LEVERAGING CARBON MARKETS FOR SUSTAINABLE DEVELOPMENT IN VIET NAM

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Tra Vinh University, Tra Vinh, Viet Nam www.carboncreditsconference.com

Book of Abstracts







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Mr. Pham Nam Hung

Senior Official, Department of Climate Change, Vietnam Ministry of Natural Resources and Environment







LEVERAGING CARBON MARKETS FOR SUSTAINABLE DEVELOPMENT IN VIET NAM

international conference "Leveraging carbon markets for sustainable development in Viet Nam" took place in a hybrid format (offline and virtual) in an Tra Vinh University, Tra Vinh, Viet Nam on March 28, 2024. The Conference was coorganized by Tra Vinh University (Viet Nam), Foreign Trade University (Viet Nam) and Vietnam Science Forum on Climate Change and Sustainable Development (VSF-CCSD). The meeting assembled national and international experts in carbon credit markets as well as lectures and students from several universities from Viet Nam to discuss and present the latest research on the development of carbon markets in Viet Nam and worldwide. The meeting featured a combination of invited keynotes, a panel discussion and contributed talks for a total of 23 presentations arranged in a program revolving around 3 thematic areas: (i) the most updated picture of the carbon market in Viet Nam; (ii) the international carbon market: today and tomorrow; (iii) lessons from the global carbon market to develop an effective and sustainable carbon market in Viet Nam. All abstracts submitted are included in this book. The abstract content was not modified and corresponds to what originally submitted by the authors. The name of the presenting author is underlined.







(i) The most updated picture of the carbon market in Viet Nam







RENEWABLE ENERGY AND CARBON MARKETS IN VIETNAM'S 2030 VISION TOWARDS 2050: A SYMBIOTIC PATH TO SUSTAINABLE DEVELOPMENT

Le Ngoc Long^{1*}, Tran Thi Ngoc Bich^{2*}, Nguyen Hoang Lam², Tran Thi Tuyet Mai³ and Huynh Minh Phuc⁴

- ¹ School of Applied Chemistry, Tra Vinh University, Viet Nam.
- ¹ Institute of Environmental science and Technology, Tra Vinh University, Viet Nam.
- ³ Department of Human Resources Management, Tra Vinh University, Viet Nam.
- ⁴ Tra Vinh School of Politics, Viet Nam.

Corresponding author. lnlong@tvu.edu.vn; ngocbich@tvu.edu.vn;

Abstract

This research provides a comprehensive exploration of the symbiotic relationship between renewable energy initiatives and the evolving carbon markets in Vietnam's 2030 vision towards 2050, with a keen focus on the nation's journey toward sustainable development. By scrutinizing international and national policies, including the Kyoto Protocol and the Paris Agreement, the study delineates the institutional framework necessary for effective carbon market participation. Analyzing Vietnam's updated Nationally Determined Contribution (NDC), the research unveils sector-specific mitigation targets, emphasizing the country's potential to generate carbon credits. The article also sheds light on Vietnam's robust experience in carbon market preparedness, spanning Clean Development Mechanism (CDM) projects, Joint Crediting Mechanism (JCM) initiatives, and active engagement in the voluntary carbon market. Through these endeavors, Vietnam emerges as a key contributor to global efforts in fostering sustainable practices, technology transfer, and international collaboration, positioning itself prominently in the global transition toward a low-carbon economy.

Keywords: Renewable energy, carbon markets, sustainable development, Vietnam, Clean Development Mechanism.







RESEARCH ON DEVELOPMENT OF THE CARBON EMISSIONS MARKET IN VIETNAM

Nguyen Thi Nhat Mai, Vu Thi Phuong, Phuong Trieu Chinh

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: nguyenthinhatmai2004@gmail.com

Abstract

The carbon emissions market is always a concern as well as an inevitable trend of countries around the world. In recent years, the carbon emissions market has received widespread attention, affecting the level of environmental pollution, while also demonstrating the level of market economic development through trading of carbon credits. By combining the use of a number of research methods such as desk research method, SWOT analysis, data collection and analysis method and historical and logical approach, the research team decided to conduct an analysis. Analyzing more deeply and expanding the scope to developing countries like Vietnam aims to reach the most comprehensive conclusions about the practice of developing carbon emissions markets, thereby providing lessons for Vietnam, continue to reform, innovate, and closely monitor the market for effective application in Vietnam's economy. From the research results, the authors have proposed some specific solutions as well as suggested some policies to develop the carbon emissions market in Vietnam.

Key words: carbon emissions market, Vietnam, economy, environmental pollution, carbon credits.







DIFFICULTIES AND RISKS IN THE CARBON MARKET - THE CASE OF VIETNAM

Mai Nguyen Ngoc

Foreign Trade University, HaNoi, Vietnam Corresponding Author. ngocmn@ftu.edu.vn

Abstract

Carbon credits are certificates that can be traded and represent the right to emit an amount of CO2 or another amount of greenhouse gas converted to CO2 equivalent. It is a type of carbon pricing that has been introduced as a voluntary initiative with no legal binding force, and is already being used by a wide range of companies as decarbonization efforts accelerate. The carbon market is one of important economic tool to provide a mechanisms to reduce CO2 emissions and solve the problem of global warming.

As decarbonization efforts accelerate around the world, carbon credits are attracting increasing attention. Particularly in recent years, the use of carbon credits (voluntary credits) led by the private sector has been rapidly expanding in various countries.

To achieve net zero emissions by 2050, Vietnam is gradually developing a domestic carbon market focusing on mandatory trading of greenhouse gas emission quotas, while also considering international market integration. Accordingly, Vietnam has set a roadmap to have an official domestic carbon market by 2028. This is a very challenging goal because there is less than 5 years left to operate the official carbon credit market in Vietnam.

