POLICY ADVOCACY NEWLETTER

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WOULD THE POLICY BENEFIT DOMESTIC ECONOMY?

CPS encourages Vietnam's effort to reach decarbonization in 2050, in turn, protects Vietnamese health. Moreover, this scheme raises revenue for the Government budget, which is the most demanding for emerging countries, here in Vietnam, to finance infrastructure enhancing the competitiveness of the country. Thus, Vietnam would gain more income streams from FDI. The Government spending would hereby increase. As proof, The World Bank has disbursed $51 millions for an experimented carbon pricing market (CPM) at 6 provinces. Take Tuyen Quang province as an example, where 480.000-hectare-forest with 68% coverage. The estimated price per tCO2 is $5, thereby generating considerable revenue for this province according to the Vietnam Minister of Agricultural and Rural Development. Therefore, the introduction of the official trading market would expand the scope of the applications and would promisingly enhance the economic and output level in Vietnam under Keynesian framework.

CARON PRICING SCHEME - OPPORTUNITY OR INTIMIDATION TO VIETNAM ECONOMY?

2019, The World Bank data illustrates that Vietnam emitted 3.5 metric tons CO2 (MtCO2e), mostly comes from industrial sector, hereby ranking the 2nd-most-polluted across Southeast Asia countries. Therefore, Country Nationally Determined Contribution (NDC) stated the country aim to reduce Greenhouse Gases (GHG) by 8%/2023. **Carbon Pricing Scheme (CPS)**, a novel term in recent decades established by New Zealand's obligations under Kyoto Protocol, would help Vietnam alter its current status.

CPS formulated by economic subfield-environmental economics broadly involves various instruments: carbon taxes, cap-and-trade emission reduction credits, clean energy targets, and fossil fuel subsidy reform. Reducing the greenhouse gases (GHG) by imposing a price per ton unit CO2 emitted (tCO2e) is a cost-effective mechanism as “polluter pays” in Environmental Law 2022 and Paris Agreement.

The experiment is under Monitoring, Reporting, and Verification (MRV) guidelines domestically by The World Bank since 2016. Its launching remains skeptical about the ability to support current macroeconomic constraints.

"Vietnam would reach zero decarbonization by 2050"
-Prime Minister Pham Minh Chinh at COP26

CARBON PRICING

WHY CARBON PRICING SCHEME WOULD EXACERBATE THE ECONOMY?

CPS, besides positive-impacted CPM, carbon tax (CT) would be harmful to general investment as it would erode the profit margin and hinder promising but high-carbon technology innovation. Henceforth, employment at a certain level would be negatively impacted. Within Okun's Law, output level (GDP) has a negative relationship with the unemployment rate, thus, CT would reduce the total number of outputs. Moreover, CPS without efficient revenue recycling worsens income inequality and poverty distributional impacts when regressive tax hurts the low-to-middle than the high earners.

Vietnam is an attractive market to international corporations and factories. Therefore, defining an inappropriate rate would hamper domestic companies as an absurd additional cost. Furthermore, improper CPS without incentives that make companies increase the prices of their goods would cause a leakage, where net exports fall due to relative prices (imported goods that not subject to CPS remain lower price to that of domestic-produced).

WOULD IT WORK?

Vietnam plans to establish Carbon Pricing Scheme in 2025. Many opportunities await to rocket Vietnam's competitiveness during official practice. The project would finance the burgeoning number of vital procrastinating infrastructure projects with insufficient budgets. This project navigates the diversification of environmental trading schemes as the current environmental protection tax bracket embraces severe shortcomings and disputes among economists, corporations, and households. Governance contestation and limited-sector application drive the tax revenue growth of less than 1.4 over the past 5 years, thereby burdening the budget deficit. Vietnam needs more than taxation, an official trading market would support local entrepreneurs and gain Vietnam's competitiveness. Hence, relative leakage could be reduced with sufficient phase-in carbon tax implementation. As investors tend to invest in countries where air pollution is a problem.

Overall, CPS, in favor of cap-and-trade credits and the market would position to balance industrial growth while protecting the environment with precise legislation that optimizes environmental integrity and domestic metrics to the fullest where marketized climate policy is no longer a failure.

Summary:

This technical companion document provides details on discussions about the **Carbon Pricing Scheme Launching in Vietnam.**

The document is for reference only. The data for the official introduction is yet established, global cases would strengthen the discussion credibility.

ABBREVIATION LIST:

- MOIT: Ministry of Industry and Trade of the Socialist Republic of Vietnam
- MONRE: Ministry of Natural Resources and Environment
- MOC: Ministry of Construction of the Socialist Republic of Vietnam
- ETS: Emission Trading Scheme
- CPS: Carbon Pricing Scheme
- CT: Carbon tax
- GDP: Gross domestic Product
- RGDP: Real Gross domestic Product
- TWB: The World Bank
- IMF: International Monetary Fund

1. Introduction

Carbon Pricing Scheme (CPS) implementation is through emissions trading system (ETS), which involves diverse instruments. Most importantly, this document would discuss the launching of the scheme in favor of cap-and-trade emission reduction markets and carbon taxes; clean energy targets and fossil fuel subsidy reform would considered as "symbiosis". As marketized climate policy governance and policy have always centered numerous climate change application (Pearse and Rebecca 2015). Within the context of Vietnam, it requires an official Government-operated ETS market, the current market is limitedly utilized by a few social responsibility motivated international businesses. Furthermore, Vietnam is an emerging country with vulnerable macroeconomics stability, climate change could also pay a toll on the economic level. Therefore, carbon pricing would hold an opportunity for Vietnam to boost competitiveness in the region; evidence point out that country with carbon pricing is 2% less CO2 emissions annually than that without (Do and Burke 2021). If the scheme is underlying real practice and launching, MOIT, MONRE and MOC are responsible for patrolling and managing since this issue is prone to fraud and Vietnam economic growth.

