

12-13 DECEMBER  
DANANG, VIETNAM

2024

# VIETNAM SYMPOSIUM

in Climate  
Transition



MASSEY UNIVERSITY  
TE KUNENGA KI PŪREHUROA  
UNIVERSITY OF NEW ZEALAND



<https://vsct2024.sciencesconf.org/>

# Summary

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# Welcoming note

We are very pleased to welcome you to the first edition of the **Vietnam Symposium in Climate Transition (VSCT-2024, 12-13 December 2024)**, which is jointly organized by the **Association of Vietnamese Scientists and Experts (AVSE Global)**, the **University of Danang – University of Economics**, and **Massey University**.

Climate change is a global threat requiring the cooperation of all stakeholders, including governments, corporations, and civil society, to mitigate its harmful impacts and to ensure a just climate transition to a low-carbon, more resource-efficient and sustainable economy. Under the Paris Agreement and the 2030 UN Sustainable Development Goals (SDGs), countries are expected to mobilize all possible efforts and resources (human, financial, and capital) to achieve targeted climate and energy goals.

Jointly co-organized by the AVSE Global, the University of Danang – University of Economics, and Massey University, the 2024 Vietnam Symposium in Climate Transition (VSCT-2024) aims to provide a leading forum for academics, practitioners, and policymakers to present their research findings and discuss current and challenging issues in climate transition, environment, and energy change mitigation and adaptation. The Symposium is also an ideal occasion for Vietnamese scholars to exchange research experiences and develop research projects with their international colleagues.

This year, we have the great privilege to welcome two outstanding Guest Keynote Speakers, **Professor Summit Agarwal**, *Professor of Finance at the Business School and a Professor of Economics and Real Estate at the National University of Singapore, Singapore*, and **Professor Ian Bateman OBE**, *Professor of Environmental Economics, University of Exeter Business School, United Kingdom & Co-Editor-in-Chief of Environmental & Resource Economics*. We also have the great pleasure to welcome **Professor Summit Agarwal** (National University of Singapore, Singapore), **Professor Klaus Schaeck** (University of Bristol, United Kingdom), and **Ms. Betty Pallard** (Cofounder, ESGs and Climate Consulting) to join us in the policy discussion panel session. They are among the world's leading scholars and practitioners in climate transition. We are grateful to them for their presence and kind support.

We also thank all the submitted authors, scientific committee members, attendees, and particularly conference participants who serve as presenters, session chairs, and discussants. Our special thanks go to Professors Alessandra Guariglia, Qiang Ji, and Dayong Yang (Co-Editors-in-Chief of *Journal of Climate Finance*), Professors Raf Dewil, Jason Evans and Lixiao Zhang (Co-Editors-in-Chief of *Journal of Environmental Management*) for agreeing to consider our best conference papers for publication opportunities at their journals. Our gratitude also goes to Assoc. Prof. Hung Do, Prof. Duc Khuong Nguyen, and Prof. Russell Smyth (Co-Guest Editors of *Energy Economics*), Assoc. Prof. Hung Do, Dr. Linh H. Nguyen, and Dr. Thomas Walther (Co-Guest Editors of the *Journal of Forecasting*), who have kindly agreed to attach their special issues with our conference.

Finally, we would like to thank Professors Ngoc Phi Anh Doan and Thuy Anh Vo (*The University of Da Nang – University of Economics, Viet Nam*), for their outstanding support to make this event a great success. Also, our special thanks go to the members of our organizing committee and supporters for their great contributions to the preparations of this scientific event.

We wish you all an intellectually stimulating and productive conference as well as a chance to meet new colleagues and establish collaborations. We hope that you will have the occasion to exchange ideas and enjoy the environment of the conference!

*On behalf of the Organizing and Scientific Committees*

*The Conference Co-Chairs*

Arman Eshraghi, Muhammad Ali Nasir and Linh Pham

# Conference Scope

Climate change is a global threat requiring the cooperation of all stakeholders, including governments, corporations, and civil society, to mitigate its harmful impacts and to ensure a just climate transition to a low-carbon, more resource-efficient and sustainable economy. Under the Paris Agreement and the 2030 UN Sustainable Development Goals (SDGs), countries are expected to mobilize all possible efforts and resources (human, financial, and capital) to achieve targeted climate and energy goals.

Jointly co-organized by the AVSE Global, the University of Danang – University of Economics, and Massey University, the 2024 Vietnam Symposium in Climate Transition (VSCT-2024) aims to provide a leading forum for academics, practitioners, and policymakers to present their research findings and discuss current and challenging issues in climate transition, environment, and energy change mitigation and adaptation. The Symposium is also an ideal occasion for Vietnamese scholars to exchange research experiences and develop research projects with their international colleagues.

The scientific and organizing committee welcome submissions in all areas which represent crossroads of energy, climate, sustainability, and issues in business & management. The topics of the conference include, but not limited to:

- Behavioral finance/economics and its implications to climate transition
- Blue economy
- Carbon market
- Circular economy
- Climate change: mitigation and adaptation
- Climate change: policy and regulations
- Climate finance
- Climate risks: assessment and management
- Climate transition and COVID-19 recovery
- Climate transition and portfolio management
- Corporate Social Responsibility (CSR)
- Energy and environmental issues
- Energy markets and energy transition
- Environmental, Social and Governance (ESG)
- Financial markets and climate transition
- Geopolitical risk and climate change mitigation
- Just climate transition
- Low carbon technologies and innovation
- Management of extractive industries
- Responsible behaviors and sustainability in family business
- Responsible business conduct and SDG goals
- Role of management, business strategies, and SDG goals
- Sustainable business model innovation
- Sustainable entrepreneurship
- Sustainable infrastructure investment
- Sustainable production and consumption
- Sustainable key performance indicators

# Keynote Speakers



## **Professor [Sumit Agarwal](#)**

***Professor of Finance at the Business School and a Professor of Economics and Real Estate at the National University of Singapore, Singapore***

Sumit Agarwal is Low Tuck Kwong Distinguished Professor of Finance at the Business School and a Professor of Economics and Real Estate at the National University of Singapore. He is the Managing Director of Sustainable and Green Finance Institute at NUS. He is also the President of Asian Bureau of Finance and Economic Research. In the past, he has held positions as a Professor of Finance at the Business School, Georgetown University. Before that he was a senior financial economist in the research department at the Federal Reserve Bank of Chicago and prior to joining the Chicago Fed, he was a senior vice president and credit risk management executive in the Small Business Risk Solutions Group of Bank of America.

Sumit's research interests include issues relating to household sustainability, financial institutions, household finance, behavioral finance, and real estate markets. He has published over one hundred and twenty-five research articles in economics and finance journals among others. Additionally, he has co-written six books titled *Why We Feel Blue When the Air is Grey*, *Kiasunomics 3*, *Introduction to Household Financial Management*, *Kiasunomics 2*, *Household Finance: A Functional Approach*, and *Kiasunomics*, and also co-edited two collected volumes titled *Impact of COVID-19 on Asian Economies and Policy Responses*, and *Household Credit Usage: Personal Debt and Mortgages*. He writes regular op-ed's in the *Straits Times* and is featured on various media outlets like the CNA, BBC, CNBC, and Fox on issues relating to finance, banking, and real estate markets. Sumit's research is widely cited in leading newspapers and magazines like the *Wall Street Journal*, *The New York Times*, *The Economist*, and the U.S Presidents Report to Congress. He also runs a Podcast on household financial decision making called *Kiasunomics*.



**Professor Ian Bateman OBE**

*Professor of Environmental Economics, University of Exeter Business School, United Kingdom & Co-Editor-in-Chief of [Environmental & Resource Economics](#)*

Ian is an environmental economist with a wide array of research interests. These revolve around the issue of ensuring sustainable wellbeing through the integration of natural and social science knowledge within decision making and policy. Particular interests lie in the fields of quantitative analysis, integrated modelling, the valuation of non-market benefits and costs and working with decision and policy makers in the public and private sector.

Ian is Co-Director (with Professor Brett Day) of the Land, Environment, Economics and Policy Institute (LEEP), a multidisciplinary team bringing together the variety of disciplines and perspectives necessary to improve policy, business and social decision making regarding the connections between the economy and the environment. LEEP is based in the Department of Economics at the University of Exeter Business School. Ian is also the Director of the NetZeroPlus project.

Ian is a member of the First Minister's Environmental Council advising the Scottish Government.

# Committees

## ADVISORS

### Ted Loch-Temzelides

George & Cynthia Mitchell Professor in Sustainable Development  
Rice Scholar in Energy Studies, Baker Institute  
*Rice University, USA*

### Lutz Kilian

Senior Economic Policy Advisor, Research Department  
*Federal Reserve Bank of Dallas, USA*

## STEERING COMMITTEE



**Hung Xuan Do**

Professor of Finance, *Massey University, New Zealand*  
Director of Finance and Banking Network, *AVSE Global*



**Duc Khuong Nguyen**

Professor of Finance, *EMLV Business School, France*  
President, *AVSE Global*

## CONFERENCE CO-CHAIRS



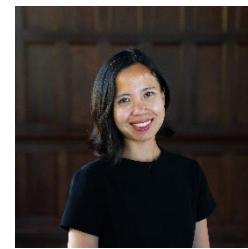
**Arman Eshraghi**

Professor of Finance and Investment  
*Cardiff University, UK*



**Muhammad Ali Nasir**

Associate Professor of Economics  
*University of Leeds, UK*



**Linh Pham**

Assistant Professor of Economics  
*Lake Forest College, USA*

## SCIENTIFIC COMMITTEE

- Jonathan Batten, *RMIT University, Australia*
- Sabri Boubaker, *EM Normandie Business School, France & Swansea University, UK*
- Karel Bruna, *Prague University of Economics and Business, Czech Republic*
- Julien Chevallier, *Paris 8 University, France*
- Xihui Chen, *Keele University, UK*
- Long Chu, *Australian National University, Australia*
- Anna Min Du, *Edinburgh Napier University, United Kingdom*
- Hung Do, *Massey University, New Zealand*