Therefore, in this paper identify the difficulties and risks that can be expected when promoting carbon credits and decarbonization, and then consider the efforts that will be required of Vietnam in the future to help the carbon market develop effectively and sustainably in Vietnam

Key words: Carbon market, carbon credit, risks, Vietnam







FACTORS AFFECTING CO2 EMISSIONS TOWARD NET ZERO TARGET OF VIETNAM BY 2050

Vu Ngoc Nhi*, Pham Ngoc Huyen, Le Thi Phuong Anh, Nguyen Giang Linh, Pham
Nhu Ngoc, Ngo Thi Phuong Thao

Foreign Trade University, Hanoi, Vietnam

Corresponding Author: <u>k61.2212450063@ftu.edu.vn</u>

Abstract

Global warming is worsening and one of the greatest reasons is carbon dioxide (CO2) emissions. To cope with this problem, many nations have committed to ambitious targets aimed at reducing carbon dioxide (CO2) emissions at the 2021 United Nations Climate Change Conference (COP26). This research focuses on the case of Vietnam, which has pledged to achieve a net-zero target by 2050. Our research seeks to comprehensively analyze the various factors that impact CO2 emissions in Vietnam. In addition, the research also aims to scrutinize the applicability of the Environmental Kuznet Curve (EKC) hypothesis to the Vietnamese situation. By utilizing data in Vietnam during 32 years from 1990 to 2022, associated with the application of the EKC model and the OLS method, we conclude that Renewable energy consumption shows no statistical relation to CO2 emissions. The results show that globalization positively impacts CO2 emissions, whereas the opposite is true for FDI inflow and trade openness. However, our study does not support the validity of an inverted U-shaped EKC in the context of Vietnam. Based on the results of this study, we suggest some policy implications for the goal of sustainable development.

Keywords: CO2 Emissions, Net-Zero Target, Globalization, Renewable Energy Consumption, Economic Factors.







THE DYNAMIC INFLUENCE OF GREEN FACTORS ON SUSTAINABLE DEVELOPMENT IN VIETNAM

Dao Phuong Ngan*, Ha Nguyet Lan Chi, Tran Vu Bao Ngoc, Nguyen Thao Nguyen.

Le Mai Phuong, Ngo Huyen Trang, Tran Mai Trang

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: k60.2113450024@ftu.edu.vn

Abstract

At the COP26, Prime Minister Pham Minh Chinh emphasized the necessity to recognize the importance of climate change and environmental management in economic development. Vietnam has signed a commitment to accelerate the clean energy transition and phase out coal use for the deduction of net emissions of CO2 to zero by 2050. This expresses the arduous efforts of Vietnam in handling and overcoming climate change. This paper aims to explore the relationship between the change of CO2 emissions and factors including renewable energy supply and consumption, natural resources depletion, and innovative advances by using ARDL model. We have obtained the data from a variety of reliable resources, such as The World Bank, OECD, and Intellectual Property Office of Vietnam, which allocates from 1990 to 2021. After a thorough analysis, the results indicate that in the long run, the increase in consumption and supply of renewable energy can effectively reduce CO2 emissions. On the contrary, a positive relationship is found between innovative ideas or projects and CO2 emissions within the same period observed. In the shorter term, renewable energy supply still has the same negative impact on CO2 emissions while others witness opposite ones. From these founded results of our research, our team suggests some comments on the transition to consumption of clean and renewable energy, hopefully achieving net zero by 2050.

Keywords: green factors, sustainable development, CO2 emissions







INTERNATIONAL COLLABORATION IN LINKING GREEN FINANCE WITH CARBON CREDITS: A DRIVER TO GREEN GROWTH IN VIETNAM

Nguyen Ha My*, Pham Minh Hieu

Mekong Development Research Institute

Corresponding author: mynguyen1@mdri.org.vn

Abstract

International cooperation in mobilising green finance for carbon market development is a crucial driving force for Vietnam's transition towards sustainable green growth. This study explores the potential of international collaboration in promoting the domestic carbon market by employing mixed qualitative and quantitative techniques. The findings confirm the significant role of international cooperation in attracting sustainable green finance, thereby expanding the development potential of Vietnam's carbon market. To achieve this goal, the Government needs to create a favourable investment environment to attract green foreign direct investment, accelerate infrastructure and institutional development for the carbon market operation. Enterprises need transparency in greenhouse gas inventory and connect foreign investments to develop green projects. The study utilises an integrated methodology to comprehensively analyse the role of international cooperation in attracting green capital to foster carbon market development, proposing feasible solutions to enhancing sustainable green growth in Vietnam.

Keywords: carbon credits, carbon market, collaboration, green finance, green growth, international, Vietnam







VIETNAM'S PROGRESS AND CHALLENGES UNDER THE EU'S CARBON BORDER ADJUSTMENT MECHANISM (CBAM)

Hong Cam Ngan *, Lam Kim Nhung

Nam Can Tho University, Viet Nam

Corresponding author: hcngan@nctu.edu.vn

Abstract

Carbon Border Adjustment Mechanism (CBAM) imposes a carbon border tax on imports from countries that do not apply a carbon tax at an EU-approved level in order to lessen the risk of carbon leakage and ensure a level playing field for European businesses facing carbon prices. The EU's CBAM will directly affect Vietnam, which is Europe's third-largest export market. In fact, after the United Nations Climate Change Conference (COP26) in 2021, Vietnam has actually made significant progress, including carefully reviewing its strategies and policies and upgrading nationally determined contribution, the national strategy on climate change for 2050 and the eighth National Power Development Plan, the action plan for methane emissions reduction by 2030, and the action plan on shifting to green energy. Although these are significant concrete commitments that support the net-zero target, more work needs to be done to lessen the adverse effects of the EU's CBAM. In this review, we utilized several databases (ProQuest, ScienceDirect, Elsevier, websites of the authority organizations) to identify relevant studies and main Vietnamese strategies and policies on Carbon markets, then conduct content analysis of these. Our content analysis shows the impact of the EU's CBAM on Vietnamese exporters, how to improve the benefits and lessen the drawbacks of this mechanism based on Vietnamese strategies and policies. The findings can be used as a foundation for further research and as a tool to assist Vietnamese exporters in approaching CBAM in a proactive way and also accomplishing the national strategies and policies on Carbon markets.

Keywords: Carbon Border Adjustment Mechanism (CBAM), Carbon markets, COP26, the eighth National Power Development Plan.







