

POLICIES AND IMPLEMENTATION ACTIONS TOWARDS NET-ZERO BY 2050 IN VIETNAM

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Introduction

Vietnam's GHG emissions: Status & Prospects

Implementation actions toward net-zero in Vietnam

1. INTRODUCTION







Introduction

- Vietnam is located in Southeast Asia
- Vietnam is long and slender, stretching in an S-shape more than 1,000 miles
- Population: > 99 million
- Population density: 297 people/km²
- Income per capita: ~2,300 USD/yr⁽¹⁾
- Vietnam's climate risk index in period 2000
 2019: ranked in the range of 11 20⁽²⁾
- Annual total damage caused by natural disasters: ~ 0.8 billion/yr (*Preliminary*)⁽¹⁾

(Source: ⁽¹⁾Vietnam General Statistics Office, using data in 2022; ⁽²⁾<u>https://www.germanwatch.org/en/cri)</u>

Gross domestic product (GDP) of the ASEAN countries from 2018 to 2028 (in billion U.S. dollars)



Predicted

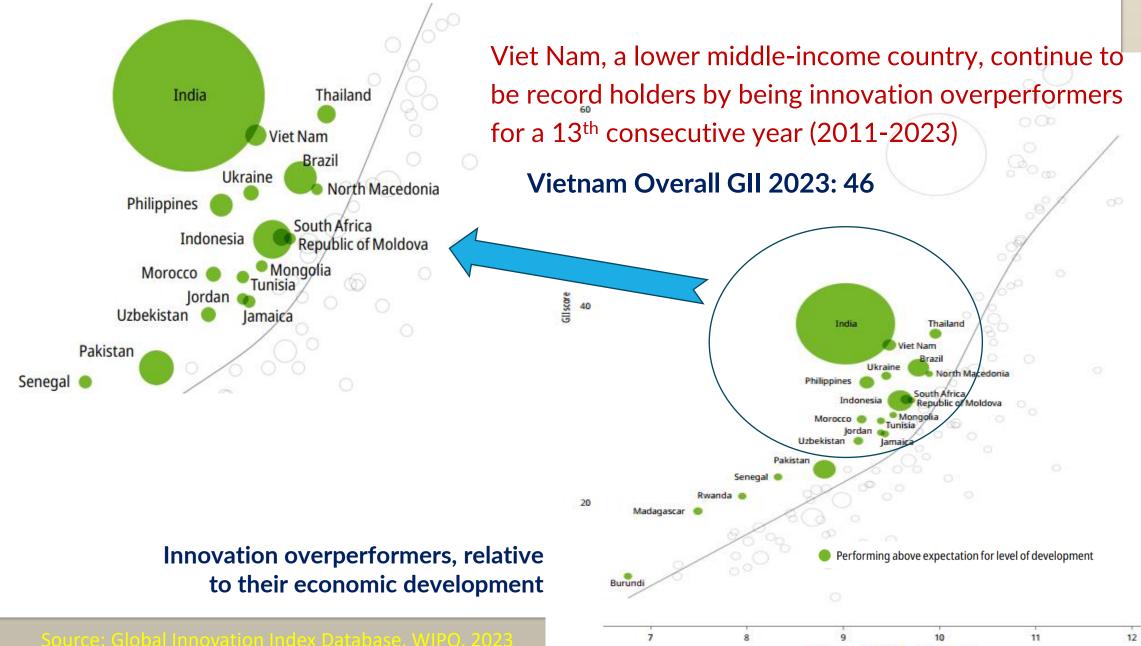
2028*

18.21

Brunei

2022*

(Source: https://www.statista.com)

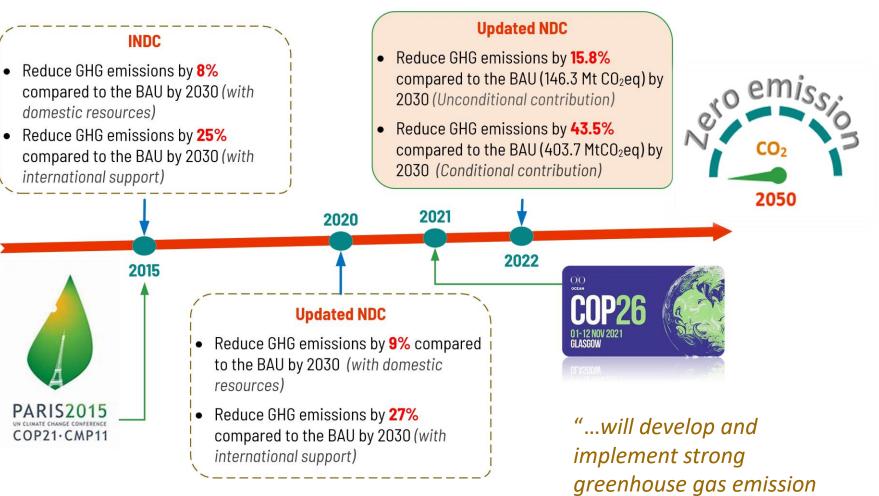


GDP per capita (PPP\$ logarithmic scale)