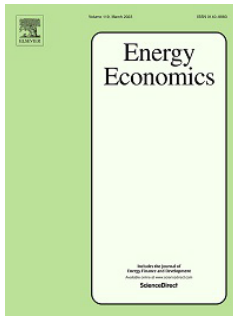
- Hisham Farag, *Birmingham Business School, UK*
- Arman Eshraghi, *Cardiff University, UK*
- Stephane Goutte, *Paris Saclay University, France*
- Alessandra Guariglia, *University of Birmingham, UK*
- Lutz Kilian, *Federal Reserve Bank of Dallas, USA*
- Tom Kompas, *University of Melbourne, Australia*
- Qiang Ji, *Chinese Academy of Sciences Institutes of Science and Development, China*
- Brian Lucey, *University of Dublin Trinity College, Ireland*
- Ted Loch-Temzelides, *Rice University, USA*
- Rabindra Nepal, *University of Wollongong, Australia*
- Duc Khuong Nguyen, *EMLV Business School, France*
- Toan Phan, *Federal Reserve Bank of Richmond, USA*
- Perry Sadorsky, *York University, Canada*
- Russell Smyth, *Monash Business School, Australia*
- Stefan Trueck, *Macquarie University, Australia*
- Dayong Zhang, *Southwestern University of Finance and Economics, China*

## ORGANIZING COMMITTEE

- Thuy Dao (**Organizing Coordinator**), *IPAG Business School, France & AVSE Global*
- Ngoc Phi Anh Doan, *The University of Danang - University of Economics, Vietnam*
- Hung Do (**Scientific Coordinator**), *Massey University, New Zealand & AVSE Global*
- Linh Pham (**Scientific Coordinator**), *Lake Forest College, USA & AVSE Global*
- Oanh Ha, *RMIT Vietnam & AVSE Global*
- Thuy Anh Vo, *The University of Danang - University of Economics, Vietnam*



# Associated Journals



Special issue of [Energy Economics](#), titled “*Impacts of Geopolitical Conflicts on Regional Energy Security and Consequences for the Global Economy*” under the Guest-editorship of Assoc. Prof. Hung Do, Prof. Duc Khuong Nguyen, and Prof. Russell Smyth. Submission deadline: **31st December 2024**.



Special issue of [Journal of Forecasting](#), titled “Forecasting carbon prices in an integrated market network” under the Guest-editorship of Assoc. Prof. Hung Do, Dr. Linh H. Nguyen, and Dr. Thomas Walther. Submission deadline: **28th February 2025**.

In consultation with the Editors-in-Chief of the [Journal of Climate Finance](#) and [Journal of Environment Management](#), authors of best conference papers will be invited to submit their papers to a regular issue of the Journal.

# Conference Venue

## **The University of Danang - University of Economics**

71 Ngu Hanh Son Street, Ngu Hanh Son District, Danang, Vietnam



# Logistic Details

## Notes for ONLINE Participants

Zoom link for **ALL** sessions:

<https://zoom.us/j/4502777596?pwd=O2RA4F3tTzFhDwmtIcPqE13VOyDAay.1&omn=95428556649>

Meeting ID: 450 277 7596

Passcode: 20241212

**Breakout rooms** will be available for parallel sessions.

**To join a breakout room:** Click **Breakout Rooms**  in your meeting controls. This will display the list of open breakout rooms created by the host.

**The Rooms are named after the parallel sessions.**

(Optional) Click **Expand All** to expand all available rooms and see which participants are in that particular room. **Note:** The **Expand All** and **Collapse All** options require version **5.9.6** or higher.

Hover your pointer over the number to the right of breakout room you wish to join, click **Join**, then confirm by clicking **Join**.

Repeat as necessary to join other breakout rooms or click **Leave Room** to return to the main session.

## Notes for ONSITE Participants

**ALL** Keynote sessions and Policy discussion sessions: Hall E

**ALL** Parallel sessions:

Onsite Rooms are noted in the **Program At a Glance** section for each session

**ALL** Coffee breaks: Hall E

**ALL** Lunch breaks: 1<sup>st</sup> Floor, H Building

# Program At a Glance

Links to the session's papers are embedded in the session name

Please refer to the Logistic Details section of the program for information on how to join the sessions virtually

THURSDAY, DECEMBER 12, 2024						
Start	End	Session Code	1	2	3	4
8:00	8:30		<b>Registration &amp; Coffee</b> Hall E			
8:30	9:00		<b>Welcome and Opening Remarks</b> Hall E			
9:00	10:00	<b>A1</b>	<b>Keynote speech 1</b> <b>Professor Sumit Agarwal</b> Professor of Finance at the Business School and Professor of Economics and Real Estate, National University of Singapore, Singapore Hall E			
10:00	10:30		<b>Coffee break</b> Hall E			
10:30	11:30	<b>A2</b>	<b>Policy Roundtable Discussion</b> Hall E			
11:30	13:00		<b>Lunch Break</b> 1st Floor, H Building			
13:30	14:30	<b>B1</b>	<a href="#">Climate risks in Banking and Debt</a> Room E301 Onsite Presenters	<a href="#">Renewable Energy and Carbon Neutrality in Developing Countries</a> Room E302 Onsite & Online Presenters	<a href="#">ESG and CSR: Unintended Effects</a> Room E303 Online Presenters	<a href="#">Finance for Energy and Climate Transition</a> Room E304 Online Presenters
14:30	15:00		<b>Coffee break</b> Hall E			
15:00	16:30	<b>B2</b>	<a href="#">Corporate and Consumer Behavior toward Environmental Sustainability</a> Room E301 Onsite Presenters	<a href="#">Sustainable Business Practices and Innovation</a> Room E302 Onsite & Online Presenters	<a href="#">Geopolitical Risk and Energy Security</a> Room E303 Onsite Presenters	<a href="#">Consumer Behavior, Corporate Reporting, and Policy Effectiveness</a> Room E304 Online Presenters
19:00	22:00		<b>Gala Dinner</b> Brilliant Seafood Restaurant			

**FRIDAY, DECEMBER 13, 2024**

8:30	9:00		<b>Registration &amp; Coffee</b> <b>Hall E</b>			
9:00	10:00	<b>A1</b>	<b>Keynote speech 2</b> <b>Professor Ian Bateman OBE</b> Professor of Environmental Economics, University of Exeter Business School, United Kingdom Co-Editor-in-Chief of Environmental & Resource Economics <b>Hall E</b>			
10:00	10:30		<b>Coffee break</b> <b>Hall E</b>			
10:30	12:00	<b>A2</b>	<u><a href="#">Risk Management in Financial and Environmental Contexts</a></u> Room E301 Onsite Presenters	<u><a href="#">Innovation and Organizational Strategy</a></u> Room E302 Onsite Presenters	<u><a href="#">Carbon Emissions and Trade Policies</a></u> Room E303 Onsite Presenters	<u><a href="#">Climate mitigation and adaptation</a></u> Room E304 Online Presenters
12:00	13:30		<b>Lunch Break</b> 1st Floor, H Building			
13:30	--		<b>END OF CONFERENCE</b>			

# Program Overview

Authors' names are in LastName, FirstName format.

## Thursday, 12 December 2024

8:00	8:30	Registration & Coffee	Hall E
8:30	9:00	Welcome and Opening Remarks	Hall E
Duc Khuong Nguyen, EMLV Business School, France & AVSE Global, Steering Committee Hung Do, Massey University, New Zealand, Steering Committee Arman Eshraghi, Cardiff University, UK, Conference Co-Chair Muhammad Ali Nasir, University of Leeds, UK, Conference Co-Chair Linh Pham, Lake Forest College, USA, Conference Co-Chair Thuy Anh Vo, The University of Danang – University of Economics, Vietnam, Organizing Committee Ngoc Phi Anh Doan, The University of Danang – University of Economics, Organizing Committee			
9:00	10:00	Keynote speech 1	Hall E



### Water Conservation and Household Sustainability

#### Professor Sumit Agarwal

Professor of Finance at the Business School and Professor of Economics and Real Estate  
National University of Singapore, Singapore

10:00	10:30	Coffee break	Hall E
10:30	11:30	Policy Roundtable Discussion	Hall E

### Macroeconomic implications of climate transitions

#### Panel:

##### Professor Sumit Agarwal

Professor of Finance at the Business School and Professor of Economics and Real Estate  
National University of Singapore, Singapore

##### Professor Klaus Schaeck

Professor of Banking and Finance, School of Accounting and Finance - Business School  
University of Bristol, United Kingdom

##### Ms. Betty Pallard

Co-founder, ESGs and Climate Consulting, Viet Nam

#### Moderator:

##### Professor Arman Eshraghi

Professor of Finance and Investment, Cardiff Business School  
Cardiff University, United Kingdom

11:30	13:00	Lunch Break	1 <sup>st</sup> Floor H Building
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<b>13:00</b>	<b>14:30</b>	<b>Parallel Sessions B1</b>			
<b>13:00</b>	<b>14:30</b>	<b>B1.1 (Onsite)</b>	<b>Climate risks in Banking and Debt</b>	<b>Room E301</b>	
<b>Onsite</b>	Chair: <b>Schaeck, Klaus</b> <i>University of Bristol (United Kingdom)</i>				
<b>13:00</b>	<b>14:30</b>	<b>B1.2 (Hybrid)</b>	<b>Renewable Energy and Carbon Neutrality in Developing Countries</b>	<b>Room E302</b>	
<b>Onsite</b>	Chair: <b>Narain, Vishal</b> <i>Professor, Management Development Institute, India</i> <i>Management Development Institute Gurgaon, India</i>				
<b>13:00</b>	<b>14:30</b>	<b>B1.3 (Online)</b>	<b>ESG and CSR: Unintended Effects</b>	<b>Room E303</b>	
<b>Online</b>	Chair: <b>Hoang, Khanh</b> <i>Lincoln University, New Zealand</i>				
<b>13:00</b>	<b>14:30</b>	<b>B1.4 (Online)</b>	<b>Finance for Energy and Climate Transition</b>	<b>Room E304</b>	
<b>Online</b>	Chair: <b>Heni, Boubaker</b> <i>IPAG Business School, IPAG Lab, France</i>				
<b>14:30</b>	<b>15:00</b>	<b>Coffee break</b>			<b>Hall E</b>
<b>15:00</b>	<b>16:30</b>	<b>Parallel Sessions B2</b>			
<b>15:00</b>	<b>16:30</b>	<b>B2.1 (Onsite)</b>	<b>Corporate and Consumer Behavior toward Environmental Sustainability</b>	<b>Room E301</b>	
<b>Onsite</b>	Chair: <b>Tran-Danh, Nhan</b> <i>Faculty of E-Commerce, University of Economics, The University of Danang, Viet Nam</i>				
<b>15:00</b>	<b>16:30</b>	<b>B2.2 (Hybrid)</b>	<b>Sustainable Business Practices and Innovation</b>	<b>Room E302</b>	
<b>Onsite</b>	Chair: <b>Nguyen, Duc Duy (Louis)</b> <i>Durham University United Kingdom</i>				
<b>15:00</b>	<b>16:30</b>	<b>B2.3 (Onsite)</b>	<b>Geopolitical Risk and Energy Security</b>	<b>Room E303</b>	
<b>Onsite</b>	Chair: <b>Chu, Tuan</b> <i>RMIT University Vietnam</i>				
<b>15:00</b>	<b>16:30</b>	<b>B2.4 (Online)</b>	<b>Consumer Behavior, Corporate Reporting, and Policy Effectiveness</b>	<b>Room E304</b>	
<b>Online</b>	Chair: <b>Galkiewicz, Dominika</b> <i>University of Applied Sciences Kufstein (Uask), Austria</i>				
<b>19:00</b>	<b>22:00</b>	<b>Gala Dinner</b> <b>Brilliant Seafood Restaurant</b>			
<b>End of Day 1</b>					