NET ZERO PLATFORM TM A MANAGEMENT PLATFORM FOR A LOW-EMISSION ECONOMY ECOSYSTEM

Au Vo, Thong Ngo, Tuan Tran, Tim Nguyen, Phong Vo

Institute of Research and Applied Innovation for Entrepreneurs (3AI)

Corresponding author: thong.ngo@3ai.vn

Abstract

This paper presents the "NET ZERO PLATFORM – A Management Platform for a Low-Carbon Economy Ecosystem", an initiative aimed at achieving net-zero carbon emissions in business and production management. With a strategic vision, this platform seeks to minimize negative environmental impacts through the application of digital solutions and enhanced energy efficiency. The primary goal is sustainable development, integrating economic, social, and environmental factors to effectively and sustainably promote the transition to a low-carbon economy. The platform focuses on developing and supporting sectors such as sustainable tourism, environmental education, eco-friendly infrastructure, and information management, thereby facilitating the transition towards emission reduction and environmental protection. The platform's application scope is extensive, particularly in the fields of tourism and education, emphasizing the construction and management of carbon-neutral products and services and optimizing energy efficiency. The platform provides the necessary tools, knowledge, and support for all organizations and individuals to actively reduce emissions and contribute to the collective goal of environmental protection.

Keywords: Net Zero Platform, Net Zero Certified, Net Zero Tours, Net Zero Stations, NetZero Educations







ENHANCING BANKABILITY FOR A SUSTAINABLE CARBON MARKET IN VIETNAM: CHALLENGES, CAUSES, AND SOLUTIONS

Thien Thanh Thao NGUYEN¹, Duc Huy TRAN²

¹Business School, University of St Andrews, United Kingdom.

²Postgraduate Studies Faculty, Foreign Trade University, Vietnam.

Corresponding author: https://doi.org/10.2016/nc.2016/

Abstract

The carbon market has emerged as an essential element in international endeavors to mitigate greenhouse gas emissions and address the challenges posed by climate change. In order to establish an efficient and sustainable carbon market in Vietnam, it is imperative for financial institutions, particularly banks, to provide specialized support. The emerging carbon market in Vietnam is encountering a multitude of challenges stemming from the lack of bankability. This study examines the factors contributing to the limited bankability within the carbon market in Vietnam, including heightened investment risks, insufficient and untrustworthy project data, and ambiguous legal and policy frameworks. The study also evaluates the potential repercussions of these factors on the overall development of the carbon market in Vietnam. Furthermore, the paper advances recommendations for addressing these challenges and creating a conducive and sustainable investment climate. These include enhancing multilateral cooperation, implementing favorable financial policies to promote investment in carbon projects, and improving information transparency and education.

Keywords: bankability, carbon market, climate change, greenhouse gas emissions, investment, sustainable development, Vietnam.







CIRCULAR ECONOMIC DEVELOPMENT IN VIETNAM IN THE CONTEXT OF THE FOURTH INDUSTRIAL REVOLUTION

Ta Quoc Khai¹ and Ta Quoc Anh²

¹Foreign Trade University, Hanoi, Viet Nam

²Ministry of Industry and Trade, Viet Nam

Corresponding author: qanhh235@gmail.com; khaitq@ftu.edu.vn

Abstract

The circular economy stands as a symbolic "green solution," representing a paramount aspiration for our nation's sustainable development objectives from 2021 to 2030. Positioned against the backdrop of the Fourth Industrial Revolution, Vietnam's circular economy is on the brink of leveraging numerous growth opportunities, although not exempt from its fair share of challenges. These challenges, in their essence, present formidable obstacles to the full-fledged flourishing of the circular economy within the Vietnamese context. Within the intricate narrative of the article, an elaborate exploration unfolds, intricately delving into the nuanced realms of both the opportunities and challenges that characterize the landscape. Simultaneously, the article puts forth a collection of insightful recommendations and strategic solutions, precisely tailored to propel the development of the circular economy amid the transformative landscape of the Fourth Industrial Revolution. In essence, the discourse encapsulates a comprehensive analysis, offering a holistic perspective on the intricate interplay between opportunities, challenges, and strategic interventions within the dynamic context of Vietnam's circular economy.

Keywords: circular economy, challenges, Fourth Industrial Revolution, opportunities, sustainable development.







INDIVIDUAL BUSINESS HOUSEHOLDS WHO USE DIGITAL TRASFORMATION TO DO BUSINESS ARE A CONDITION FOR GREEN GROWTH AND SUSTAIABLE DEVELOPMENT IN VIETNAM'S MEKONG DELTA

Huynh Minh Phuc1*, Phuoc Minh Hiep2 and Tran Thi Tuyet Mai1

Tra Vinh University, Viet Nam

Postgraduate Institute of the Saigon International University, Viet Nam

Corresponding author: phuc30@gmail.com

Abstract

Digital transformation is developing all most countries in the world, including Vietnam. The Government of the Socialist Republic of Vietnam has determined a goal that Vietnam's digital economy accounts for 20% of GDP by 2025, There are kinds of economic activity which achieve at least 10% and total retail sales are reached over 10% by E-commerce. The study focuses on analyzing about individual business households. Descriptive statistical methods are used by using data tables and increase-decrease charts about quantity and scale developing business; contribution rate to Vietnam's GDP of the economic sector of individual business households and E-commerce development in Vietnam. Time-bound is in the period 2018-2022 (before - during and after the Covid-19 epidemic). After that, the article discusses solutions to address shortcomings in order to promote individual business households to use digital transformation in business activities which aim towards green and sustainable growth in Vietnam's Mekong Delta to achieving the goal of Government.

Keywords: Individual business household, digital transformation, green growth, sustainable development.







(ii) The international carbon market: today and tomorrow







INTERNATIONAL EXPERIENCES IN FINANCIAL CONTROL IN THE CARBON EMISSIONS MARKETS

Doan Thi Phuong Anh , Pham Thi My Hanh *, Nguyen Hong Quan

Foreign Trade University, Hanoi, Vietnam

Corresponding author: hanhmypham@ftu.edu.vn

Abstract

This paper explores international experiences in governments' financial management within carbon emissions markets, focusing on the European Union (EU), the United Kingdom (UK), New Zealand, China, and South Korea. In the EU and the UK, tax policies on emissions trading and carbon credits involve value-added tax and corporate income tax at standard rates. Revenue generated from emissions allowances auctions and trading is allocated to various funds or budgets, with Germany and Poland establishing dedicated funds for climate efforts. In New Zealand, profits from carbon credit sales are taxable income, with revenue managed through the Climate Change Fund. China is planning to allocate allowances through auctions, with revenue supporting national carbon market development. South Korea law applies value-added tax to emissions allowances but currently exempts emission trading to encourage market participation. Funds generated are deposited into national funds for emissions reduction efforts. Vietnam is advised to consider imposing value-added tax and corporate income tax on transactions of emissions allowances and carbon credits, while possibly exempting or reducing corporate income tax to encourage market participation in initial phases. Revenue from auctions and trading emissions allowances could be allocated to funds for emissions reduction, climate change adaptation, and green growth projects, managed separately from the state budget. Sanctions for exceeding emission allowances should be implemented to ensure market transparency and compliance, including fines, compensation, and potential exclusion from trading activities for repeat offenders. However, a legal framework is urgently needed before implementing these recommendations.