Vietnam's development orientation

2021: Committed to achieving net zero emissions by 2050 (Net zero)

2015: Committed to reducing GHG emissions when participating in the Paris Agreement



implement strong greenhouse gas emission reduction measures ... to **achieve net zero emissions by 2050**"

Other international pledges



The Global Methane Pledge (♥ 30% methane emissions in 2030 compared with 2020)



The Global Coal to Clean Power Transition Statement



The Glasgow Leaders' Declaration on Forests and Land Use to prevent and reverse deforestation and land degradation by 2030

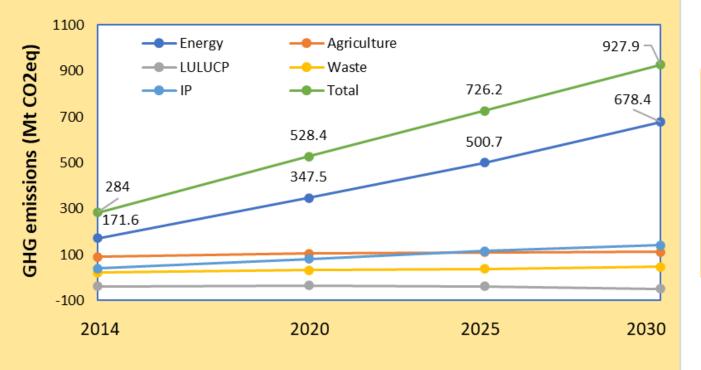


The Adaptation Action Coalition to mobilize resources for climate change adaptation



2. Vietnam's GHGemissions: Status& Prospects





Energy: Highest GHG emission, ~ 65.8% in 2020

(Source: NDC updated in 2022)

National contribution to GHG emission reduction by sectors by 2030

	GHG reduction unconditional contribution		
Sector	Compared to BAU	Reduction amount (Mt CO ₂ eq)	
Energy	7.0	64.8	
Agriculture	1.3	12.4	
LULUCF	3.5	32.5	
Waste	1.0	8.7	
IP	3.0	27.9	
Total	15.8	146.3	

	GHG reduction conditional contribution		
Sector	Compared to BAU	Reduction	
		amount	
		(Mt CO ₂ eq)	
Energy	24.4	222.7	
Agriculture	5.5	50.9	
LULUCF	5.0	46.6	
Waste	3.2	29.4	
IP	5.4	49.8	
Total	43.5	403.7	

GHG EMISSIONS UNDER THE BAU SCENARIO

FINANCIAL NEED FOR IMPLEMENTING VIETNAM'S NDC 2022

Energy	Unconditional contribution	Conditional contribution	14/12/2022: Vietnam joined
	14,464.4	60,561.4	the Just Energy Transition
Agriculture	2,122.8	16.102,2	Partnership
	3,927.4	5,494.9	(JETP) to take advantage of
LULUCF	916.6	2,726.1	international
Waste	310.0	1,950.1	sources
IP	Total: 21,741.2	Total: 86,834.7	e key to creating a trongly promote the
	(Unit: Million USD)		n process in Vietnam

