic carbon market.

+ Section 1. Mitigation of GHG emissions.

+ Section 2. Organization and development of the domestic carbon market.

## ❖ Regarding mitigation of greenhouse gas emissions, regulations:

- Objects of mitigation of greenhouse gas emissions;
- Objectives, roadmap and methods of GHG emission reduction
- Increased absorption of greenhouse gases;
- National GHG and MRV, GHG emission reduction system;
- Contents of MRV activities to reduce greenhouse gas emissions;
- GHG audit at all levels;
- Allocating, adjusting and withdrawing GHG emission quotas;
- GHG emission mitigation plan and GHG emission reduction results;
- Requirements for appraisal units;
- Responsibility for inspecting and monitoring GHG emission reduction activities.





## 2. Decree 06/2022/D-GV

Chapter III. Protect the ozone layer.

Chapter IV. Measures to promote activity on greenhouse gas emission reduction and ozone layer protection.

Chapter V. Terms enforcement.



### 3. Goals, roadmap and methods reduce greenhouse gas emissions

- The target to reduce greenhouse gas emissions is set by the Prime Minister, Prime Minister approval in the NDC, including targets for the areas;

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- The roadmap is divided into 2 phases: from now until the end of the year 2025 and from 2026 to the end of 2030;
- The period from now to the end of 2025 will not put pressure on enterprises to reduce emissions, from 2026 to the end of the year 2030 will implement measures to reduce emissions as planned;

### 3. Goals, roadmap and methods reduce greenhouse gas emissions

- Methods of mitigating greenhouse gas emissions include:

- + Policy measures, management of GHG emission reduction activities, GHG emission mitigation measures for each type of production and business establishments are implemented through reduction plans. Reduction greenhouse gas emissions at field and grassroots levels;

- + Technology transformation, application of production processes, use of services with low greenhouse gas emissions;

- + Implement programs and projects according to cooperation mechanisms and methods on GHG emission reduction in accordance with the provisions of law and international treaties to which Vietnam is a member.





## 4. Measurement, reporting, appraisal and inventory of greenhouse gases

- Clearly define the implementation content and responsibilities of the Ministries, sectors/fields according to international regulations and activities that have been implemented in practice;
- Greenhouse gas measurement, reporting, appraisal and inventory data is updated in an online database;
- Appraisal results of greenhouse gas audit by Ministries management field service performance organization.
- Appraisal of national report on mitigation , development sector-level greenhouse gas emissions by the Ministry of Natural Resources and Environment on the basis of reports of the Ministries managing the field;

## 4. Measurement, reporting, appraisal and inventory of greenhouse gases

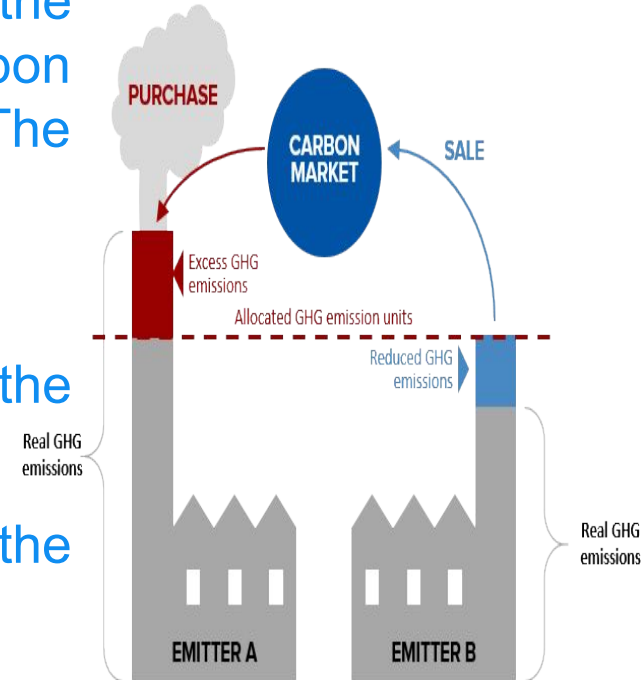
- Appraisal results of greenhouse gas inventory by Ministries management of the field of implementation.
- Appraisal of mitigation report house gas emissions grassroots glasses performed by qualified appraisal units;
- Decree stipulating criteria, the Ministry of Natural Resources and Environment will publish the list of capable units;
- Decree clearly defines rights and responsibilities.

## 5. Organization and market development domestic carbon market

Regarding the organization and development of the domestic carbon market, regulations for the development and operation of the official carbon market are set out from January 1, 2028. The regulations include:

- Participants in the domestic carbon market;
- Development roadmap, time to deploy the domestic carbon market
- Confirmation of carbon credits traded on the exchange of the domestic carbon market;

How an emission trading system works



## 5. Organization and market development domestic carbon market

- Exchange of greenhouse gas emission quotas and carbon credits in the domestic carbon market;
- Documents, order and procedures for project implementation according to the credit exchange and clearing mechanism carbon;
- Responsibility for the development of the domestic carbon market.