Keywords: financial management, carbon emission, ETS







IMPACT OF ENERGY CONSUMPTION, NATIONAL INCOME ON CO2 EMISSIONS IN ASIA-PACIFIC COUNTRIES

Nguyen Binh Duong

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: duongnb@ftu.edu.vn

Abstract

For over two centuries, economic growth has been driven by fossil fuel usage, resulting in the release of CO2—the primary contributor to climate change. This study employs the Kuznets environmental curve theory to examine the influence of economic growth and energy consumption on CO2 emissions in Asia-Pacific countries. The results offer vital perspectives and policy recommendations, guiding regional countries in formulating energy development strategies that meet socio-economic needs while mitigating greenhouse gas emissions to safeguard the environment.

Keywords: Asia-Pacific, CO2, Energy consumption, Income







IMPACT OF EXPORT DIVERSIFICATION ON ENERGY INTENSITY: EMPIRICAL EVIDENCE IN 15 SELECTED ASIAN COUNTRIES

Pham Hoang Thuc Doan*, Huynh Ngoc Tuyen, Tran Nguyen Chat

Foreign Trade University - Ho Chi Minh City Campus

Corresponding author: thucdoan562002@gmail.com

Abstract

The study examines the impact of export diversification on energy efficiency in 15 Asian countries by using energy intensity as a proxy and data from 2007-2020 and the method of Feasible Generalized Least Squares (FGLS) to overcome defects from Fixed effects model (FEM). The study also examines the role of some economic and institutional factors on energy intensity and verifies the existence of the Environmental Kuznets Curve. The results for Asia support the EKC theory and show a negative impact of export diversification on energy intensity and can be used as a tool to improve energy efficiency. This is pioneering research that contributes practical recommendations to policymakers about export diversification to achieve the goal of efficient energy use and more sustainable development in Asian.

Keywords: energy intensity, Environmental Kuznets Curve, export diversification







THE ROLES OF GREEN BONDS AND RENEWABLE ENERGY

IN REDUCING CARBON EMISSIONS

Phuong Bich Truong*, Anh Nguyen Tuan Ho, Vy Thao Duong, Minh Ta Thanh Vo

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: truongbichphuong.cs2@ftu.edu.vn

Abstract

The growing urgency of achieving sustainable development goals, particularly reducing carbon emissions, has highlighted the need for an effective financial instrument to channel capital towards green projects. Although green bonds represent a promising new tool for financing environmentally friendly initiatives, research on their direct environmental impact still needs to be completed. This study investigates the relationship between green bond issuance and carbon emissions using data from 72 countries between 2014 and 2020. Employing the Generalized methods of moments model and rigorous robustness tests, we find a statistically significant negative association between green bonds and carbon emissions per capita. However, the impact varies across countries based on their income levels and existing renewable energy deployment. Notably, the effects of green bonds on CO2 emissions per capita weaken in nations with higher income and renewable energy use, suggesting potential diminishing returns from green investment. These findings imply that policymakers should prioritise the development of green bond markets while tailoring policies to optimise environmental benefits, considering variations in clean energy infrastructure. By quantifying the environmental impact of green bonds and providing nuanced policy recommendations, this study contributes to a more informed approach to financing sustainable development.

Keywords: carbon emissions, green bonds, income groups, renewable energy, sustainable development.







ENVIRONMENTAL DEGRADATION IN ASIAN COUNTRIES: MODERATING ROLE OF INDUSTRIALIZATION AND URBANIZATION

Tran Hoang Tan*, Nguyen Hoang Anh, Tran Khanh Ly, Huynh Dieu My, Tran Nhu Ngoc, Nguyen Thi Mai, Huynh Hien Hai

Foreign Trade University – Ho Chi Minh City Campus

Corresponding author: k60.2111113246@ftu.edu.vn

Abstract:

The study measures the impact of urbanization and industrialization on greenhouse gas emissions in 49 Asian countries between 1990 and 2020. Through the GLS method, the study results show that industrialization growth will increase emissions. For countries with increased levels of urbanization, CO2 emissions will increase while reducing CH4 emissions. Notably, the relationships of the aforementioned variables are reversed in middle- and high-income countries. As a result, the authors propose a number of recommendations such as (1) The Government promulgates policies to encourage low-emission industries and impose environmental taxes if necessary, (2) Urban development through promoting promote the use of renewable energy, deploy technological innovation and promote green lifestyles to reduce carbon emissions, contributing to sustainable development.

Keywords: asia, industrialization, pollution, sustainable development, urbanization, vietnam.







SUSTAINABLE ODA AND CO2 EMISSIONS: THE EVIDENCE FROM A GLOBAL SAMPLE

Dang Tran Viet Hoa*, Le Van Hau, and Ngo Quang Tuan

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: hoaviet2603@gmail.com

Abstract

The purpose of this research is to establish a relationship between Sustainable ODA (SODA) and CO2 emissions (CO2, by analyzing the current literature, contemporary concepts, data, and gaps for future discipline research. This research identifies information from existing academic journals and investigates research designs and methods, data analysis techniques, industry involvement, and geographic locations. Information regarding university affiliation, publishers, authors, and year of publication is also documented. A collection of a Global Sample database from 2012 to 2021 was explored, using the keywords "sustainable ODA" and "CO2 emissions" in their title and abstract, to deliver an inclusive listing of journal articles in this discipline area. The empirical findings of our study substantiate the proposition that the expansion of the Sustainable ODA acts as a stimulus for CO2 emissions in middle-income countries. To elucidate the connection between Sustainable ODA and CO2 emissions, various indicators are considered, including the economic freedom index (EFI), capture fisheries production (CFP), natural rents (NR), and the industrialization level (IND). The robustness and reliability of these findings are maintained even when accounting for heterogeneity, fixed effects, and endogeneity within the analytical framework. This assessment provides an enhanced appreciation of the current practices of current research and offers further directions within Sustainable ODA and CO2 emissions.