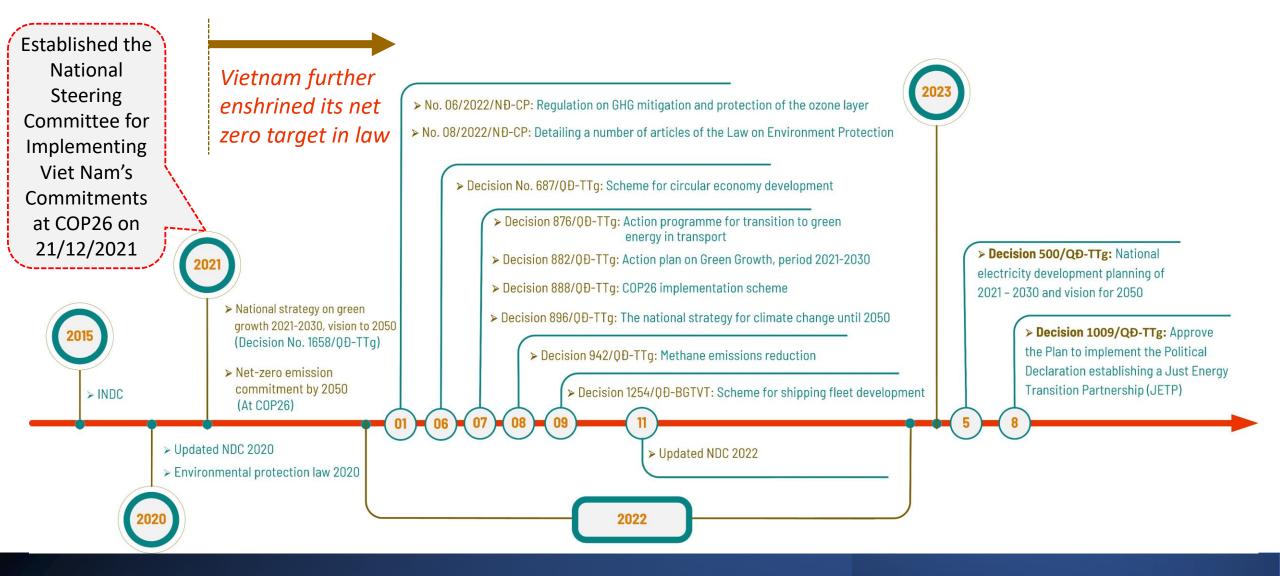
3. IMPLEMENTATION ACTIONS TOWARD NET-ZERO IN VIETNAM

A lot of legal documents and action plans have been issued since the Vietnamese government committed to achieving Net-zero by 2050

https://www.un.org/en/clima techange/net-zero-coalition



Vietnam's strong commitment to sustainable development is the consistent development policy of the Party and the State



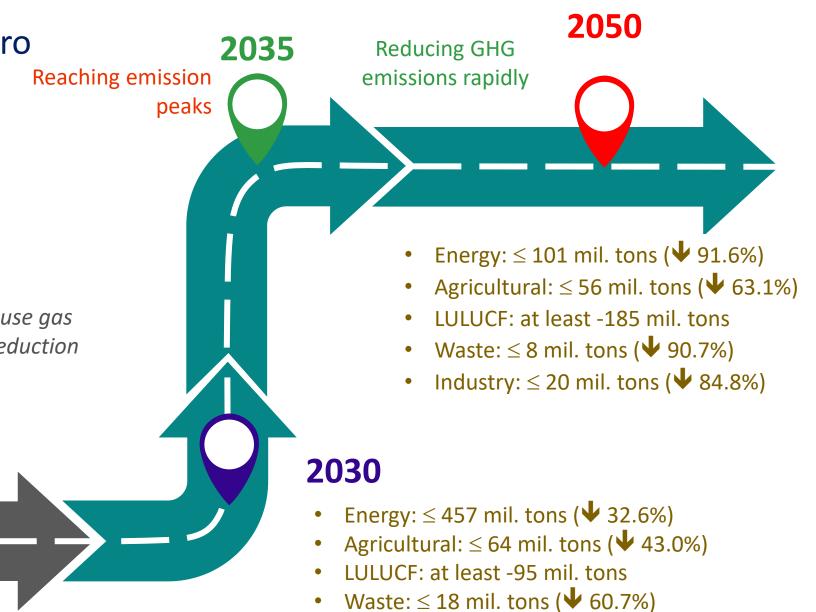
Sustainable development policies are guided by law, national strategies and action plans

Roadmap to reach Net-Zero in 2050 according to National Climate Change Strategy (Promulgated after COP26)

Set specific goals related to the greenhouse gas emissions limit to be achieved and the reduction level compared to BAU

Approving the national strategy for climate change until 2050

2022



• Industry: ≤ 86 mil. tons (♥ 38.3%)

Transport-related main solutions determined in the National Climate Change Strategy

- A sector reportedly contributed ~ 18% of Vietnam's total GHG emissions
- About 45.5 mill. Tons CO2eq in 2020
- Of which, road transport-related GHG emission about 80%

Rate of renewable electric energy reaches at least 33% (in 2030); 55% (in 2050)