## 5. Organization and market development domestic carbon market

Implement Article 139 of the Law on Environmental Protection, the roadmap includes 02 phases;

### 1. The period from now to the end of 2027:

- Develop regulations on management of carbon credits, exchange of GHG emission quotas and carbon credits;
- Developing regulations on operation of carbon credit trading floor; guiding the implementation of the domestic and international carbon credit exchange and clearing mechanism;





## 5. Organization and market development domestic carbon market

- Establish and organize pilot operation of a carbon credit exchange from 2026; capacity building, awareness raising;
- Regulations on term exchange activities greenhouse gas emissions quotas and carbon credits in the market as well as the organization and operation of the domestic carbon market.

### 2. Period from 2028:

- To organize the operation of the main carbon credit exchange awake from January 1, 2028;
- Regulations on connection and exchange of carbon credits domestic and regional and global carbon markets.



## 6. Protect the ozone layer

**The content of this Chapter focuses on stipulating the following contents:**

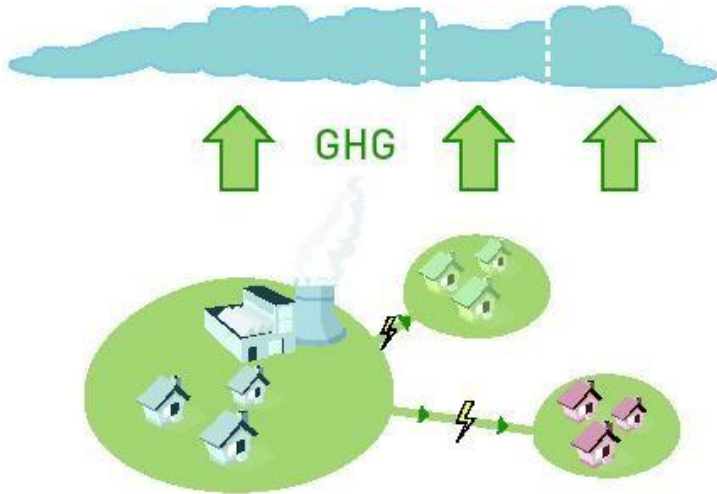
- Objects and regulations on management and exclusion of substances according to Vietnam's responsibilities and obligations;
- Regulations on registration of controlled substance use applicable to groups of subjects engaged in controlled substance-related activities;
- Regulations on principles, order and procedures for allocating, adjusting and supplementing quotas for the use of controlled substances;
- Regulations on basic content and time for submission of Vietnam's Plan on Management and Elimination of Controlled Substances;
- Regulate the collection, recycling, reuse or destruction of substances controlled and technical regulations;
- Regulation of accountability and interagency coordination in the management of controlled substances.

# Measures to promote activity on greenhouse gas emission reduction and ozone layer protection

The content of this Chapter focuses on provisions on:

- Develop and implement bilateral and multilateral cooperation programs on mitigating greenhouse gas emissions and protecting the ozone layer;
- Scientific research and technology development;
- Resources for greenhouse gas emission mitigation and ozone layer protection;
- Capacity building, awareness raising;
- Encourage activities on GHG emission reduction and floor protection ozone.

## Terms of performance



Decree takes effect from January 1, 2022 at the same time as the Law on Environmental Protection.

## Appendix I. Criteria for determining the establishment that must conduct a greenhouse gas audit

- List of objects to be inventoried greenhouse gases as prescribed in Clause 3 of Article 91 Law on Environmental Protection;
- The main sources of greenhouse gas emission/absorption are related to human activities;
- Enterprises under Decision 01/2022/D-PM
  - a) Thermal power plants, industrial production facilities with total annual energy consumption from 1,000 tons equivalent oil (TOE) or more;
  - b) Cargo transport company with total spending annual fuel consumption of 1,000 TOE or more;
  - c) Commercial buildings with total annual energy consumption of 1,000 TOE or more;
  - d) Solid waste treatment facilities with annual operating capacity of 65,000 tons or more.



## Requirements for businesses

GHG responsibilities of enterprises under Decision 01/2022 /De-PM).

a. Providing data and information activities related to the greenhouse inspection of the database before the reporting period according to the guidance of the management sector before March 31 from 2023;

b. Organize the implementation of grassroots greenhouse gas testing, develop a grassroots level GHG test report every two years for 2024 onwards, using the Form No. 06 Appendix Appendix II promulgated together with this decree sent Provincial-level People's Committees before December 31 March from 2025 for appraisal;

c. Finalize the report on results of greenhouse gas testing at grassroots level, and send it to the Ministry of Natural Resources and Environment before December 1 of this period. Report start from 2025.

- a) Participating in the domestic carbon market and international
- b) Modern, efficient, cost-effective technology conversion
- c) Increase competition when participating in the international market.



*Advantages*  
*Challenges*

- a) Not understanding the regulations and technical requirements on GHGs
- b) GHG system operating costs
- c) There are no specific GHG guidelines for all production and business lines.
- d) How steel enterprises can transform in fierce competition period?
- e) Where does the funding come?