## Friday, 13 December 2024

8:30	9:00	Registration & Coffee		Hall E
9:00	10:00	Keynote speech 2		Hall E
		<p><b>Bringing climate change and environmental sustainability into economic decision making</b></p> <p><b>Professor Ian Bateman OBE</b>  <i>Professor of Environmental Economics, University of Exeter Business School, United Kingdom</i>  <i>Co-Editor-in-Chief of Environmental &amp; Resource Economics</i></p>		
10:00	10:30	Coffee break		Hall E
10:30	12:00	Parallel Sessions A2		
10:30	12:00	A2.1 (Onsite)	Risk Management in Financial and Environmental Contexts	Room E301
Onsite	Chair: <b>Uddin, Moshfique</b> <i>University of Leeds, United Kingdom</i>			
10:30	12:00	A2.2 (Onsite)	Innovation and Organizational Strategy	Room E302
Onsite	Chair: <b>Kecskes, Ambrus</b> <i>Schulich School of Business, York University, Canada</i>			
10:30	12:00	A2.3 (Onsite)	Carbon Emissions and Trade Policies	Room E303
Onsite	Chair: <b>Tan Yan</b> <i>Yulin Normal University, China</i>			
10:30	12:00	A2.4 (Online)	Climate mitigation and adaptation	Room E304
Online	Chair: <b>Qu, Songze</b> <i>The University of Sydney, Australia</i>			
12:00	13:30	Lunch Break		1 <sup>st</sup> Floor H Building
End of conference				



# Program in Details

Authors' names are in LastName, FirstName format.

## Thursday, 12 December 2024

8:00	8:30	Registration & Coffee	Hall E
8:30	9:00	Welcome and Opening Remarks	Hall E
Duc Khuong Nguyen, EMLV Business School, France & AVSE Global, Steering Committee Hung Do, Massey University, New Zealand, Steering Committee Arman Eshraghi, Cardiff University, UK, Conference Co-Chair Muhammad Ali Nasir, University of Leeds, UK, Conference Co-Chair Linh Pham, Lake Forest College, USA, Conference Co-Chair Thuy Anh Vo, The University of Danang – University of Economics, Vietnam, Organizing Committee Ngoc Phi Anh Doan, The University of Danang – University of Economics, Organizing Committee			
9:00	10:00	Keynote speech 1	Hall E



### Water Conservation and Household Sustainability

#### Professor Sumit Agarwal

Professor of Finance at the Business School and Professor of Economics and Real Estate

National University of Singapore, Singapore

10:00	10:30	Coffee break	Hall E
10:30	11:30	Policy Roundtable Discussion	Hall E

### Macroeconomic implications of climate transitions

#### Panel:

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Professor of Finance at the Business School and Professor of Economics and Real Estate  
National University of Singapore, Singapore

#### Professor Klaus Schaeck

Professor of Banking and Finance, School of Accounting and Finance - Business School  
University of Bristol, United Kingdom

#### Ms. Betty Pallard

Co-founder, ESGs and Climate Consulting, Viet Nam

#### Moderator:

#### Professor Arman Eshraghi

Professor of Finance and Investment, Cardiff Business School  
Cardiff University, United Kingdom

11:30	13:00	Lunch Break	1 <sup>st</sup> Floor H Building
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13:00	14:30	Parallel Sessions B1		
13:00	14:30	<b>B1.1 (Onsite)</b>	<b>Climate risks in Banking and Debt</b>	<b>Room E301</b>
<b>Onsite</b>	Chair: <b>Schaeck, Klaus</b> <i>University of Bristol (United Kingdom)</i>			
<b>Paper</b>				<b>Discussant</b> Nguyen, Huyen
	<b>Raining On Bonds: The Financing Costs of Extreme Rain On Urban Investment Bonds</b> Yang, Zhenhuan, <i>Hong Kong University of Science and Technology (Guangzhou) (China)</i>			
	<b>Lu, Yangsiyu</b> <i>Hong Kong University of Science and Technology (Guangzhou) (China)</i>			
	<b>Climate Stress Tests, Bank Lending, and the Transition to The Carbon-Neutral Economy</b> <b>Schaeck, Klaus</b> <i>University of Bristol (United Kingdom)</i>			Lu, Yangsiyu
	Nguyen, Huyen <i>WH Halle and FSU Jena (Germany)</i>			
	Nguyen, Trang <i>University of Bristol (United Kingdom)</i>			
	Fuchs, Larissa <i>University of Cologne (Germany)</i>			
	<b>Carbon Transition Risk and Corporate Loan Securitization</b> <b>Nguyen, Huyen</b> <i>WH Halle and FSU Jena (Germany)</i>			Schaeck, Klaus
	Mueller, Isabella <i>Ministry of Finance (Germany)</i>			
	Nguyen, Trang <i>University of Bristol (United Kingdom)</i>			

13:00	14:30	B1.2 (Hybrid)	Renewable Energy and Carbon Neutrality in Developing Countries	Room E302
<b>Onsite</b>	Chair: <b>Narain, Vishal</b> <i>Professor, Management Development Institute, India</i> <i>Management Development Institute Gurgaon, India</i>			
<b>Paper</b>	<b>Assessing Climate-Induced Salinity Thresholds and Adaptive Responses In Bangladesh's Coastal Ecosystems: A Case Study of Koyra Upazila</b> <b>Hossain, Md Nirab</b> <i>Department of Applied Mathematics, University of Dhaka, Bangladesh</i> <i>Akhter, Syeda Shagin</i> <i>Bangladesh Open University, Bangladesh</i>		<b>Discussant</b> Boulanouar, Zakari	
	<b>Climate Induced Water Insecurity In Peri-Urban Spaces: Towards A Political Ecology of Periurban Disasters</b> <b>Narain, Vishal</b> <i>Professor, Management Development Institute, India</i> <i>Management Development Institute Gurgaon, India</i>		Hossain, Md Nirab	
	<b>Vision for Indonesia's 2050 Power Generation: Scenarios of Hydrogen Integration, Nuclear Energy Prospects, and Coal Phase-Out Impact</b> <b>Hakam, Dzikri Firmansyah</b> <i>School of Business and Management (SBM ITB), Indonesia</i> <i>Kemala, Prodia Nur</i> <i>School of Business and Management (SBM ITB), Indonesia</i> <i>Wijayanto, Tito</i> <i>School of Business and Management (SBM ITB), Indonesia</i>		Narain, Vishal	
	<b>Achieving Carbon Neutrality in Emerging Markets: The Dual Impact of Energy Transition Investments On Economic Growth and Carbon Emissions (Online Presentation)</b> <b>Boulanouar, Zakari</b> <i>Department of Economics &amp; Finance, College of Business &amp; Economics, United Arab Emirates University, United Arab Emirates</i> <i>National Water and Energy Center, The United Arab Emirates University, United Arab Emirates</i> <i>Essid, Lobna</i> <i>Higher Institute of Biotechnology Beja, University of Gandoura, Tunis, Tunisia</i>		Hakam, Dzikri Firmansyah	

13:00	14:30	B1.3 (Online)	ESG and CSR: Unintended Effects	Room E303
<b>Online</b>	Chair: <b>Hoang, Khanh</b> Lincoln University, New Zealand			
<b>Paper</b>				<b>Discussant</b> Hoang, Khanh
	<b>Bank Credit Risk, Greenwashing and ESG Reputation</b> Papanikolaou, Nikolaos Newcastle University, United Kingdom			
	<b>Wu, Mengya</b> Newcastle University, United Kingdom			
	<b>Crosswashing In Sustainable Investing: Unveiling Strategic Practices Impacting ESG Scores</b> <b>Hassani, Bertrand</b> Université Paris 1 Panthéon Sorbonne, France Quant AI Lab, United Kingdom Bahini, Yacoub Quant AI Lab, C. De Arturo Soria, 122, 28043 Madrid, Spain			Wu, Mengya
	<b>To Woke or Not: Corporate Woke Engagement and Financial Outcomes</b> <b>Hoang, Khanh</b> Lincoln University, New Zealand Peltomäki, Jarkko Stockholm University, Sweden Nguyen, Cuong Lincoln University, New Zealand Zhang, Yuqian Lincoln University, New Zealand			Doori, Kim
	<b>R&amp;D Organizational Structure and The Interaction Between Mandatory and Cooperative ECSR</b> <b>Kim, Doori</b> Department of Economics, Chonnam National University, South Korea Lee, Sangho Department of Economics, Chonnam National University, South Korea			Hassani, Bertrand

13:00	14:30	B1.4 (Online)	Finance for Energy and Climate Transition	Room E304
<b>Online</b>	Chair: <b>Heni, Boubaker</b> IPAG Business School, IPAG Lab, France			
<b>Paper</b>				<b>Discussant</b> Kouzez, Marc
	<b>Asymmetric Spillover In Clean Energy Financial Markets: The Role of Geopolitical and Climate Risk</b> <b>Sophian, Wafid</b> <i>Universiti Brunei Darussalam, Brunei</i> Premaratne, Gamini <i>Universiti Brunei Darussalam, Brunei</i>			
	<b>The Effect of Energy Taxes and Green Innovation on Renewable and Non-Renewable Energy Consumption</b> Hassan, Mahmoud <i>Bordeaux School of Economics, France</i> Lee, Ji-Yong <i>Audencia Business School, France</i> <b>Kouzez, Marc</b> <i>ICN Business School, France</i>			Heni, Boubaker
	<b>Economic and Statistical Insights into Dependence and Hedging Dynamics</b> <b>Heni, Boubaker</b> <i>IPAG Business School, IPAG Lab, France</i> Ben, Saad Zorgati Mouna <i>IPAG Business School, IPAG Lab, France</i>			Kemala, Prodia Nur
	<b>Valuing Offshore Natural Gas Development Plan Through Real Options: Case Study of Indonesia</b> <b>Kemala, Prodia Nur</b> <i>School of Business and Management (SBM ITB), Indonesia</i> Dzikri, Firmansyah Hakam <i>School of Business and Management (SBM ITB), Indonesia</i> Risa, Saraswani <i>School of Business and Management (SBM ITB), Indonesia</i>			Sophian, Wafid
14:30	15:00	Coffee break		Hall E