Promote the transition to clean energy usage

Develop green traffic infrastructure

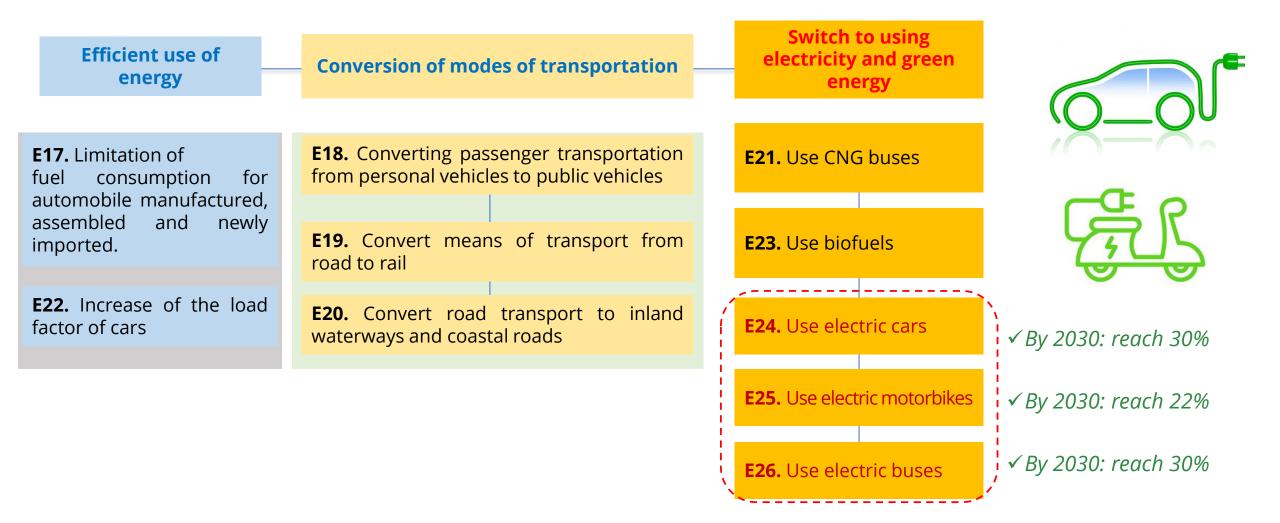
Restructure transport market

Develop and implement roadmap for making the transition
 to clean energy in transport; gradually increase the percentage of electric and hydro-powered vehicles

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Solutions to reduce GHG emissions in the NDC by promoting the use of electric vehicles

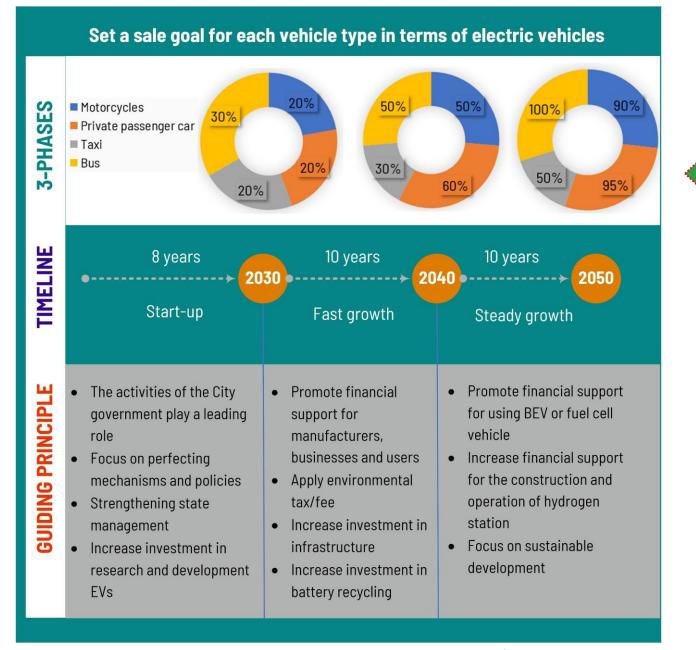


Roadmap of green energy transition in the transport sector in Vietnam

(According to Decision 876/QD-TTg)