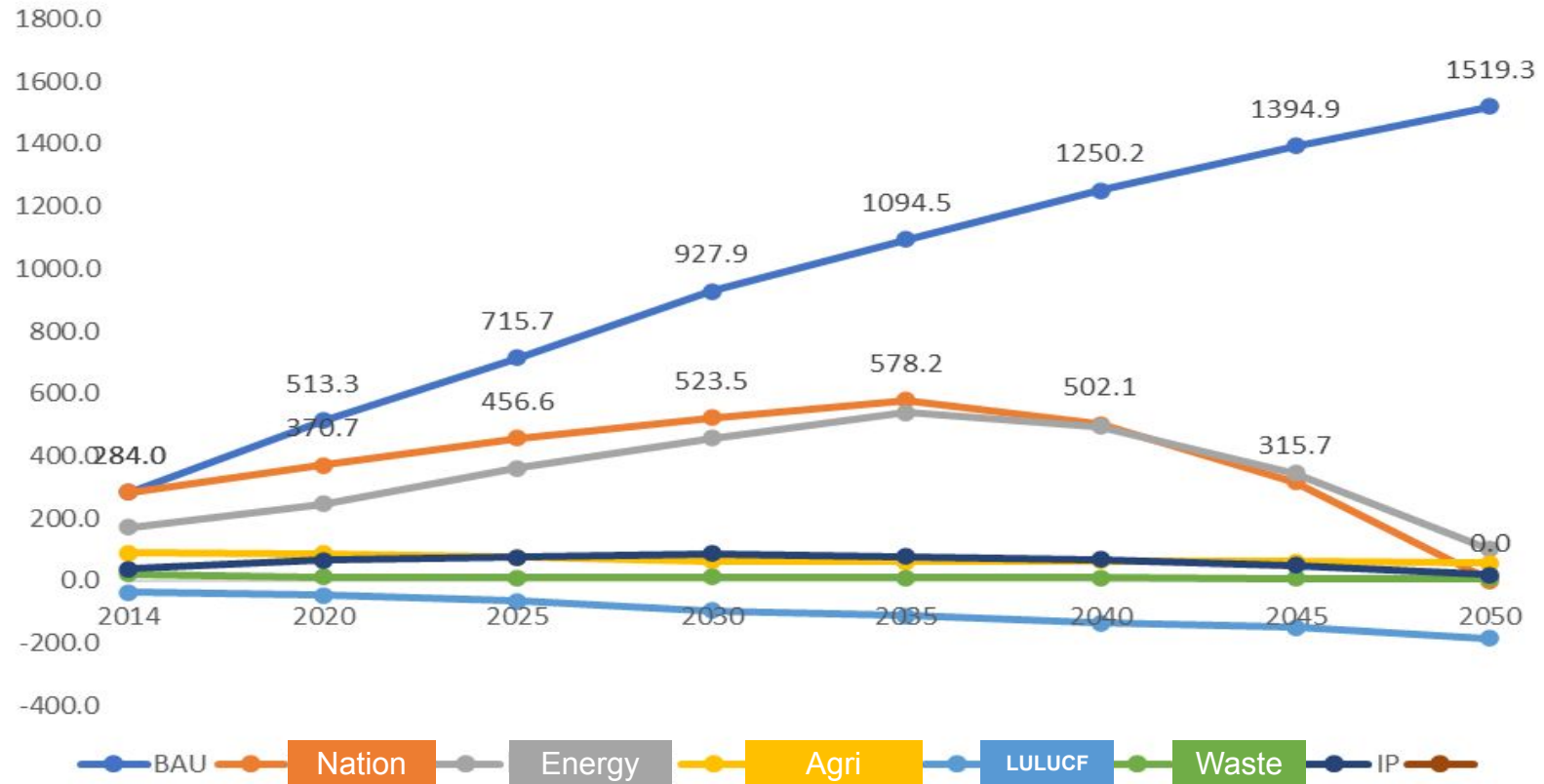
# Which scannerio till 2050 - NZE

## Total emissions nationwide and by sectors (unit: million tons of CO<sub>2</sub>)

Unit: million tons of CO <sub>2</sub>	2014	2020	2025	2030	2035	2040	2045	2050
<b>Emissions according to BAU</b>	284,0	513,3	716,5	928,0	1.096,0	1.252,5	1.396,7	1.519,3
<b>Energy Sector</b>	171,6	247,0	360,8	456,6	539,5	494,4	345,0	101,1
<b>Agriculture Sector</b>	89,8	88,3	75,3	63,9	62,2	63,8	61,5	56,4
<b>LULUCF Sector</b>	-37,5	-45,0	-65,6	-95,3	-112,4	-134,0	-149,6	-185,2
<b>Waste Sector</b>	21,5	13,1	9,81	11,81	10,81	9,8	8,8	7,8
<b>IP Sector</b>	38,6	67,3	76,3	86,5	78,1	68,0	50,0	20,0
<b>Total Emissions</b>	284,0	370,7	456,6	523,5	578,2	502,1	315,7	0,0

# Which scenario till 2050 - NZE

Total emissions nationwide and by sectors (unit: million tons of CO<sub>2</sub>)



## Which scenario till 2050 - NZE

Three (03) options are proposed to reduce emissions, in which emission reduction measures for non-energy sectors (agriculture, land use, land use change and forestry, waste) , industrial processes) are generally applied to all three alternatives.