15:00	16:30	Parallel Sessions B2	
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15:00	16:30	B2.1 (Onsite)	Corporate and Consumer Behavior toward Environmental Sustainability	Room E301
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<p><b>Onsite</b></p> <p>Chair: <b>Tran-Danh, Nhan</b> <i>Faculty of E-Commerce, University of Economics, The University of Danang, Viet Nam</i></p> <p><b>Paper</b></p> <p><b>Drivers of Consumer Willingness To Support Carbon Offsetting: The Role of Perceived Information, Values, and Skepticism In Grab's Carbon Neutral Program</b> <b>Truong-Dinh, Bao Quoc</b> <i>University of Economics, The University of Danang Vietnam</i></p> <p><b>Impacts of Eco-Label, Green Advertising, and Green Attitude on Consumer Green Purchasing Behavior: An Empirical Study In Vietnamese Context</b> <b>Tran-Danh, Nhan</b> <i>Faculty of E-Commerce, University of Economics, The University of Danang, Viet Nam</i> Tran-Thi-Phuong, Ha <i>Faculty of Marketing, University of Economics , The University of Danang, Viet Nam</i> Dinh-Thi, Thi <i>Faculty of Tourism, Danang Architecture University, Viet Nam</i></p> <p><b>The Impact of Corporate Social Responsibility and Co-Creation On Customer Satisfaction, Customer Commitment and Customer Loyalty: An Empirical Study In Vietnamese Context</b> <b>Tran-Thi-Phuong, Ha</b> <i>Faculty of Marketing, University of Economics, The University of Danang, Vietnam</i> Tran-Danh, Nhan <i>Faculty of E-Commerce, University of Economics, The University of Danang, Vietnam</i> Dinh-Thi, Thi <i>Faculty of Tourism, Danang Architecture University, Vietnam</i></p>	<p><b>Discussant</b> Tran-Thi-Phuong, Ha</p> <p>Truong-Dinh, Bao Quoc</p> <p>Tran-Danh, Nhan</p>
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15:00	16:30	B2.2 (Hybrid)	Sustainable Business Practices and Innovation	Room E302
<b>Onsite</b>	Chair: <b>Nguyen, Duc Duy (Louis)</b> <i>Durham University United Kingdom</i>			
<b>Paper</b> <b>Does Regional Digital Inclusive Finance Enhance SME ESG Performance? Insights From China</b> <b>Yang, Tianle</b> <i>Zhejiang University of Technology China</i> Pan, Wenjun <i>Zhejiang University of Technology China</i> Du, Qunyang <i>Zhejiang University of Technology China</i>				<b>Discussant</b> Park, Chul-Hi
<b>Pastures Green: Corporate Investments In Green Skills and Toxic Plant Emissions</b> Hagendorff, Jens <i>Durham University, United Kingdom</i> <b>Nguyen, Duc Duy (Louis)</b> <i>Durham University, United Kingdom</i> Sila, Vathunyoo <i>University of Edinburgh, United Kingdom</i>				Yang, Tianle
<b>The Role of Green Organizational Culture In Driving Competitive Advantage Through Green Innovation: A Systematic Review In Textile and Apparel Industry (Online Presentation)</b> <b>Le, Nguyen Huong Quynh</b> <i>University of Economics, The University of Danang, Vietnam</i> Ngo, Tan Nhi <i>University of Economics, The University of Danang, Vietnam</i> Nguyen, Truong Son <i>University of Economics, The University of Danang, Vietnam</i> Nguyen Son Tung <i>University of Economics, The University of Danang, Vietnam</i>				Nguyen, Duc Duy (Louis)
<b>Cooperative and Non-Cooperative Commitment on Emission Target Under Environmental Regulations: Emission Tax Vs. Abatement Subsidy</b> <b>Park, Chul-Hi</b> <i>Gwangju National University of Education, South Korea</i> Lee, Sangho <i>Chonnam National University, South Korea</i>				Le, Nguyen Huong Quynh

15:00	16:30	B2.3 (Onsite)	Geopolitical Risk and Energy Security	Room E303
<b>Onsite</b>	Chair: <b>Chu, Tuan</b> <i>RMIT University Vietnam</i>			
<b>Paper</b>				<b>Discussant</b> Chu, Tuan
	<b>Geopolitical Risk and Green Total Factor Energy Efficiency: A Cross-Country Analysis</b> <b>Qiu, Ziang</b> <i>University of Macau SAR, China</i> Zhang, Yang <i>University of Macau SAR, China</i>			
	<b>The Effects of Energy Consumption, Energy Security, Geopolitical Risk, and Covid-19 On Climate-Policy Risk Exposure: Evidence From China</b> <b>Chu, Tuan</b> <i>RMIT University Vietnam</i> Pham, Quyen <i>Western Sydney University Vietnam</i> Pham, Huy <i>RMIT University Vietnam</i> Le, Hanh <i>RMIT University Vietnam</i> Chung, Chune Young <i>Chung-Ang University South Korea</i>			Dao, Thuy
	<b>The Impact of Technological Innovation and Geopolitical Risk On Energy Security: Insights From A Cross-National Study</b> <b>Dao, Thuy</b> <i>IPAG Business School France</i> Awijen, Haithem <i>INSSEC Business School France</i>			Qiu, Ziang



15:00	16:30	B2.4 (Online)	Consumer Behavior, Corporate Reporting, and Policy Effectiveness	Room E304
<b>Online</b>	Chair: <b>Galkiewicz, Dominika</b> <i>University of Applied Sciences Kufstein (Uask), Austria</i>			
<b>Paper</b>				<b>Discussant</b> Galkiewicz, Dominika
	<b>Do The ESG Factors Truly Enhance the Financial Market's Performance In The Era of Geopolitical Conflict and Uncertainty?</b> Nguyen, Duc <i>School of Banking, University of Economics Ho Chi Minh City</i> Nguyen, Huu Huan <i>School of Banking, University of Economics Ho Chi Minh City</i> <b>Tran, Nguyen Tram Anh</b> <i>Van Lang University</i> Nguyen, Ha Minh Tam <i>School of Banking, University of Economics Ho Chi Minh City</i> Nasir, Muhammad Ali <i>University of Leeds/ University of Cambridge, United Kingdom</i>			
	<b>Can Media Campaign Shift Consumers' Taste for Meat? A Revealed Preferences Approach</b> <b>Finkelshtain, Israel</b> <i>The Hebrew University of Jerusalem, Israel</i>			Tran, Nguyen Tram Anh
	<b>Changes In Sustainability Reporting Dynamics Observed from ESG Measures Provided By Real Estate Companies In 2020 and 2021: Evidence From Germany, Austria and Switzerland</b> <b>Galkiewicz, Dominika</b> <i>University of Applied Sciences Kufstein (Uask), Austria</i> Wollmann Bernd <i>University of Applied Sciences Kufstein (Uask), Austria</i>			Zhang, Geyao
	<b>The Impact of Economic Uncertainty on Corporate ESG Performance</b> <b>Zhang, Geyao</b> <i>University of Leeds, United Kingdom</i>			Finkelshtain, Israel
<b>19:00</b>	<b>22:00</b>	<b>Gala Dinner</b>	<b>Brilliant Seafood Restaurant</b>	
<b>End of Day 1</b>				

# Friday, 13 December 2024

8:30 9:00 Registration & Coffee Hall E

9:00 10:00 Keynote speech 2 Hall E



**Bringing climate change and environmental sustainability into economic decision making**

**Professor Ian Bateman OBE**

Professor of Environmental Economics, University of Exeter Business School, United Kingdom

Co-Editor-in-Chief of Environmental & Resource Economics

10:00 10:30 Coffee break Hall E

10:30 12:00 Parallel Sessions A2

10:30 12:00 A2.1 (Onsite) Risk Management in Financial and Environmental Contexts Room E301

**Onsite**

Chair:

**Baur, Dirk**

UWA Business School, Australia

**Paper**

**Charging Up On Lithium: The Metal or The Miner?**

**Baur, Dirk**

UWA Business School, Australia

**Discussant**

Wojewodzki, Michal

**The Inevitable Role of The Oil Market: Does Its Price Really Matter for Green Investment?**

**Qin, Meng**

Doctoral School of Economics and Business Administration, West University of Timisoara, Romania

Su, Chi-Wei  
Faculty of Economics and Business Administration, West University of Timisoara, Romania

Lobont, Oana-Ramona  
West University of Timisoara, Faculty of Economics and Business Administration, Finance, Business Information Systems and Modelling Department, Romania

Moldovan, Nicoleta Claudia  
Finance, Business Information Systems and Modelling Department, Faculty of Economics and Business Administration, West University of Timisoara, Romania

Baur, Dirk

**Public climate attention and European electricity prices systemic risk**

**Dai, Xingyu**

College of Economics and Management and Research Center for Soft Energy Science, Nanjing University of Aeronautics and Astronautics, China

**Wojewodzki, Michal**

Department of Finance, Faculty of Business, Lingnan University, Hong Kong

Lau, Chi Keung Marco

Teesside University, United Kingdom

Wang, Qunwei

College of Economics and Management and Research Center for Soft Energy Science, Nanjing University of Aeronautics and Astronautics, China