Keywords: CO2 emissions, global sample, sustainable ODA







EMISSIONS TRADING SYSTEM AND CARBON PRODUCTIVITY

Truong Quang Bao, Nguyen Quynh Huong

Foreign Trade University, Hanoi, Vietnam

Corresponding Author: nguyenquynhhuong.cs2@ftu.edu.vn

Abstract

The Emissions Trading System (ETS) generates an economic incentive to reduce emissions by efficiently pricing pollution. This study examines the effect of the Emissions Trading System (ETS) on the Carbon Productivity of related determinants. Exploiting the unique panel data from 2000 to 2019 of 56 countries worldwide, the authors apply the Generalized method of moments (GMM) to investigate the effects of implementing the ETS on the Carbon Productivity. The results are as follows. First, the ETS policy has the greatest beneficial effect on national carbon productivity, followed by R&D intensity and total population, respectively. Second, the FDI element exerts an adverse influence. The results may provide useful information for proposals of establishment and orientation for ETS operation in Vietnam.

Keywords: carbon market, carbon productivity, Emissions Trading System, sustainable development.







EMISSIONS TRADING SYSTEMS IN PRACTICE: THE CASE STUDY OF INDONESIA AND LESSONS LEARNED FOR VIETNAM

Nguyen Minh Chau, Do Thu Thao, Nguyen Hoang Tung, Nguyen Thanh Long, Dang Chau Anh, Nguyen Hai Anh, Nguyen Van Minh Son, Truong Minh Hung, Nguyen Thi Thanh Huyen

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: <u>k60.2113150011@ftu.edu.vn</u>

Abstract

In February 2023, Indonesia launched its first emissions trading system (ETS), marking a new step forward in the government's attempt to fight against climate change. This article aims to evaluate Indonesia's ETS in order to propose policy implications for Vietnamese governments and recommendations for their enterprises. By using the desk study through analyzing and synthesizing documents, the authors conduct the assessment of this current ETS against five criteria: environmental effectiveness, economic efficiency, market management, revenue management, and stakeholder engagement. The recent implementation of ETS in Indonesia demonstrates that most criteria are evaluated at low and medium levels and some of them do not have already available data for research. From the research results, the paper proposes several market management features that can be applied in the context of Vietnam.

Keywords: economic efficiency, emissions trading systems, environmental effectiveness, Indonesia, stakeholder engagement, Vietnam.







LEGISLATION REGULATING THE CARBON MARKET - CURRENT SITUATION IN VIETNAM AND EXPERIENCE OF SOME COUNTRIES

Lưu Thị Bích Hạnh

Foreign Trade University Ho Chi Minh City Campus

Corresponding author: <u>luuthibichhanh.cs2@ftu.edu.vn</u>

Abstract

Building a carbon market to drive green growth and sustainable development is an inevitable trend for all countries in the world, including Vietnam. Vietnam is one of the six countries most severely affected in the past decade by extreme weather events caused by climate change. Reducing greenhouse gas emissions and accelerating green growth towards net zero emissions by 2050 while promoting economic development are the goals set by the Government of Vietnam. To achieve this goal at the lowest cost and Implementing the commitment to cut greenhouse gas to "zero" by 2035, Vietnam has been making efforts to build a domestic carbon market, towards connecting with the world carbon market. In the immediate future, the development and completion of regulations on carbon credit management and exchange of greenhouse gas emission quotas are the basis for creating goods for the market and promoting the market. The article introduces the theoretical basis, current regulations of Vietnamese law and international legal basis of the carbon credit market, and points out some legal problems related to the nature of carbon credits and orientation solutions to be able to safely and efficiently operate the market for carbon credits in Viet Nam. Besides, through analysis of legal regulations regulating carbon markets of some countries, such as China, Korea, Thailand, the United States, India, Europe and the current situation in Vietnam, the article discusses lessons and recommendations for Vietnam in building and perfecting the regulatory framework for the carbon market in Vietnam.

Keywords: carbon market, carbon, Carbon credit, Vietnam, green growth







(iii) Lessons from the global carbon market to develop an effective and sustainable carbon market in Viet Nam







THE IMPACT OF TECHNOLOGICAL INNOVATION, RENEWABLE ENERGY ON GREEN GROWTH IN ASIAN COUNTRIES AND LESSONS LEARED FOR VIETNAM

Hoang Xuan Binh, Hoang Thi Tra My*, Nguyen Thi Thanh Huyen

Falcuty of International Economics, Foreign Trade University, Hanoi, Vietnam *Corresponding author:* k59.2014410100@ftu.edu.vn

Abstract

This study aims to assess the impact of technological innovation, renewable energy on green growth in Asian countries and draw lessons for Vietnam. The data used in this study was collected from 21 Asian countries (mostly developing nations, including Vietnam) during the period from 1998 to 2018. After accounting for the heterogeneity of the slope, cross-sectional dependence, stationarity, and cointegration in the dataset, the cross-sectional augmented autoregressive distributed lag (CS-ARDL) method was applied to estimate the long-term and short-term relationships among variables. The research findings indicate that technological innovation has a negative effect on green growth in Asian countries, but no such impact is observed in Vietnam. Meanwhile, renewable energy positively influences green growth both in Vietnam and Asia. Furthermore, reducing the consumption of non-renewable energy can enhance the effectiveness of achieving green growth. Based on these results, the study proposes several solutions to promote green growth in Vietnam through technological innovation, such as improving the number of technological patents to control environmental degradation and harnessing the potential of renewable energy

Keywords: Asia, Green Growth, Technological innovation, Renewable energy, Vietnam.







EXPERIENCES IN BUILDING CARBON EMISSION MARKETS WORLDWIDE AND LESSONS FOR VIETNAM

Nguyen Thi Tuong Anh, Nguyen Thi Minh Thu*, Nguyen Hong Quan

Foreign Trade University, Hanoi, Vietnam Corresponding author: thuntm@ftu.edu.vn

Abstract

In the wake of the Kyoto Protocol's expiration and the global call to reduce carbon emissions, nations worldwide, including developing ones like Vietnam, are urged to participate in global carbon emission reduction strategies. Vietnam, committed to reducing greenhouse gas emissions, aims to establish a carbon emission market, recognizing its significance in achieving emission reduction goals outlined in its national strategies. However, challenges persist in determining carbon rights, offset/trading systems, and financial mechanisms. Drawing insights from successful carbon markets globally, this article delves into the experiences of building carbon emission markets worldwide and extracts lessons for Vietnam. The literature review highlights the efficacy of carbon markets in reducing emissions and provides insights into their design mechanisms. International experiences from the EU, New Zealand, and China offer valuable lessons. The EU's cap-and-trade system, New Zealand's emission cap allocation, and China's pilot programs demonstrate varied approaches to carbon market implementation. Lessons for Vietnam encompass policy allocation, emission allowance auctions, and carbon credit mechanisms. Pricing controls, sector-specific requirements, and the MRV (Monitoring, Reporting, and Verification) system are also crucial. Future trends suggest rising carbon prices, necessitating comprehensive market preparation. Recommendations for Vietnam emphasize phased implementation, starting with industry trials and scaling up gradually. Organizational structures and operational mechanisms are pivotal, necessitating central management agencies supported by technical committees and secretariats. Additionally, a robust MRV system is essential for effective carbon market functioning.