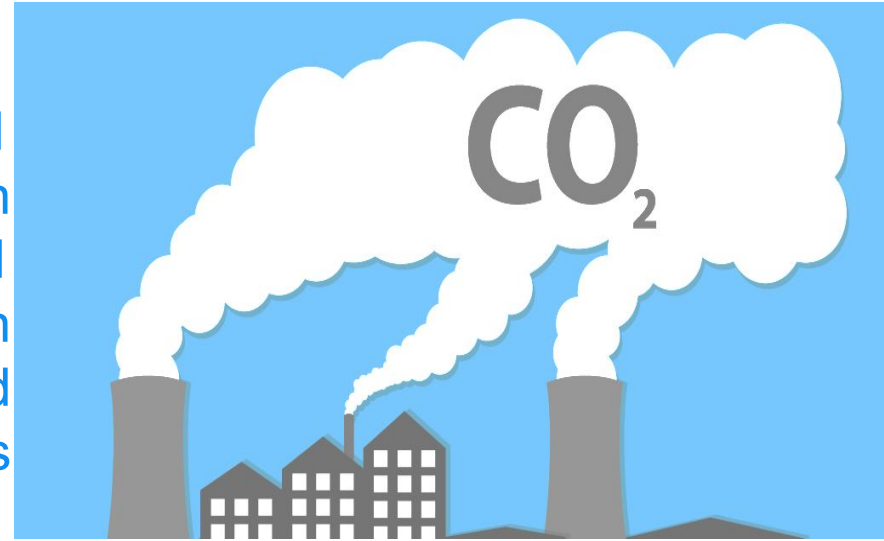
Emission reduction measures for the energy sector that are optimally calculated in terms of energy, emissions and economic and social impacts are selected to apply to Vietnam from now to 2050.





## Which scenario till 2050 - NZE

The main difference of Option 1 compared to Option 2 is that the proportion of renewable energy in 2050 in Option 1 (73%) is higher than in Option 2 (48.5%), in which the proportion of electricity fixed solar energy in Option 1 is about 4-5 times higher than that of Option 2.



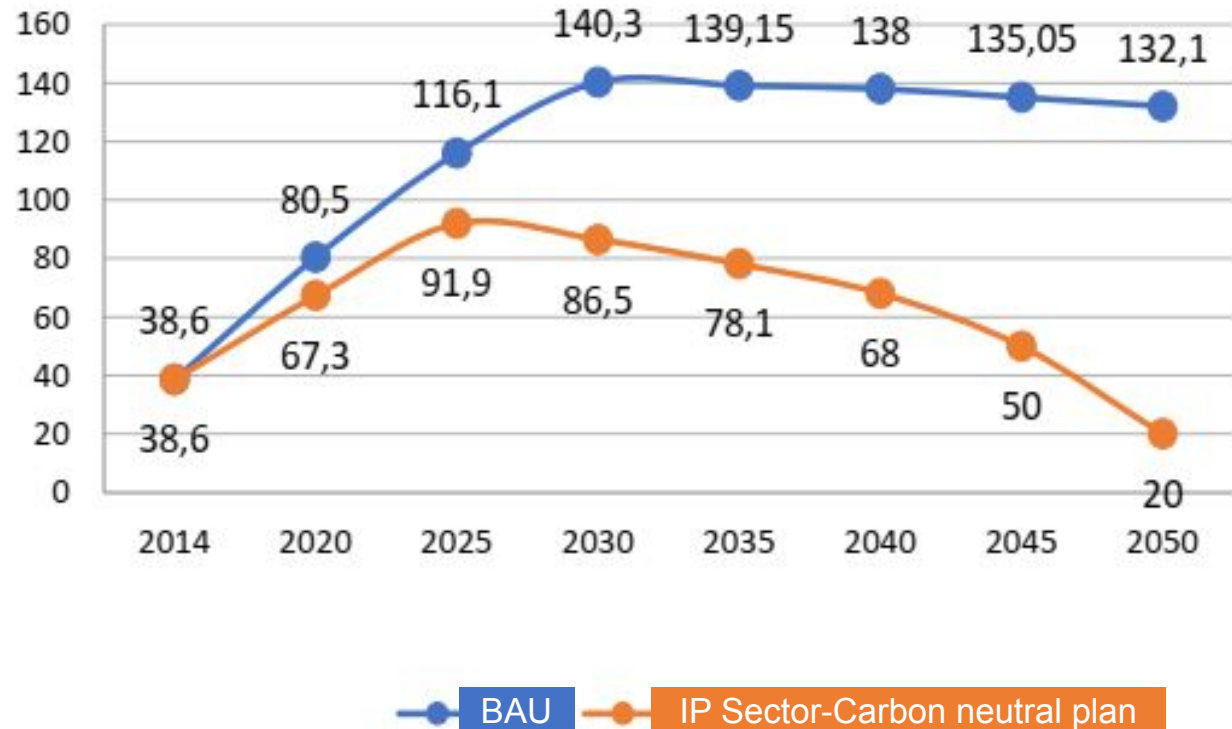
Option 2 has a higher proportion of fossil energy than Option 1, so measures to capture and landfill must be applied (CCS and CCUS) so the cost is higher.