Qin, Meng

10:30	12:00	A2.2 (Onsite)	Innovation and Organizational Strategy	Room E302
<b>Onsite</b>	Chair: <b>Uddin, Moshfique</b> <i>University of Leeds, United Kingdom</i>			
<b>Paper</b>				<b>Discussant</b> Kecskes, Ambrus
	<b>Accounting and Renewable Energy Sector: Global Evidence</b> Uddin, Moshfique <i>University of Leeds, United Kingdom</i> <b>Chowdhury, Anup</b> <i>Leeds Beckett University, United Kingdom</i> Anderson, Keith <i>University of York, United Kingdom</i>			
	<b>Producing AI Innovation and Its Value Implications</b> Ahmadi, Ali <i>Schulich School of Business, York University, Canada</i> <b>Kecskes, Ambrus</b> <i>Schulich School of Business, York University, Canada</i> Michaely, Roni <i>University of Hong Kong, Faculty of Business and Economics and ECGI, Hong Kong Sar China</i> Nguyen, Phuong-Anh <i>School of Administrative Studies At York University, Canada</i>			Chavda, Priyanshu
	<b>Impact of Green Trade, Technological Innovation and Renewable Energy On India's Ecological Footprint</b> <b>Chavda, Priyanshu</b> <i>Pandit Deendayal Energy University India</i> Mehta, Dhyan <i>Pandit Deendayal Energy University India</i>			Lhuillery, Stephane
	<b>Biotechnology or bioeconomy: Six of one and half a dozen of the other?</b> <b>Lhuillery, Stephane</b> <i>Neoma Business School, France</i> Befort, Nicolas <i>Neoma Business School, France</i> <i>INRAE, UMR LISIS Université Paris-Est Marne-La-Vallée, France</i> Atmane, Samih <i>Neoma Business School, France</i>			Chowdhury, A nup

10:30	12:00	A2.3 (Onsite)	Carbon Emissions and Trade Policies	Room E303
<b>Onsite</b>	Chair: <b>Tan, Yan</b> <i>Yulin Normal University, China</i>			
<b>Paper</b>				<b>Discussant</b>
	<b>Exploring CO2 Emission Factors in Vietnam Towards Sustainable Consumption</b> <b>Nguyen, Huu Nguyen Xuan</b> <i>The University of Danang - University of Economics, Vietnam</i> Nguyen, The Phu <i>The University of Danang - University of Economics, Vietnam</i>			Bhatt, Mandar
	<b>Exploring The Impact of Foreign Direct Investment on Ecological Footprint in Southeast Asia with Heterogeneous Effects</b> <b>Tan, Yan</b> <i>Yulin Normal University, China</i>			Ben Zaied, Younes
	<b>Impact of Green Trade and Green Energy Consumption on Energy Intensity: Evidence from India</b> <b>Bhatt, Mandar</b> <i>Pandit Deendayal Energy University, India</i> Mehta, Dhyan <i>Pandit Deendayal Energy University, India</i>			Tan, Yan
	<b>Energy Poverty and Low-Carbon Transition in Sub-Saharan Africa</b> <b>Ben Zaied, Younes</b> <i>EDC Paris Business School, France</i> Ben Cheikh, Nidhaledine <i>ESSCA Paris, France</i> Nguyen, Duc <i>EMLV, France</i>			Nguyen, Huu Nguyen Xuan

10:30	12:00	A2.4 (Online)	Climate mitigation and adaptation	Room E304
Online	Chair: <b>Qu, Songze</b> <i>The University of Sydney, Australia</i>			<b>Discussant</b> Qu, Songze
<b>Paper</b>				
<b>A Bibliometric Analysis of The Inclusive Green Growth</b>				
Hoang, Van Hai <i>Danang University Economic, Vietnam</i>				
<b>Nguyen, Doan Doan Trang</b>				
<i>Danang University Economic, Vietnam</i>				
Nguyen, Ho Thanh Dat <i>Danang University Economic, Vietnam</i>				
Le, Bao <i>Danang University Economic, Vietnam</i>				
<b>Fossil Fuel Costs and Their Effect On The Australian Electricity Market: Evidence From Russia-Ukraine Conflict</b>				Vicuna, Jhonatan
<b>Qu, Songze</b> <i>The University of Sydney, Australia</i>				
Neill, Kelly <i>The University of Sydney, Australia</i>				
Ancev, Tiho <i>The University of Sydney, Australia</i>				
<b>Natural Events in Peru: A Multidimensional Analysis</b>				Nguyen, Doan Doan Trang
<b>Vicuna, Jhonatan</b> <i>Central Reserve Bank of Peru, Peru</i>				
García, María Fe <i>Paris School of Economics, France</i>				
Castellares, Renzo <i>Central Reserve Bank of Peru, Peru</i>				
12:00	13:30	Lunch Break		1 <sup>st</sup> Floor H Building
<b>End of conference</b>				

# List of Abstracts

Thursday, 12 December 2024

Parallel Sessions B1

## B1.1 (Onsite)

### Climate risks in Banking and Debt

#### Carbon Transition Risk and Corporate Loan Securitization

**Presenting author:** Huyen Nguyen (*Halle Institute for Economic Research And University of Jena*)

**All authors:** Huyen, Nguyen (1), Mueller, Isabella (2), Nguyen, Trang (3)

1 - *Halle Institute for Economic Research and University of Jena (Germany)*, 2 - *Ministry of Finance (Germany)*, 3 - *University of Bristol (United Kingdom)*

#### Abstract

We examine how banks manage carbon transition risk by selling loans given to polluting borrowers to less regulated shadow banks in securitization markets. Exploiting the election of Donald Trump as an exogenous shock that reduces carbon risk, we find that banks' securitization decisions are sensitive to borrowers' carbon footprints. Banks are more likely to securitize brown loans when carbon risk is high but swiftly change to keep these loans on their balance sheets when carbon risk is reduced after Trump's election. Importantly, securitization enables banks to offer lower interest rates to polluting borrowers but does not affect the supply of green loans. Our findings are more pronounced among domestic banks and banks that do not display green lending preferences. We discuss how securitization can weaken the effectiveness of bank climate policies through reducing banks' incentives to price carbon risk.

#### Climate Stress Tests, Bank Lending, and The Transition To The Carbon-Neutral Economy

**Presenting author:** Klaus Schaeck (*University of Bristol*)

**All authors:** Schaeck, Klaus (1), Nguyen, Huyen (2), Nguyen, Trang (1), Fuchs, Larissa (3)

1 - *University of Bristol (United Kingdom)*, 2 - *IWH Halle and FSU Jena (Germany)*, 3 - *University of Cologne (Germany)*

#### Abstract

We ask if bank supervisors' efforts to combat climate change affect banks' lending and their borrowers' transition to the carbon-neutral economy. Combining information from the French supervisory agency's climate pilot exercise with borrowers' emission data, we first show that banks that participate in the exercise increase lending to high-carbon emitters but simultaneously charge higher interest rates. Second, participating banks collect new information about climate risks, and boost lending for green purposes. Third, receiving credit from a participating bank facilitates borrowers' efforts to improve environmental performance. Our findings establish a hitherto undocumented link between banking supervision and the transition to net-zero.

#### Raining on Bonds: The Financing Costs of Extreme Rain on Urban Investment Bonds

**Presenting author:** Yangsiyu Lu (*Hong Kong University of Science And Technology (Guangzhou)*)

**All authors:** Yang, Zhenhuan (1), Lu, Yangsiyu (2) (1)

1 - *Hong Kong University of Science and Technology (Guangzhou) (China)*, 2 - *Assistant professor (China)*

#### Abstract

Extreme weather events, exacerbated by climate change, have had significant impacts on the economy, highlighting the pressing need to address the transmission of physical climate risks to financial markets. In this paper, we assess the impact of extreme rainfall risk on bond spreads by leveraging county-level precipitation and urban investment bonds in China. Our findings suggest that a one-day increase in the frequency of extreme rainfall in the previous year results in an increase of bond spreads by approximately 3 basis points. Notably, while adaptation bonds effectively reduce the adverse impact of extreme rainfall on local financing costs, we find no evidence that extreme rainfall risk influences the issuance behavior of local bonds. Furthermore, interventions by higher-level authorities can mitigate these impacts. This paper contributes to the literature by clarifying how climate risks are integrated into bond market pricing and underscores the importance of adaptive financial instruments in managing physical climate risks.

**Achieving Carbon Neutrality in Emerging Markets: The Dual Impact of Energy Transition investments on Economic Growth and Carbon Emissions (Online Presentation)**

**Presenting author:** Zakaria Boulanouar (*United Arab Emirates University*)

**All authors:** Boulanouar, Zakaria (1) (2), Essid, Lobna (3)

1 - *Department of Economics & Finance, College of Business & Economics, United Arab Emirates University (United Arab Emirates)*, 2 - *National Water and Energy Center, The United Arab Emirates University (United Arab Emirates)*, 3 - *Higher Institute of Biotechnology Beja, University of Jendouba, Tunis (Tunisia)*

**Abstract**

This study investigates the effectiveness of energy transition investments (ETIs) in achieving net-zero emissions. Specifically, it reevaluates the environmental Kuznets curve (EKC) by analysing whether ETIs can simultaneously stimulate economic activity and reduce carbon emissions (CE) using the Autoregressive Distributed Lag (ARDL) model. The analysis focuses on a sample of emerging countries. In contrast to previous research, the study expands the EKC model by incorporating the ETIs variable, which encompasses a broader and more comprehensive range of investments that contribute to climate change mitigation, beyond just renewable energy. Additionally, the study employs total factor productivity (TFP) as a measure of economic activity, instead of GDP, considering the efficiency of technology, energy, and other resources. Key findings indicate that the TFP coefficient is higher in the short term compared to the long-term supporting the validity of the EKC hypothesis. This suggests that emerging countries have reached a TFP level that helps reduce their CE, aiding climate change adaptation and mitigation. The study also reveals a negative effect of ETIs on CE and shows that an increase in TFP significantly enhances ETIs, suggesting that higher TFP levels attract more investment in energy transitions. These findings provide insights for policymakers on the impact of ETIs on CE and aid in formulating effective policies to achieve net-zero emissions.