... for the road transport

20	22	20	30 2040	2050
Decision No. 876/QĐ-TTg (Roadways- related aspects)	 Promote manufacture, assembly, import, and transition to electricity-powered road vehicles Promote blending and use of E5 gas for 100% of road motor vehicles Develop charging infrastructures meeting the demand of individuals and enterprises 		• By 2040: Phase out manufacture, assembly and import of automobiles, motorcycles and mopeds with fossil fuels for domestic use	Overall goal by 2050
			 By 2050: 100% of road motor vehicles participating in traffic will be converted to use electricity and green energy. Complete the electric charging infrastructure, provide green energy nationwide to meet the needs of people and businesses. 	Develop green transportation system towards the goal of net-
	 By 2025: the percentage of buses using electricity and clean energy in newly purchased 	URBAN TRAFFIC	 From 2030, achieve at least 50% vehicles using electricity and green energy; use electricity and green energy for 100% new taxis By 2050: the percentage of buses and taxis using electricity or clean energy will reach 100% 	zero greenhouse gas emissions by 2050
	buses will reach 100%			18



...an example for promoting the energy transition in the transport sector at city scale

A proposed EV development roadmap for HCM City

For EVs, the Ministry of Finance has submitted many preferential documents on taxes and fees to the Government and National Assembly.

Source: GIZ, Formulating the city e-mobility action plan/roadmap for HCM city, Report for NDC TIA, Workshop 5/2022



The national power development plan for the period 2021 - 2030, vision to 2050 has been approved in 2023 (the goal of Net-Zero is integrated)

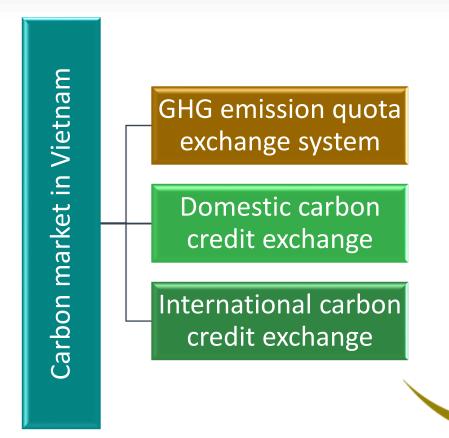
		Up to 2050	
Share of renewable energy	30.9% ÷ 39.2% Towards 47% with JETP	8 th Power Development Plan	67.5% - 71.5%
Solar energy	Increase 4,100 MW	Specific	168,594 ÷ 189,294 MW
Wind energy	Onshore: 21,880 MW Offshore: 6,000 MW	objectives	Offshore: 70,000 ÷ 91,500 MW
GHG emissions	204 ÷ 254 mil. tons $≤$ 170mil. tons with JETP	According to Decision	27 ÷ 31 mil. tons
	5	00/QD-TTg on 15/5/2023	

Vietnam joined the Just Energy Transition Partnership (JETP) to take advantage of international sources

- Possible to receive 15.5 bil. USD from a group of donor countries through JETP
- To:
 - $\checkmark\,$ Accelarate the GHG emission peak from 2035 to 2030
 - $\checkmark\,$ Reduce power sector emissions from 240 mil. tons to 170 million tons
 - ✓ Promote renewable energy to reach the share of 45% of renewable energy by 2030
 - ✓ Limit coal power capacity of 30.2GW compared the planned level of 37GW.

Vietnam is urgently developing a plan to mobilize resources to implement the political declaration on establishing JETP

Vietnam has also issued policies to promote the carbon market development





- Law on Environmental Protection 2020
- Decree No. 06/2022/ND-CP on mitigation of GHG emissions and protection of ozone layer

ROADMAP OF DOMESTIC CARBON MARKET

Decree No. 06/2022/ND-CP on mitigation of GHG emissions and protection of ozone layer

Stage 1 (2022 – 2027)

Stage 2 (From 2028)

- Formulating carbon credit management regulations, GHG emission quota exchange and carbon credits
- Formulating operation rules of the CTX
- Experiment with carbon exchange and offsetting mechanisms in potential sectors
- Establishing and organizing trial operation of the CTX from 2025
- Raise awareness about carbon market development.

- Organizing official operation of the CTX in 2028
- Prescribing carbon credit connected and exchange between domestic, regional and global carbon market.



Conclusion

By implementing solutions to reduce GHG emissions early, Vietnam has achieved some significant results in the period of 2014-2020⁽¹⁾:
 ✓ Reduced about 85 mil. tons of CO2eq by 2020

 The Vietnamese government has shown its determination to pursue the target of Net-zero by 2050

✓ A lot of legal documents and action plans have been issued

✓ Continuous efforts to mobilize international resources

⁽¹⁾ NDC 2022

Aknowledgement

- A3PS E-Mobility 2023 organizer
- Dr. Michael Nöst
- GIZ NDC-TIA Council for Decarbonising Transport in Asia
- Vietnamese delegation

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THANK YOU !

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