Option 3 is Option 2 but with additional nuclear power to partially replace coal power, applied for the period after 2035 when the level of safety and cost is appropriate.

Anyway, each option has price itself and the fund is biggest issue!

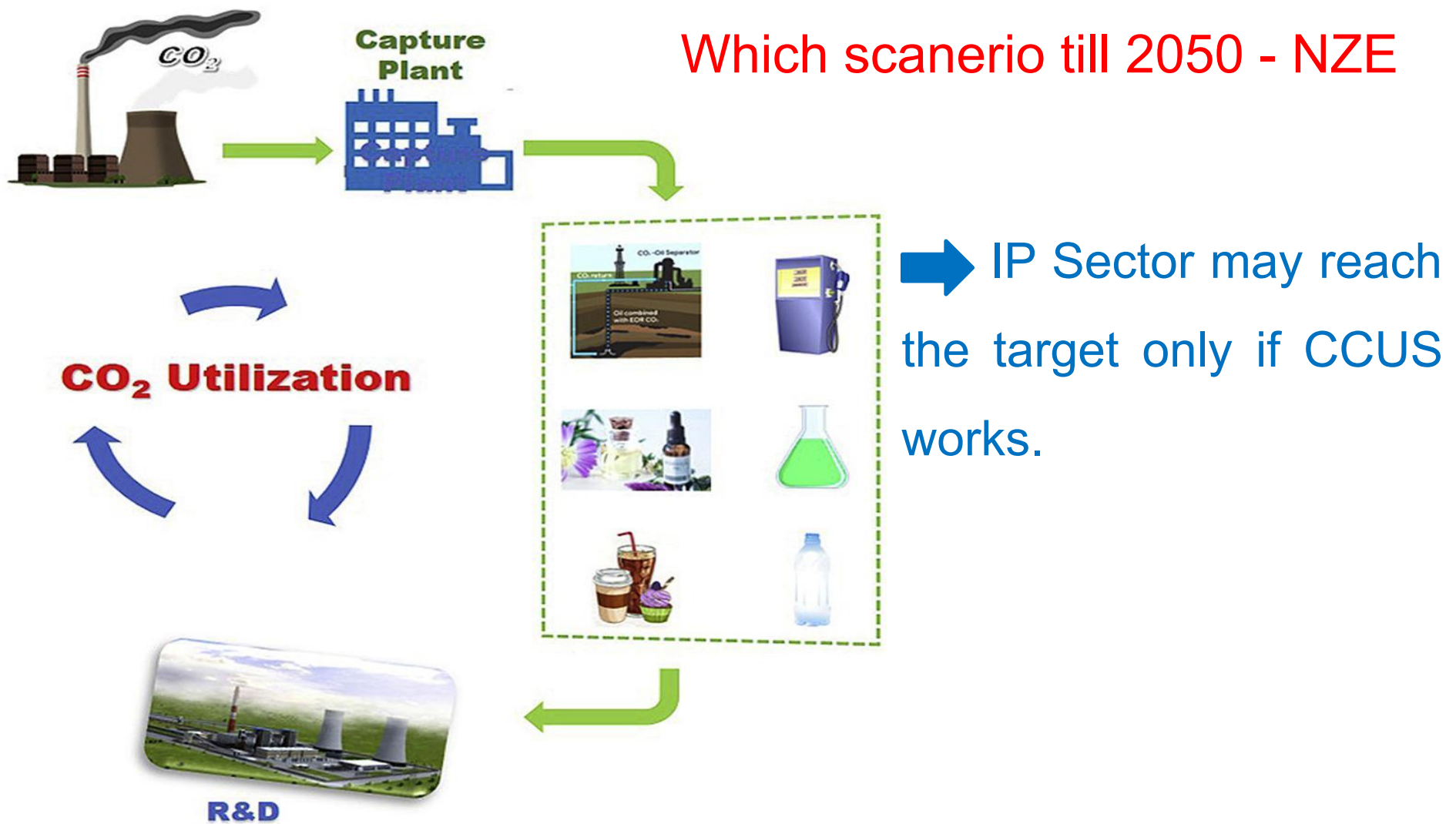
# Which scenario till 2050 - NZE

Total emissions according BAU and Carbon neutrality  
IP sector (unit: million tons of CO<sub>2</sub>)



In Steel sector, on average, to produce 10 million tons of steel, emit about 21 million tons of CO<sub>2</sub>.