**Assessing Climate-Induced Salinity Thresholds and Adaptive Responses in Bangladesh's Coastal Ecosystems: A Case Study of Koyra Upazila**

**Presenting author:** Md Nirab Hossain (*Bangladesh Open University*)

**All authors:** Hossain, Md Nirab (1), Akhter, Syeda Shagin (2)

1 - *Department of Applied Mathematics, University of Dhaka (Bangladesh)*, 2 - *Bangladesh Open University (Bangladesh)*

**Abstract**

Coastal zone of Bangladesh, Koyra in the Khulna district, is acutely vulnerable to climate-induced salinity intrusion, posing severe socio-economic and environmental challenges. This study examines the salinity thresholds affecting agricultural productivity of the inhabitants of Koyra and their stability of income, since that region is low-lying and heavily reliant on rice cultivation and aquaculture. Using Structural Equation Modeling (SEM), it has been explored how salinity impacts agricultural productivity, household income, and adaptive capacity. The result shows an inverse relationship between salinity levels and agricultural yields, with households reporting substantial income losses due to reduced productivity. It also implies that many households have used several tactics, two of which were the development of salt-tolerant crops and the diversification of income through shrimp farming. These tactics do have drawbacks, too, especially if aquaculture worsens soil degradation and affects long-term viability. This study underscores the role of government and institutional support in strengthening community resilience. By formulating a resilience framework that emphasizes the need for climate-adaptive agricultural practices, diversifying livelihoods for those communities that are vulnerable, and stronger infrastructure, this study provides actionable insights for policymakers.

## **Climate-Induced Water insecurity in Peri-Urban Spaces: Towards A Political Ecology of Periurban Disasters**

**Presenting author:** Vishal Narain (*Management Development Institute Gurgaon*)

**All authors:** Narain, Vishal (1) (2)

1 - Professor, Management Development Institute (MDI, MG Road, Sukhrali, Sector 17, Gurgaon India), 2 - Management Development Institute Gurgaon (MDI, M.G. Road, Sukhrali, Sector 17, Gurgaon, Haryana, 122007 INDIA India)

### **Abstract**

This paper describes how climate extremes as represented by sudden and heavy spurts of rainfall create conditions for peri-urban flooding in an urbanising village called Rawta located at the peripheries of Delhi, the National Capital of India. It employs a qualitative research design, using an ethnographic approach. The data has been collected mainly through semi-structured interviews, key informant interviews and direct observation of irrigation activities. The paper uses a theoretical framework that draws on a socio-technical approach to water management and a political ecology framework. A socio-technical lens is used to study the technology and institutions that are used to appropriate wastewater in Rawta, while a political ecology lens is used to study how as a peri-urban village Rawta is at the receiving end of urbanisation, receiving the excess storm water and wastewater from the National Capital Region. Located at the banks of Najafgarh drain, a storm water and wastewater drain of the National Capital Region of India, the residents of the village use the wastewater from the drain for purposes of irrigation. In times of sudden and extreme rainfall, however, the drain overflows and floods into the fields of the Rawta village. This causes harm to the agricultural crops. About 200 acres of the village's agricultural land has become permanently inundated for the last 20 years, and has been rendered unfit for cultivation. The chapter describes the differential vulnerability of the residents of the village to peri-urban flooding; their vulnerability being shaped by the location of the fields as well as the tenurial and land ownership status. It further documents their adaptive responses. The paper describes how the peri-urban character of the village makes it prone to the effects of flooding. The chapter concludes with some identification of possible solutions to the peri-urban flooding of Rawta village.

## **Vision for Indonesia's 2050 Power Generation: Scenarios of Hydrogen integration, Nuclear Energy Prospects, and Coal Phase-Out Impact**

**Presenting author:** Dzikri Firmansyah Hakam (*Institut Teknologi Bandung*)

**All authors:** Hakam, Dzikri Firmansyah (1), Kemala, Prodia Nur, Wijayanto, Tito

1 - School of Business and Management (SBM) ITB (Indonesia)

### **Abstract**

Indonesia's energy sector faces critical challenges due to its heavy reliance on coal as the dominant power source, which contributes to environmental degradation and rising CO<sub>2</sub> emissions, resulting into transition needs for renewable energy. In addition to these, hydrogen energy also shows great potential for Indonesia's energy needs. However, to date there are no extensive research in Indonesia that simulate the effect of hydrogen incorporation and coal phase-out policy for 2050 power generation system, making this research a critical contribution to the exploration of Indonesia's energy landscape. This study utilizes the Low Emissions Analysis Platform (LEAP). There are four simulated power generation scenarios in this study: the business-as-usual (BAU) scenario, the hydrogen incorporation (HYD) scenario, the coal phase-out (CPO) scenario and the progressive (PRO) scenario. The parameter and characteristics of each power plant are differing from one another. The analysis indicates that the BAU scenario emerges as the most cost-effective approach for meeting Indonesia's future electricity demand. Unfortunately, due to coal phase-out policy, the CPO scenario is shown to be more viable from cost perspective. On the contrary, The HYD scenario largely aligns Indonesia's hydrogen target, potentially contributing 1-5% of energy demand and reducing coal reliance. Additionally, the PRO scenario highlights the necessity to conduct further research into nuclear power, as it offers a high output-to-capacity ratio despite high investment costs. The result suggests the necessity to construct feasibility analysis to understand the broader impacts of renewable energy development.



### **Bank Credit Risk, Greenwashing and ESG Reputation**

**Presenting author:** Mengya Wu (*Newcastle University*)

**All authors:** Papanikolaou, Nikolaos (1), Wu, Mengya (1)

1 - *Newcastle University (United Kingdom)*

#### **Abstract**

The concept of green banking has gained global prominence, reflecting the strategic integration of environmental practices into traditional banking models in response to climate change. However, there is evidence that banks have been lately engaged in making green-related statements, which do not reflect their sustainability profile, a practice that has been widely known as greenwashing. We use an international sample of banks to shed light on the relationship between bank credit risk, greenwashing, and ESG reputation. Our results reveal that the banks which are engaged in greenwashing suffer from higher levels of credit risk. ESG reputation is found to mitigate the impact of greenwashing and credit risk. Although improved ESG reputation can attract borrowers and investors of higher creditworthiness, the adverse impact of greenwashing on the credit risk profile of banks remains unchanged.

### **Crosswashing in Sustainable investing: Unveiling Strategic Practices Impacting ESG Scores**

**Presenting author:** Bertrand Hassani (*Université Paris 1 Panthéon-Sorbonne*)

**All authors:** Hassani, Bertrand (1) (2), Bahini, Yacoub (3)

1 - *Université Paris 1 Panthéon Sorbonne (France)*, 2 - *QUANT AI Lab (United Kingdom)*, 3 - *QUANT AI Lab, C. de Arturo Soria, 122, 28043 Madrid (Spain)*

#### **Abstract**

This paper introduces and defines a novel concept in sustainable investing, termed crosswashing, and explore its impact on ESG (Environmental, Social, and Governance) ratings through quantitative analysis using a Multi-Criteria Decision Making (MCDM) model. The study emphasises that this specific form of greenwashing is not currently considered in existing ESG assessments, potentially leading to an inflated perception of corporate ethical practices. Unlike traditional greenwashing, crosswashing involves companies strategically investing in sustainable activities to boost Environmental, Social, and Governance (ESG) scores while preserving non-sustainable core operations. By unveiling the nuances of crosswashing, the research contributes to a more nuanced understanding of sustainable investing, offering insights for improved evaluation and regulation of corporate environmental and ethical responsibilities.

### **To Woke or Not: Corporate Woke Engagement and Financial Outcomes**

**Presenting author:** Khanh Hoang (*Lincoln University*)

**All authors:** Hoang, Khanh (1), Peltomski, Jarkko (2), Nguyen, Cuong (1), Zhang, Yuqian (1)

1 - *Lincoln University (New Zealand)*, 2 - *Stockholm University (Sweden)*

#### **Abstract**

This paper develops a novel approach to capture corporate woke engagement (CWE) of public firms in the United States (US) by measuring their disclosure in 10-K filings from 2008 to 2023. CWE disclosure shows a sharp increase beginning in 2020 and is more prevalent among firms that emphasize integrity, respect, teamwork and innovation as cultural values. Firms with high frequency of CWE disclosure is associated with an immediate boost in labor investment efficiency, however, that association diminishes after one year. Empirical evidence on an inverted U-shaped relationship between CWE disclosure and Tobin's Q and a return premium for non-CWE stocks highlight that excessive woke engagement disclosure is detrimental to firm value. Additional analysis reveals that the abnormal returns of CWE stocks manifest during the Republican presidency and disappear during Democrat presidencies. Our findings underline the growing significance of CWE in contemporary corporate America.

## R&D organizational Structure and The Interaction Between Mandatory and Cooperative ECSR

**Presenting author:** Doori Kim (*Chonnam National University*)

**All authors:** Kim, Doori (1), Lee, Sangho (1)

1 - *Department of Economics, Chonnam National University, Gwangju, Republic of Korea (South Korea)*

### Abstract

This study examines the complex relationship between emission taxes, mandatory Environmental Corporate Social Responsibility (ECSR) guidelines, and firms' environmental R&D (ER&D) organizational structures. Focusing on cooperative and non-cooperative ECSR efforts, we explore how varying levels of ECSR guidelines and ER&D efficiency influence corporate profitability and social welfare. We analyze three distinct organizational structures: ER&D competition, ERJV competition, and ERJV cartelization. Our findings reveal that when mandatory ECSR guidelines are low, firms engage in voluntary cooperative ECSR efforts, particularly under ERJV competition, where profits are maximized if ER&D efficiency is high. As ER&D efficiency decreases, firms gravitate toward ER&D competition to minimize costs, resulting in higher profits but increased emissions and lower social welfare. Stricter ECSR guidelines incentivize firms to adopt ERJV cartelization, enabling compliance through non-cooperative efforts without exceeding regulatory standards. From a social planner's perspective, ERJV cartelization yields the highest social welfare, especially when ER&D efficiency is moderate. Policymakers should adjust ECSR guidelines in line with industry-specific ER&D efficiencies, promoting ERJV cartelization in high-efficiency sectors while considering targeted subsidies or incentives for industries with lower R&D efficiency. This study highlights the role of emission taxes and ECSR guidelines as tools for achieving socially desirable ER&D structures, balancing environmental sustainability with economic performance.

## B1.4 (Online)

### Finance for Energy and Climate Transition

## Asymmetric Spillover in Clean Energy Financial Markets: The Role of Geopolitical and Climate Risk

**Presenting author:** Wafid Sophian (*Universiti Brunei Darussalam*)

**All authors:** Sophian, Wafid, Premaratne, Gamini (1)

1 - *Universiti Brunei Darussalam (Brunei)*

### Abstract

This paper aims to understand the effect of Spillover Asymmetry on realized prices within the context of NASDAQ Sectoral Energy ETFs and S&P Global Green Energy Index. TVP-DY Connectedness method (Antonakakis et al., 2020) and BK framework (Barunik et al., 2016) is adopted to account for differences in spillover dynamics between volatilities in of positive and negative returns. Significance of spillover asymmetry is assessed using Maximum Entropy Bootstrap method (Vinod and Lopez-de-Lacalle, 2004) and to calculate its 95% confidence intervals. The binary regression is employed to examine the relationship between ADSAM-FROM with price direction of assets. The evidence shows there is a inverse relationship of price direction of some assets. Further, the results also suggests that climate physical risk, climate transitional risk, and geopolitical risk has a heterogenous effect on ADSAM-FROM. These results provides important empirical insights for investors to manage risk of clean energy portfolios during increasing occurrence of realized climate change events and geopolitical conflicts.