Keywords: carbon emissions, carbon market implementation.







THE EXPERIENCES OF DEVELOPING EMISSION TRADING SCHEME IN SELECTED COUNTRIES AND LESSONS FOR VIETNAM

Dinh Thi Thanh Binh, Le Thi Thu Hang, Cao Thi Nhat Le

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: k59.2014410041@ftu.edu.vn

Abstract

In order to reduce CO2 emissions, the Emission Trading Scheme (ETS) is one of the environmental policies implemented by many countries around the world. However, there still exist many controversial issues about ETS implementation in the world due to the influence of national political, economic, and environmental institutions. Therefore, to offer a clear perspective on the implementation of ETS at the present time, the study uses the data synthesis method to review the experience of implementing ETS of a number of representative countries around the world including the European Union (EU), Korea and China from major aspects: mechanism design, ETS policy and impact assessment. In addition, from international experiences and Vietnam's actual conditions, the article proposes some policy implications to build and develop Vietnam's ETS in the future.

Keywords: CO2 emission, Emission Trading Scheme, Environmental Economics, Reduction policy, Sustainable Development.







CLIMATE-SMART TRADE AND INVESTMENT IN THE ASIA-PACIFIC REGION: POLICY EVALUATION AND IMPLICATIONS FOR VIET NAM

Le Nguyen Quynh Trang

Foreign Trade University, Hanoi, Viet Nam Corresponding author: tranging@ftu.edu.vn

Abstract

While trade and investment have continued to be essential for pursuing the 2030 Agenda for Sustainable Development, the Asia-Pacific economic growth has come at a steep environmental cost. The Intergovernmental Panel on Climate Change firmly states that a human-caused climate crisis is unfolding, requiring more environmentally friendly trade and investment policies rather than solely considering economic and social impacts. Some Asia-Pacific countries have enabled climate-smart government regulations, including liberalizing trade in environmental goods and services, implementing emissions standards of imports, NTMs, and addressing other wasteful subsidies. However, the remaining countries, including Viet Nam, still do not have the appropriate responses. This study aims to examine to which extent the Asia-Pacific region's trade and investment policies contribute to addressing the challenges associated with climate change. By employing the systematic literature review and statistical analysis, this study analyzes the climate-smart trade and investment index (SMARTII) and good practices from the region, etc. Based on that, this study discusses several policy implications for Viet Nam in mitigating risks and adapting to climate change. The contribution of it in literature is a systematic and integrated approach of international trade and investment policies related to climate change issues in the Asia-Pacific region, as well as a new measurement for the effectiveness of Viet Nam's trade policies and agreements involved in climate change issues.

Keywords: Asia-Pacific region, climate smart, investment, trade.







INTERNATIONAL COLLABORATION TO EXPAND THE CARBON MARKET: EXPERIENCES FROM CHINA AND SOME RECOMMENDATIONS FOR VIETNAM

Ly Hoang Phu and Hoang Tu Giang

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: lyhoangphu@ftu.edu.vn

Abstract

The global effort to mitigate climate change has led to the establishment of carbon markets as one of the key mechanisms for reducing greenhouse gas emissions. China, as the world's largest emitter of greenhouse gases, plays a crucial role in this endeavor.

This paper examines firstly China's experiences in international collaboration in enhancing its carbon market, by comprehensively analyse and synthesize related policy documents, official statements, and academic literature. Secondly, we explore challenges and opportunities associated with China's engagement in international carbon market expansion efforts, as well as the effectiveness of China's cooperation in bilateral and multilateral regimes, specifically with European Union, United States and as a member of UNFCCC, Paris Agreement. And finally, authors draw the key lessons from China that could be applied to develop Vietnam's carbon market, in line with the national plan, policy framework and stakeholders' involvement.

The paper's main findings lie in Chinese multiside perpectives on international partnership toward carbon market enhancement, the focus on the establishment of the national carbon market and the creation of pilot areas, the gain both top-down and bottom-up effectiveness of the national policy and adjustment.

Keywords: Carbon market, international collaboration, China, emission trading scheme, climate change.







POTENTIALS OF DEVELOPING CARBON MARKET IN THE VIETNAMESE POWER INDUSTRY: USING ESG GUIDELINES AND LESSONS FROM SHANGHAI ELECTRIC GROUP COMPANY LIMITED

Pham Hong Phuc*, Nghiem Le My Hanh, Le Thanh Mai, Nguyen Van Thuy Linh,

Tran Cong Minh, Pham Thu Thao

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: phamphuc190502@gmail.com

Abstract

Amidst a rising global concern for environmental matters and the imperative to reduce carbon emissions, this paper investigates the fusion of Environmental, Social, and Governance (ESG) in the Vietnamese power industry with the vision to establish a carbon market. Commencing with the theoretical foundation of ESG and carbon market, and by synthesis method using secondary data, the authors briefly analyse the current stage of the Vietnamese power industry, comprising: current challenges, potentials, and orientation for sustainable development. Analysing upon Environmental - Social -Governance dimensions, we emphasize the industry's readiness and potential to develop a carbon market. Afterwards, leveraging the experiences of Shanghai Electric Co. Ltd as a case study, the paper distils valuable lessons for transitioning towards ESG in the Vietnamese context. This paper concludes by offering tailored recommendations for Vietnam, providing actionable steps to enhance ESG performance within the power industry. By combining theoretical concepts, industry analysis, and practical experiences, this contribution aims to address the escalating global concern for the environment and provides a roadmap for countries, like Vietnam, seeking to align their energy practices with stringent global ESG standards