# Which scenario till 2050 - NZE



# VIETNAM STEEL INDUSTRY IN 2021



# AND OUTLOOK FOR 2022

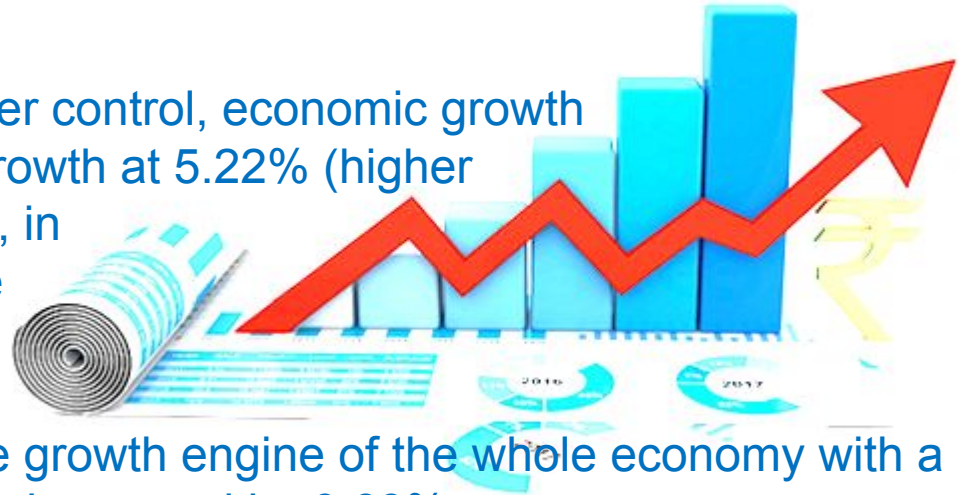
PART  
2



## A. Performance of Country Economy 2021

In 2021, Vietnam's socio-economic situation faced a breakdown in supply chains and labor sources. GDP increased by 2.58% in 2021 and expected an increase of 6-6.5% in 2022. In 2022, one of the solutions is to ensure social security, restore stability and restructure the labor market, and improve people's income and living standards. In that context, global growth slowed down, with GDP growth was 5.6% in 2021 as the world economy recovered from the pandemic, and expected at 4.5% in 2022.

When the pandemic was basically under control, economic growth in Q4 2021 recovered quickly, with GDP growth at 5.22% (higher than the growth rate of 4.61% in Q4 2020), in general, GDP grew by 2.58% in 2021. The industry and construction sector increased by 4.05%, in which the processing and manufacturing industry continued to be the growth engine of the whole economy with a growth rate of 6.37%; construction industry increased by 0.63%.

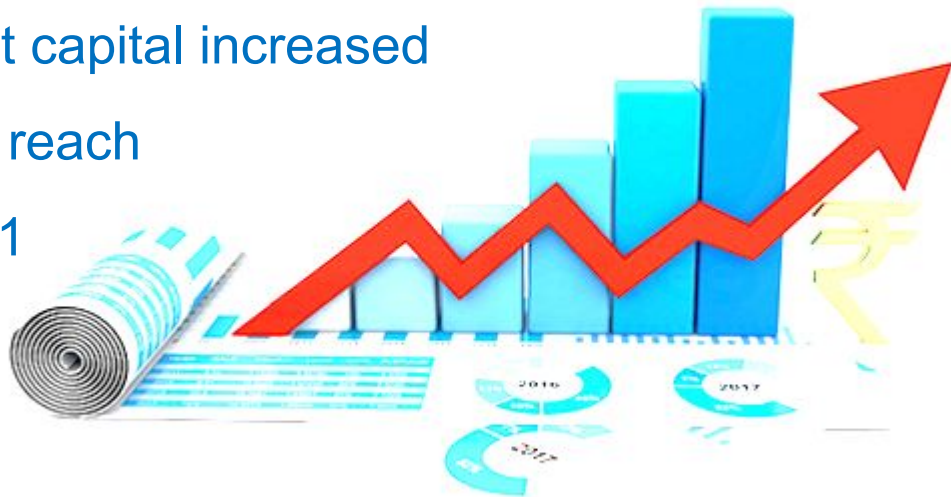




## A. Performance of Country Economy 2021

Disbursement of public investment capital increased by 3.2% compared to the last year to reach VND 2,891.9 trillion in 2021, (Q4 2021 reached VND 999.8 trillion, up 6.2% over the same period last year).

In which, disbursement of foreign direct investmentis reached USD 19.74 billion in 2021, down 1.2% on year.



## B. Overview of Vietnam Steel Industry in 2021

In 2021, despite many difficulties and challenges caused by the COVID-19 epidemic, the steel industry still experienced good growth, increasing by over 16% compared to the previous year.

Overview of Vietnam's

# STEEL INDUSTRY

## B. Overview of Vietnam Steel Industry in 2021

Facing complicated changes in the price of steelmaking raw materials on the global market, steel prices increased from the end of 2020 until the middle of Q1 2021, with a decrease, then continue uptrend until the end of May 2021 started a downtrend. Domestic steel prices were relatively stable since the end of Q2 and then decreased at the end of the year. Vietnam's steel industry in 2021 recorded positive growth.



- Crude steel production reached 23 million tons, up 16% compared to 2020.
- Production of all kinds of finished steel products reached nearly 34 million tons, up 19%. And the apparent steel consumption reached more than 22 million tons in 2021, down 5.5% compared to 2020.
- Steel export in 2021 also achieved positive results, reaching nearly 4.0 million tonnes of semi-finished and finished steel products with about 10 million tones.

## C. Im-Ex of Vietnam 8M2022

### 1. Import:

In the first 8 months of 2022, imports of finished steel products into Vietnam were about 8.18 million tons with a value of more than USD 8.8 billion, down 7.97% in volume but up 14.11% in value over the same period of 2021.