## Economic and Statistical insights into Dependence and Hedging Dynamics

**Presenting author:** Heni Boubaker (*IPAG*)

**All authors:** Heni, Boubaker (1), Ben Saad Zorgati, Mouna

1 - *IPAG Business School, IPAG LAB, 184 Boulevard Saint-Germain (France)*

### Abstract

In this study, we analyze the multivariate dependence between crude oil, gold, the USD/EUR exchange rate, and the domestic inflation level in the United States. We utilize the vine copula methodology. The aim is to assess whether gold remains regarded as a hedge and/or a safe haven against variations in crude oil prices, the USD/EUR exchange rate, and the domestic inflation level. Empirical findings indicate that, on one hand, inflation exerts a positive influence on West Texas Intermediate and gold, while exerting a negative effect on the dollar exchange rate. Regarding dependence, inflation positively impacts both the West Texas Intermediate- USD/EYUR and gold-oil dependence. These findings support the notion that gold acts as a limited hedge and a safe haven against variations in oil prices, exchange rates, and inflation.

## **The Effect of Energy Taxes and Green innovation on Renewable and Non-Renewable Energy Consumption**

**Presenting author:** Marc Kouzez (*ICN Business School- Cerefige Université De Lorraine*)

**All authors:** Hassan, Mahmoud (1), Lee, Ji-Yong (2), Kouzez, Marc (3)

1 - *Bordeaux School of Economics (France)*, 2 - *Audencia Business School (France)*, 3 - *ICN Business School (France)*

### **Abstract**

In today's world, the transition from fossil fuel consumption to renewable energy is one of the main challenges to achieving carbon neutrality. Energy taxes (ET) and green innovation (GI) are the main tools used for this purpose. This paper investigates the effect of these instruments on renewable and non-renewable energy consumption in OECD countries by using data from 1994 to 2019 and modern panel data techniques. The results of the two-step system-GMM estimator show that energy taxes and green innovation have a negative impact on fossil fuels, and a positive effect on renewables, while the dynamic approach demonstrates that investment in renewables is based on the past fiscal energy policy. Further, we applied dynamic CRE and FE with Driscoll-Kraay standard error estimators to obtain robustness results and observed that the findings remained valid. On the other hand, the results of panel Granger non-causality test highlight a unidirectional causality from energy taxes to renewable and non-renewable energy consumption. At the same time, the findings show a bidirectional causal relationship between GI and renewable energy consumption, and between GI and non-renewable energy consumption. Consequently, this research provides significant guidance to policymakers by demonstrating that energy taxes and green innovation are effective instruments to help shift from fossil fuel consumption to renewable energy.

## **Valuing offshore Natural Gas Development Plan Through Real Options: Case Study of Indonesia**

**Presenting author:** Prodia Nur Kemala (*Husky-Cnooc Madura Limited*)

**All authors:** Kemala, Prodia Nur (1) (2)

1 - *Dzikri Firmansyah Hakam (Indonesia)*, 2 - *Risa Saraswani (Indonesia)*

### **Abstract**

Over a decade, more than 50% discoveries in Indonesia is dominated by natural gas. In replacing more polluting fossil fuel, natural gas plays an important role as bridge to low carbon future during energy transition. Despite government set ambitious target to achieve 12 BCFD gas production by 2030, natural gas lifting realization only 6 BCFD by 2023. This research aim to value an offshore natural gas development plan of major oil and gas Production Sharing Contract (PSC) in Indonesia as one of national gas supply backbone. Given that domestic gas market is highly regulated and influenced by policy, uncertainties will continue to exist. In this circumstance, using Discounted Cash Flow (DCF) method is not adequate to value natural gas development given static and single point input with no volatility and uncertainty estimated. Hence, this research use the extension of DCF method, namely Real Options Valuation (ROV) with sequential compound options for multiple phase model. This research proved that ROV deliver higher investment valuation compared to DCF method due to the presence of option value which closely related to managerial flexibility and strategic options. We argue that despite ROV offers a substantial and helpful point of view on scenarios selection, ROV analysis solely is not sufficient. This research is the first research of ROV application using in the Final Investment Decisions (FID), which identify the interrelationship among three dependent variables e.g. volatility factor, gas price and Take or Pay (TOP) volume. This research analyzes the combined impact of these key variables during robustness check and advanced sensitivity analysis to validate and evaluate the stability of best development scenario selected to any changes in key variables. By understanding the degree to which different gas price and TOP structures affect the project valuation, more favorable terms that aligned with project sanction could be secured during gas sales negotiation with gas buyers. This research shows that the best scenario could fall to second or third ranking under two conditions: (1) both volatility and implementation cost increase; and (2) volatility increase while gas price and TOP decrease. This research features an insight for stakeholders in energy sector in valuating investment using ROV decision framework for Indonesia case study.

## Parallel Sessions B2

### B2.1 (Onsite)

#### Corporate and Consumer Behavior toward Environmental Sustainability

##### **Drivers of Consumer Willingness to Support Carbon offsetting: The Role of Perceived information, Values, and Skepticism in Grab's Carbon Neutral Program**

**Presenting author:** Bao Truong-Dinh (*University of Economics, The University of Danang*)

**All authors:** Truong-Dinh, Bao Quoc (1)

1 - *University of Economics, The University of Danang (Vietnam)*

##### **Abstract**

In response to climate change, carbon offsetting has emerged as a viable strategy, yet research exploring the consumer behaviors driving these initiatives remains limited, especially in developing markets. This study investigates consumer willingness to engage in carbon offsetting within the context of Grab's carbon-neutral program, using a framework based on Signaling Theory and Value Theory. Our findings reveal that perceived information availability and personal values positively influence brand credibility and self-brand connection, ultimately fostering a higher willingness to pay for voluntary carbon offsets. This research not only expands empirical insights into carbon offsetting in developing economies but also provides actionable strategies for businesses, like Grab, to enhance consumer engagement in sustainability initiatives through targeted marketing.

##### **Impacts of Eco-Label, Green Advertising, and Green Attitude on Consumer Green Purchasing Behavior: An Empirical Study in Vietnamese Context**

**Presenting author:** Nhan Tran-Danh (*Faculty of E-Commerce, University of Economics – The University of Danang*)

**All authors:** Tran-Danh, Nhan (1), Tran-Thi-Phuong, Ha (2), Dinh-Thi, Thi (3)

1 - *Faculty of E-Commerce, University of Economics, The University of Danang, Danang 59000, Vietnam (Vietnam)*, 2 - *Faculty of Marketing, University of Economics, The University of Danang, Danang 59000, Vietnam (Vietnam)*, 3 - *Faculty of Tourism, Danang Architecture University, Danang 59000, Vietnam (Vietnam)*

##### **Abstract**

Environmental issues and its adverse impact on human health have become an important issue among scholars, governments and organizations. This study aimed to investigating the impacts of eco-label, green advertising, and green attitude along with other factors in building consumer green purchasing behavior. The research framework was empirically tested using 258 responses conducted in Vietnamese consumers. The research results confirmed that eco-label and green attitude have significant effect on consumer green purchasing behavior. However, in Vietnamese context, green advertising had not demonstrated its impact on consumer green purchasing behavior.

##### **The Impact of Corporate Social Responsibility and Co-Creation on Customer Satisfaction, Customer Commitment and Customer Loyalty: An Empirical Study in Vietnamese Context**

**Presenting author:** Ha Tran-Thi-Phuong (*Faculty of Marketing, University of Economics – The University of Danang*)

**All authors:** Tran-Thi-Phuong, Ha (1), Tran-Danh, Nhan (2), Dinh-Thi, Thi (3)

1 - *Faculty of Marketing, University of Economics, The University of Danang, Danang 59000, Vietnam (Vietnam)*, 2 - *Faculty of E-Commerce, University of Economics, The University of Danang, Danang 59000, Vietnam (Vietnam)*, 3 - *Faculty of Tourism, Danang Architecture University, Danang 59000, Vietnam (Vietnam)*

##### **Abstract**

This study investigates the role of corporate social responsibility (CSR) and co-creation in shaping customer satisfaction, commitment, and loyalty within the consumer market. Despite substantial investment in CSR activities, businesses often struggle to effectively leverage these initiatives to enhance consumer perceptions. Using a sample of 254 responses from Vietnamese consumers, this research empirically examines a framework where CSR and co-creation impact customer loyalty, mediated by customer trust, perceived value, commitment, and satisfaction. Findings confirm that CSR and co-creation significantly influence customer loyalty, underscoring the importance of trust and perceived value in strengthening customer relationships.

**Cooperative and Non-Cooperative Commitment on Emission Target Under Environmental Regulations: Emission Tax vs. Abatement Subsidy**

**Presenting author:** Chul-Hi Park (*Gwangju National University of Education*)

**All authors:** Park, Chul-Hi (1), Lee, Sangho (2)

1 - *Gwangju National University of Education (South Korea)*, 2 - *Chonnam National University (South Korea)*

**Abstract**

In this article, we formulate a vertically related market structure where polluting duopoly firms produce final goods but lessen emissions by purchasing abatement goods which are supplied by an eco-monopoly under environmental regulations. We compare two regulatory instruments between emission tax and abatement subsidy and investigate the effects of cooperative and non-cooperative commitments on emission target. When the government selects the emission tax, the profit of polluting duopoly under the cooperative commitment is lower (higher) than that under the non-cooperative commitment when there is more (less) serious environmental damage. When the government selects the abatement subsidy, the profit of polluting duopoly under the cooperative commitment is higher (lower) than that under the non-cooperative commitment except (within) the medium efficiency of abatement good production. We also show that with either or both less serious damage level or efficient abatement good production, the government selects abatement subsidy policy and polluting duopoly commits to emission target cooperatively (non-cooperatively) except (within) the medium level of damage or efficiency. With this medium level of damage and efficiency, government selects abatement subsidy to induce the welfare improving non-cooperative commitment on emission target. With more serious damage and inefficient production of abatement goods, the government selects emission tax policy and polluting duopoly commits non-cooperatively unless the damage level is low and the efficiency of abatement technology is sufficiently low. With less serious damage and inefficient abatement good production, government selects emission tax to induce the welfare improving cooperative commitment on emission target.