Keywords: Carbon Market, Vietnamese Power Industry, ESG, Sustainable Development







DEVELOPING THE CARBON MARKET TOWARDS SUSTAINABLE DEVELOPMENT: INTERNATIONAL EXPERIENCES AND LESSONS FOR VIETNAM

QUYEN Minh Hoang

Foreign Trade University, Hanoi, Viet Nam

Corresponding author: Quyenhm@ftu.edu.vn

Abstract

The Vietnamese Government has set a target of achieving net-zero emissions by 2050, alongside efforts to reduce greenhouse gas emissions and promote green growth, all while fostering economic development. To achieve this goal, technical measures and market tools need to be combined to achieve the objective at the lowest cost. Establishing a carbon market provides an incentive for green growth, and sustainable development, and is an inevitable trend worldwide, including Vietnam. In our country, the carbon market is still in the experimental stage and faces numerous challenges during implementation. To truly make this market a catalyst for all stakeholders, especially voluntary businesses participating in low-emission technology applications, aiming towards a carbon-neutral economy, comprehensive solutions from various stakeholders are needed. Through the analysis of carbon markets in several countries worldwide such as China, South Korea, Thailand, the United States, India, and Europe, and based on the context of Vietnam, the article addresses lessons and recommendations for Vietnam in building the carbon market.

Keywords: carbon market, international experiences, lessons, Vietnam







AGENDA/ CHƯƠNG TRÌNH HỘI THẢO

LEVERAGING CARBON MARKETS FOR SUSTAINABLE DEVELOPMENT IN VIET NAM

"Đòn Bẩy Của Thị Trường Các-Bon Đối Với Phát Triển Bền Vững Tại Việt Nam"

March 28th 2024, Tra Vinh province, Viet Nam

Ngày 28/3/2024, Trà Vinh, Việt Nam

8:00-8:30	Register / Đăng ký	
8:30-8:40	Welcome and Introduction / Giới tthiệu đại biểu	
	MC	
8:40-9:00	Opening ceremony/ Khai mac	
	Associate Professor. Dr. Diep Thanh Tung, Vice-Rector of Tra Vinh University, Viet Nam (Chairman)	
9:00-9:45	Keynote speech I: Sustainable Development Carbon Market in Vietnam Thị trường Carbon phát triển bền vững tại Việt Nam	
	Diễn giả chính 1: Mr. Pham Nam Hung, Official Department of Climate Change, Vietnam Ministry of Natural Resources and Environment – Bộ Tài nguyên và Môi trường	
	30' presentation 15' Q & A	
9:45-10:30	Keynote speech II: Things we can do in mekong delta for ghg reduction that can enhance the community/Nhưng ý tưởng giảm phát thải khí nhà kính nhằm nâng cao lợi ích cho cộng đồng tại khu vực ĐBSCL	
	Mr. Hangsok Kim, the CEO at KCCTS, Dreamsharing Social Coop, MangLub Social Enterprise Vietnam	
	30' presentation 15' Q & A	
10:30-11:00	Tea break / giải lao	







11:00-11:30	Panel discussion: Unlocking the Potential of Carbon Credits in Vietnam: Obstacles and Solutions / Giải phóng tiềm năng tín chỉ carbon tại Việt Nam	
	Moderator:	
	Dr. Pham Kim Long , Director – Institute of Environmental Science and Technology, TVU, Viet Nam	
	Panelists:	
	Guest 1: Associate Professor. Dr. Diep Thanh Tung , Vice- Rector of Tra Vinh University, Viet Nam (Chairman)	
	Guest 2: Assoc. Prof. Dr. Nguyen Thi Tuong Anh, Vice Dean of Faculty of International Economics, FTU, Viet Nam	
	Guest 3: Mr. Pham Nam Hung, Official Department of Climate Change, Vietnam Ministry of Natural Resources and Environment	
	Guest 4: Mr. Hangsok Kim , the CEO at KCCTS, Dreamsharing Social Coop, MangLub Social Enterprise Vietnam (online)	
11:30-13:00	Lunch /ăn trưa	
13:00-16:58	Opening sessions – các phiên thảo luận mở	
13:00-14:16	Section 1: The most updated picture of the carbon market in Viet Nam/ Bức tranh mới nhất về thị trường carbon tại Việt Nam	
	Chair: Dr. Nguyen Binh Duong, Faculty of International Economics, FTU, Viet Nam	
	✓ 13:00-13:15 Talk 1.1 (Onsite): Renewable Energy and Carbon Markets in Vietnam's 2030 Vision Towards 2050: A Symbiotic Path to Sustainable Development/ Thị trường năng lượng tái tạo và carbon ở Việt Nam, tầm nhìn 2030 hướng tới 2050: Con đường cộng sinh để phát triển bền vững Le Ngoc Long *, Tran Thi Ngoc Bich, Nguyen Hoang Lam, Tran Thi Tuyet Mai and Huynh Minh Phuc	
	✓ 13:15-13:22 Talk 1.2 (Online): Research on Development of The Carbon Emissions Market in	







Vietnam/ Nghiên cứu phát triển thị trường phát thải carbon ở Việt Nam

Nguyen Thi Nhat Mai*, Vu Thi Phuong, Phuong Trieu Chinh

✓ 13:22-13:29 Talk 1.3 (Online): Difficulties and risks in the carbon market - The case of Vietnam/ Khó khăn và rủi ro trên thị trường carbon - Trường hợp Việt Nam

Mai Nguyen Ngoc

✓ 13:29-13:36 Talk 1.4 (Online): Factors Affecting CO2 Emissions Toward Net Zero Target of Vietnam by 2050 / Các yếu tố ảnh hưởng đến lượng phát thải CO2 hướng tới mục tiêu 0% của Việt Nam vào năm 2050

Vu Ngoc Nhi*, Pham Ngoc Huyen, Le Thi Phuong Anh, Nguyen Giang Linh, Pham Như Ngoc, Ngo Thi Phuong Thao

✓ 13:36-13:43 Talk 1.5 (Online): The Dynamic Influence of Green Factors on Sustainable Development in Vietnam/ Ånh hưởng năng động của các yếu tố xanh đến phát triển bền vững ở Việt Nam/ Ảnh hưởng năng động của các yếu tố xanh đến phát triển bền vững ở Việt Nam/ Ảnh ảnh hưởng động của các yếu tố xanh đến phát triển bền vững ở Việt Nam