The key countries exporting steel into Vietnam include: China (46.01%), Japan (15.67%), Korea (11.12%), Taiwan (9.09%) and India (7.22%).

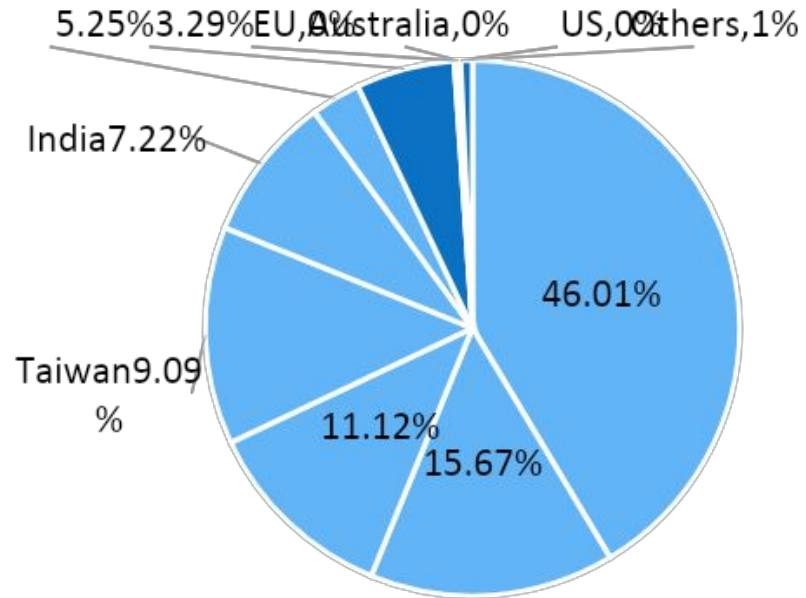
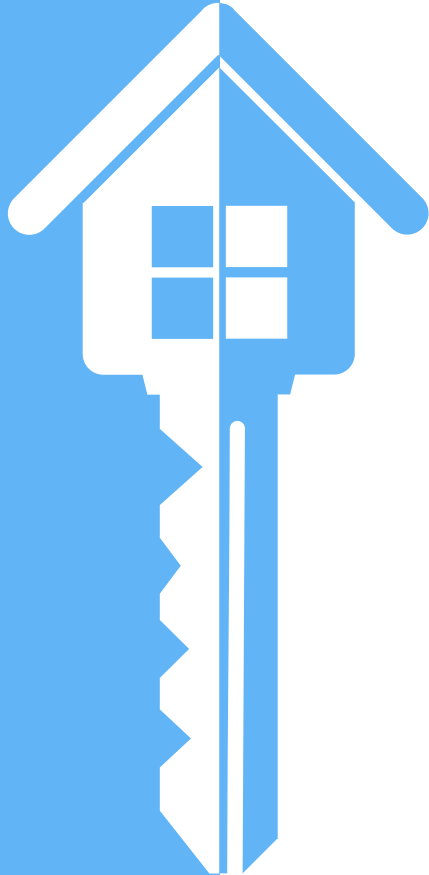




## 1. Import:

Country	8 months/ 2022		Share (%)	
	Volume (tons)	Value (1,000 USD)	Volume	Value
Total	8.187.740	8.853.230	100,00%	100,00%
China	3.767.460	3.824.640	46,01%	43,20%
Japan	1.283.390	1.292.940	15,67%	14,60%
Korea	910.770	1.134.430	11,12%	12,81%
Taiwan (China)	744.060	735.770	9,09%	8,31%
India	591.220	483.050	7,22%	5,46%
ASEAN	430.030	925.350	5,25%	10,45%
Russia	269.330	225.770	3,29%	2,55%
Brazil	75.260	61.100	0,92%	0,69%
Australia	40.170	31.800	0,49%	0,36%
EU	17.600	70.600	0,21%	0,80%

## 1. Import: 8M2022







## ***2. Export:***

In the first 8 months of 2022, Vietnam exported about 5.92 million tons of steel, down 30.27% over the same period last year. Export value reached USD 6.08 billion, down 13.35% over the same period in 2021.