2. Basic theoretical framework and its application in Carbon Pricing Scheme Launching in Vietnam

2.1. Keynesian Economic Theory

2.1.1. Definition

The theory is founded by Keynes, who stated that because price is rigid, any changes in GDP components- Consumption (C), Investment (I), Government spending (G), and Net exports (NX) could cause the total outputs to change (Jahan et al 2014). Here is the formula where the equilibrium happens, RGDP equates to Income (Y) that intersects Aggregate Expenditure (AE) (assuming all income is spent):

$$E_p = C_1Y + (C_0 - C_1T + I_p + G + NX)$$

E_p: Aggregate Planned Expenditure

C_1: Marginal Propensity to Consume (MPC)

C_0: Autonomous Consumption (MPC)

Y: Income

T: Tax

I_p: Planned Investment

G: Government spending

NX: Net exports

2.1.2. Application and finding on how the theory help policy makers

Generally, with short-run effects the carbon taxation would cause a shift the AE curve down vertically as regressive tax hurts the low-to-middle than the high earners; technically, expenditure on energy or goods would decrease with income (Caron and Fally 2018). CT leads to higher commodities' prices, thereby causing a drawback of implementing CT in domestic market without ETS combination and financial incentives for firms who switch to low-carbon or energy-efficient operations – reducing domestic-produced goods consumption. Henceforth, a void in relative price is generated opening opportunities for imported goods, NX decreases (RBOA n.d.). As when the foreign goods are not subject to CPS, the prior price is maintained and gain the competition over increasing domestic goods prices (Dr. Michaelowa et.al 2018).

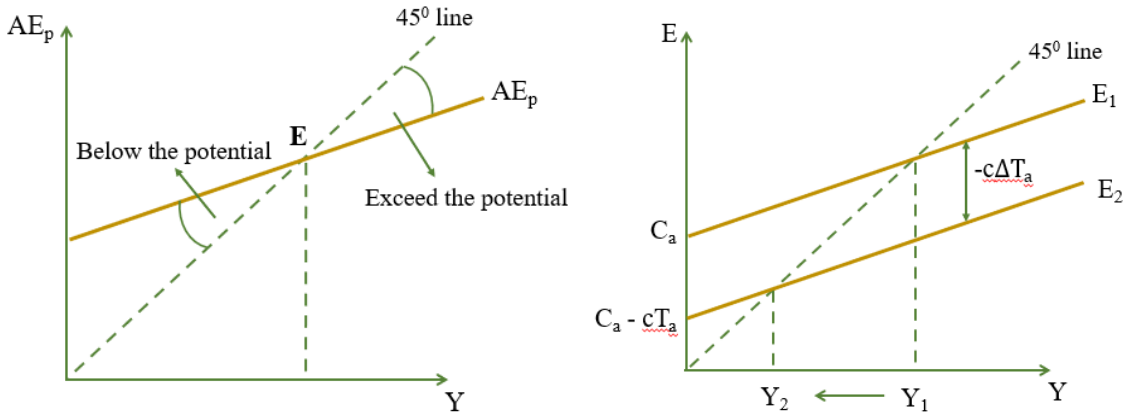

Figure 1. **Keynesian Economics Model (Left) and its application for triggering a short-term tax change – variables (Right).**

Therefore, it is recommended to integrate the ETS and carbon tax simultaneously to balance Injection and Leakage, also under Keynesian model:

$$G + I = S + T$$

G: Government spending

I: Investment

S: Saving

T: Tax

The equation indicates that GDP is remaining at a constant growth level, therefore, if Leakage (S+T) was higher than Injection (G+I), GDP would fall. This basic concept explains for the assumption above about the combination of ETS and CT (or carbon-fee). There should be time for phase-in taxes, generating sustainable revenue for the Government budget. Then it would be spent into infrastructure, welfare that enhances Vietnam's competitiveness in both quantity and quality. Appropriate tax rate and incentive would also prevent the Investment decrease from Carbon Leakage, which is defined as moving production to lenient CP-policy nation (EC n.d.). Take Sweden as an example, their revenue from carbon and energy taxes contribute a large proprotion

and 50% of revenue is recylced to reform subsidy, labor tax, social security (Dr. Michaelowa et.al 2018)

2.2. Okun's Law

2.2.1. Definition

Economic growth measured by GDP is inversly correlated with unemployment rate (Andrei et.al n.d.)

2.2.2. Application and finding on how the theory help policy makers

The application is clarified in the newspaper, as if the CT rate is overwhelming, corporations have to consider thoroughly their cash flows, whether they should invest in promising, innovative but hihg-carbon technology or not. The net profit margin is also eroded, and like recessionary phase, employment would be reduced to ensure the operation cash flow of the firms. Henceforth, domestic economic level would be sluggish.

3. Conclusion

In essence, an appropriate ETS combines with reasonable carbon tax would effectively control the price floor avoiding volatizing or hurting domestic market (Do and Burke 2021).

Vietnam commitment at COP26 is important turning Vietnam into a promising destination for international giants, who always go beyond the technology trend, here is low-carbon and energy efficiency technology market, thereby boosting the domestic economy. Since the fear of reducing ecconomic competitiveness would be banised by political involvement, direct policies with geographical coverage of carbon pricing spreads (MOIT 2022; Carbon Pricing Leadership Coalition 2016).

However, the launching is still debatable among policy makers and economists despite the overwhelming economic benefits over its drawbacks. Evidently, 2016-2021 experimented framework from World Bank still yet enough to publish the scheme, then it is planned to launch in 2025, planned solely (Ceikindo Vietnam 2021).

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