Dao Phuong Ngan*, Ha Nguyet Lan Chi, Tran Vu Bao Ngoc, Nguyen Thao Nguyen, Le Mai Phuong, Ngo Huyen Trang, Tran Mai Trang

✓ 13:43-13:50 Talk 1.6 (Online): Vietnam's Progress and Challenges under the Eu's Carbon Border Adjustment Mechanism (CBAM)/ Tiến bộ và thách thức của Việt Nam trong Cơ chế điều chỉnh biên giới carbon của EU (CBAM)

Hong Cam Ngan, Lam Kim Nhung

✓ 13:50-13:57 Talk 1.7 (Online): Net Zero Platform TM

— A Management Platform for a Low-Emission
Economy Ecosystem / Net Zero Platform TM — Nền
tảng quản lý cho hệ sinh thái nền kinh tế phát thải
thấp







	Vo Trung Au, Ngo Huu Thong, Tran Anh Tuan, Tim Nguyen*, Vo Van Phong
14:16-15:26	Section 2: The international carbon market: today and tomorrow/ Thị trường carbon quốc tế: hôm nay và ngày mai
	<u>Chair</u> : Assoc. Prof. Dr. Nguyen Thi Tuong Anh, Vice Dean of Faculty of International Economics, FTU, Viet Nam
	✓ 14:16-14:31 Talk 2.1 (Onsite): International Experiences in Financial Control in The Carbon Emissions Markets / Kinh nghiệm quốc tế về kiểm soát tài chính trong thị trường phát thải carbon Doan Thi Phuong Anh, Pham Thi My Hanh*, Nguyen Hong Quan
	✓ 14:31-14:46 Talk 2.2 (Onsite): Impact of Energy Consumption, National Income on CO2 Emissions in Asia-Pacific Countries / Tác động của tiêu thụ năng lượng, thu nhập quốc dân đến phát thải CO2 ở các nước châu Á - Thái Bình Dương Nguyen Binh Duong
	✓ 14:46-14:53 Talk 2.3 (Online): Impact of Export Diversification on Energy Intensity: Empirical Evidence in 15 Selected Asian Countries / Impact of Export Diversification on Energy Intensity: Empirical Evidence in 15 Selected Asian Countries Pham Hoang Thuc Doan*, Huynh Ngoc Tuyen, Tran Nguyen Chat
	✓ 14:53-15:00 Talk 2.4 (Online): The Roles of Green Bonds and Renewable Energy in Reducing Carbon Emissions/ Vai trò của trái phiếu xanh và năng lượng tái tạo trong việc giảm lượng khí thải carbon Phuong Bich Truong*, Anh Nguyen Tuan Ho, Vy Thao Duong, Minh Ta Thanh Vo
	✓ 15:00-15:07 Talk 2.5 (Online): Environmental Degradation In Asian Countries: Moderating Role Of Industrialization And Urbanization/ Suy thoái môi trường ở các nước châu Á: Vai trò điều tiết của công nghiệp hóa và đô thị hóa







	Tran Hoang Tan*, Nguyen Hoang Anh, Tran Khanh Ly, Huynh Dieu My, Tran Nhu Ngoc, Nguyen Thi Mai, Huynh Hien Hai	
	 ✓ 15:07-15:14 Talk 2.6 (Online): Emission Trading System and Carbon Productivity/ Hệ thống giao dịch phát thải và năng suất carbon Truong Quang Bao and Nguyen Quynh Huong 	
15:26-15:40	Tea break / giải lao	
15:40-16:50	Section 3: Lessons from the global carbon market to develop an effective and sustainable carbon market in Viet Nam / Bài học từ thị trường carbon toàn cầu để phát triển thị trường carbon hiệu quả và bền vững ở Việt Nam	
	<u>Chair:</u>	
	Dr. Tran Thi Ngoc Bich (BICA), Vice Director – Institute of Environmental Science and Technology, TVU, Viet Nam	
	AND	
	Dr. Bui Thanh Long, Deputy Dean of the Faculty of Economics, School of Economics and Law at TVU, Viet Nam	
	✓ 15:40-15:55 Talk 3.1 (Onsite): The Impact of Technological Innovation on Green Growth in Asian Countries and Lessons for Vietnam/ Tác động của đổi mới công nghệ tới tăng trưởng xanh ở các nước châu Á và bài học cho Việt Nam Hoang Xuan Binh; Hoang Thi Tra My; Nguyen Thi Thanh Huyen	
	✓ 15:55-16:10 Talk 3.2 (Onsite): Experiences in Building Carbon Emission Markets Worldwide and Lessons for Vietnam / Kinh nghiệm xây dựng thị trường phát thải carbon trên toàn thế giới và bài học cho Việt Nam	
	Nguyen Thi Tuong Anh, Nguyen Thi Minh Thu*, Nguyen Hong Quan	
	✓ 16:10-16:17 Talk 3.3 (Online): Climate-Smart Trade and Investment in the Asia-Pacific Region: Policy Evaluation and Implications for Vietnam / Thương mại và Đầu tư Thông minh về Khí hậu ở khu vực	







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	Le	Châu Á - Thái Bình Dương: Đánh giá Chính sách và Ý nghĩa đối với Việt Nam Nguyen Quynh Trang	
	Ly	✓ 16:17-16:24 Talk 3.4 (Online): International Collaboration to Expand the Carbon Market: Experiences from China and Some Recommendations for Vietnam / Hợp tác quốc tế để mở rộng thị trường carbon: Kinh nghiệm từ Trung Quốc và một số khuyến nghị cho Việt Nam Hoang Phu; Hoang Tu Giang	
		✓ 16:24-16:31 Talk 3.5 (Online): Potentials of developing carbon market in the Vietnamese power industry: Using ESG Guidelines and lessons from Shanghai Electric Group Company Limited/ Tiềm năng phát triển thị trường carbon trong ngành điện Việt Nam: Sử dụng Hướng dẫn ESG và bài học từ Công ty TNHH Tập đoàn Điện lực Thượng Hải am Hong Phục*, Nghiem Le My Hanh, Le Thanh Mai, tuyen Van Thuy Linh, Tran Cong Minh, Pham Thu Thao	
		osing ceremony, Awards (presentation)	Onsite and Online
		sociate Professor. Dr. Diep Thanh Tung, Vice-Rector of a Vinh University, Viet Nam (Chairman)	Omnie