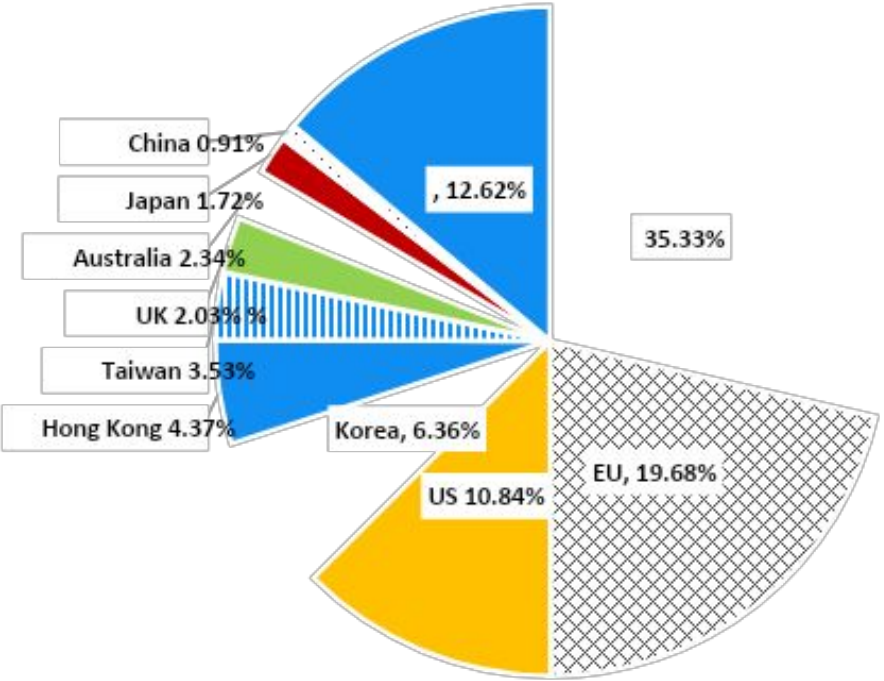
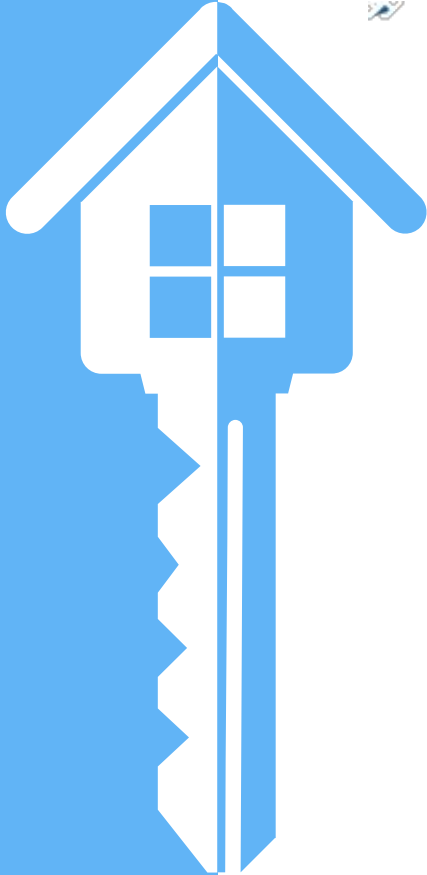
The key export markets of Vietnam are: ASEAN region (35.33%), EU region (19.68%), United States (10.84%), South Korea (6.36%) and Hong Kong (4.37%).

The development of product exports is one side, but at the same time, the structure of the export market for Vietnamese steel products has also changed, which shows the flexibility and adaptability of Vietnamese steel enterprises.

## 2. Export:

Country	8 months/ 2022		Share (%)	
	Volume (tons)	Value (1,000 USD)	Volume	Value
Total	5.923.730	6.082.730	100,00%	100,00%
ASEAN	2.448.000	2.149.200	41,33%	35,33%
EU	987.070	1.197.210	16,66%	19,68%
US	452.630	659.090	7,64%	10,84%
Korea	368.630	386.730	6,22%	6,36%
Hong Kong (China)	333.790	265.950	5,63%	4,37%
Taiwan (China)	250.710	214.550	4,23%	3,53%
Australia	120.790	142.500	2,04%	2,34%
Japan	115.580	104.860	1,95%	1,72%
China	93.490	55.500	1,58%	0,91%
UK	89.990	123.390	1,52%	2,03%

## 2. Export: 8M2022




## D. Conclusion.

### *Outlook for Vietnam Steel Industry 2022:*

In the earlier of this year, the prospect of Vietnam's steel market in 2022 will be better when the Government issued instructions to stabilize and develop production and business activities to flexibly adapt to the Covid-19 pandemic.

Resolution 01/NQ-CP dated 9 Jan with solutions for socio-economic development, recovery and estimate budget in 2022. Three focus to maintain growth momentum is determined by the Government in 2022, including restoring and promoting production and business; boosting exports and speeding up disbursement of public investment capital, mobilizing all resources for infrastructure development.

# Conclusion

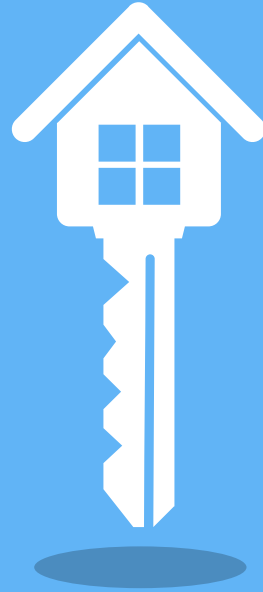


## ***Outlook for Vietnam Steel Industry 2022:***

However, the World Bank has reduced its global growth forecast for in 2022 to 2.9% from 4.1%. Similarly, the IMF reduced global growth to 3.2% from 3.6% in September 2022. And in the first 9 months of 2022, Vietnam's finished steel production reached 23.264 million tons, down 6.3% over the same period in 2021.

Sales of finished steel reached 21.269 million tons, down 3.1% over the same period last year, of which exports reached 4.864 million tons, down 15.7% on year. Particularly in Q3 2022, production of finished steel products decreased by 2.3% and 3.1% respectively over the same period in 2021, and sharply declined compared to Q1 and Q2 2022.





**Thank You**