**Does Regional Digital inclusive Finance Enhance SME ESG Performance? Insights From China**

**Presenting author:** Tianle Yang (*Zhejiang University of Technology*)

**All authors:** Yang, Tianle (1), Pan, Wenjun, Du, Qunyang

1 - *Zhejiang University of Technology (China)*

**Abstract**

This study investigates the impact of regional digital inclusive finance on the ESG performance of SMEs listed on the Chinese stock market from 2011 to 2022. Our analysis demonstrates that the development level of regional digital inclusive finance significantly enhances SMEs' ESG performance by mitigating financing constraints and promoting technological innovation, with public environmental concern serving as a positive moderator. The heterogeneity analysis indicates that these beneficial effects are more pronounced among SMEs located in Eastern regions, those with higher technological capabilities, stricter financial regulations, and more competitive markets. The findings underscore the role of digital inclusive finance in enabling corporations to meet their ESG obligations, offering both theoretical and practical insights for fostering collaboration among financial institutions, government bodies, and corporate entities to advance sustainable development.

**Pastures Green: Corporate investments in Green Skills and Toxic Plant Emissions**

**Presenting author:** Duc Duy Louis Nguyen (*Durham University*)

**All authors:** Hagendorff, Jens, Nguyen, Duc Duy (Louis) (1), Sila, Vathunyoo (2)

1 - *Durham University (United Kingdom)*, 2 - *University of Edinburgh (United Kingdom)*

**Abstract**

Using job posting data between 2010 and 2020, we document steady increases in corporate demand for employees with green skills. Demand for green skills exhibits substantial firm-level variation and is especially pronounced among firms with higher climate change exposures. Moreover, we offer micro-level evidence that increased demand for green skills is associated with subsequent reductions in toxic chemical emissions, especially those that are harmful to humans. Further analyses show that reductions in toxic emissions are observed when firms direct investments in green skills towards the plant level rather than the headquarters level. Overall, our findings shed new light on corporate risk management processes that are difficult to observe.

## **The Role of Green Organizational Culture in Driving Competitive Advantage Through Green innovation: A Systematic Review in Textile and Apparel industry ? (Online Presentation)**

**Presenting author:** Huong-Quynh Nguyen Le (*University of Economics - The University of Danang*)

**All authors:** Le, Nguyen Huong Quynh (1); Ngo, Tan Nhi (1); Nguyen, Trung Son (1); Nguyen, Son Tung (1)  
1 - *University of Economics, The University of Danang (Vietnam)*

### **Abstract**

Amidst global pressures for sustainable development and climate change mitigation, this study assesses the role of green organizational culture in enhancing competitive advantage among Vietnamese textile and apparel firms through green innovation as a mediating factor. By employing a systematic literature review, key elements for building and sustaining a green organizational culture were identified, alongside aspects of green innovation, including product and process innovation. The findings reveal that green organizational culture not only aids companies in adhering to international environmental standards but also fosters green innovation initiatives that optimize production efficiency and minimize environmental impact. Through a proposed theoretical model, this study provides practical insights for textile firms in enhancing competitiveness in international markets and meeting increasingly stringent sustainability requirements.

## **B2.3 (Onsite)**

### **Geopolitical Risk and Energy Security**

#### **Geopolitical Risk and Green Total Factor Energy Efficiency: A Cross-Country Analysis**

**Presenting author:** Ziang Qiu (*University of Macau*)

**All authors:** Qiu, Ziang (1), Zhang, Yang (1)  
1 - *University of Macau (Macau SAR China)*

### **Abstract**

Geopolitical risks (GPR) always exert a profoundly negative impact on global energy supply and energy security, which may also influence the environment. In this paper, we construct green total factor energy efficiency (GTREE) index using EBM-GML model and investigate the impact of geopolitical risk on green total factor energy efficiency (GTREE) of 43 countries from 1998 to 2022 based on instrumental variable quantile regression model. Furthermore, to analyze the heterogeneity of the impact by different types of geopolitical events, this paper uses Regression Discontinuity Design (RDD) to simulate a quasi-natural experiment. The findings indicate that GPR has an overall positive impact on the GTREE, and the positive impact can be stronger and stronger with the quantiles of GTREE's conditional distribution increasing. Further analysis shows that this positive impact is stronger in developing countries than in developed countries. And military conflict, international tension and Public Health Emergency of International Concern (PHEIC) can lead to the increase of GTREE, while terrorist attacks have no significant impact. These findings can provide empirical reference for governments to make rational use of energy and enhance their ability to respond to geopolitical risks.

#### **The Effects of Energy Consumption, Energy Security, Geopolitical Risk, and COVID-19 on Climate-Policy Risk Exposure: Evidence From China**

**Presenting author:** Tuan Chu (*RMIT University Vietnam*)

**All authors:** Chu, Tuan (1) (2), Pham, Quyen (3), Pham, Huy (2), Le, Hanh (2), Chung, Chune Young (4)  
1 - *RMIT VN (Vietnam)*, 2 - *RMIT University Vietnam (Vietnam)*, 3 - *Western Sydney University (Vietnam)*, 4 - *Chung-Ang University (South Korea)*

### **Abstract**

This study examines the impact of energy consumption on climate-policy risk exposure (CPRE) using a sample of 5,270 listed firms from 2000 to 2022 in China. We first generate the CPRE for every firm in our sample using the Fama, French five-factor model and climate-policy uncertainty index. Then, we use the generalized method of moments and generalized linear mixed model to test the impact of energy consumption on CPRE. Our results show a U-shaped relationship between energy consumption and CPRE, which persists in large-cap firms but reverses in small firms. Furthermore, firms with high energy intensity also experience this U-shaped pattern between energy consumption and CPRE. We also find that the energy security crisis, Russia-Ukraine war, and COVID-19 pandemic significantly increased CPRE in China due to strict lockdowns, high energy prices, and greater reliance on energy imports. However, firms with higher energy consumption exhibit less severe negative impacts on CPRE thanks to greater energy efficiency and effectiveness. Finally, we find that a higher renewable energy ratio increases CPRE in energy-intensive firms in the industrial, basic materials, and utilities sectors. Our findings offer valuable insights for firms, investors, and policymakers in the design of targeted regulations that account for firm-specific and sector-specific characteristics to ensure that firms in different segments and industries can effectively manage their CPRE.

## The Impact of Technological innovation and Geopolitical Risk on Energy Security: insights From A Cross-National Study

**Presenting author:** Thuy Dao (*IPAG Business School*)

**All authors:** Dao, Thuy (1), Awijen, Haithem (2)

1 - *IPAG Business School (France)*, 2 - *INSSEC Business School (France)*

### Abstract

The paper explores the complex relationship between technological advancements, geopolitical uncertainties, and energy security across different nations. Utilizing a cross-national dataset, it assesses how technological innovation contributes to energy diversification and infrastructure resilience, thereby enhancing energy security. Conversely, it examines the role of geopolitical risks, such as regional conflicts and trade disruptions, in creating vulnerabilities within energy systems. Through econometric modelling, the study identifies a non-linear, U-shaped relationship between geopolitical risk and energy security, showing that while initial increases in risk reduce energy security, they can also spur innovation, ultimately contributing to resilience. Key metrics like the Herfindahl-Hirschman Index (HHI) adjusted for political risk offer insight into the influence of diversified energy sources and political stability on national energy security. The findings suggest that balancing technological investment with geopolitical risk management is crucial for sustainable energy strategies globally.

## B2.4 (Online)

### Consumer Behavior, Corporate Reporting, and Policy Effectiveness

## Can Media Campaign Shift Consumers' Taste for Meat? A Revealed Preferences Approach

**Presenting author:** Israel Finkelshtain (*Hebrew University*)

**All authors:** Finkelshtain, Israel (1) (2)

1 - *The Hebrew University of Jerusalem (Israel)*, 2 - *The Hebrew University of Jerusalem (Israel)*

### Abstract

On October 26th, 2015, the Cancer Agency of the World Health Organization (WHO) issued a dramatic announcement, according to which processed meat products were classified as carcinogenic to humans, taking place alongside stigmatized substances proven to be carcinogenic, such as smoking tobacco, arsenic and asbestos (group 1) and red meats were classified as probably carcinogenic to humans (group 2A). The experts concluded that each 50 gram portion of processed meat eaten daily increases the risk of colorectal cancer (CRC) by 18%. Governments and international regulatory agencies were advised to conduct risk assessments, to balance the risks and benefits of meat intake. In the weeks that followed, mass media channels spread out the warning as they echo the message to the public worldwide. In this paper, we employ a novel revealed preferences approach and the WHO natural experiment to examine whether media campaign can shift consumers' Taste for Mea. We find that the WHO announcement led to a persistent reduction in of about 30% of the equilibrium consumption quantities of processed meat. In addition, we confirm the hypothesis that this shift in processed meat consumption resulted from an economically meaningful and sustained change in consumer tastes. Our analysis does not rely on estimating a parametric demand system; instead, we employ a revealed preferences-based approach.

## Changes in Sustainability Reporting Dynamics Observed From Esg Measures Provided By Real Estate Companies in 2020 and 2021: Evidence From Germany, Austria and Switzerland

**Presenting author:** Dominika Galkiewicz (*Fachhochschule Kufstein Tirol Bildungs Gmbh*)

**All authors:** Galkiewicz, Dominika (1), Wollmann, Bernd (1)

1 - *University of Applied Sciences Kufstein (UASK) (Austria)*

### Abstract

Environment, Social and Governance (ESG) related regulations such as the Non-Financial Reporting Directive (NFRD) or the upcoming Taxonomy Regulation of the European Union (EU) had and will have a lasting impact on the real estate (RE) industry and other market participants. This study, therefore, compares the current European regulation with common sustainability reporting practices in the RE industry in Germany, Austria, and Switzerland. The aim is to investigate what type of information related to employees, social, and governance besides environmental issues is being regularly provided and by how many of the 55 largest RE firms in the years 2020 and 2021. In general, most of the measures are only reported by 20-40% of the firms on a mandatory or/and voluntary basis. The majority of the sustainability measures is more often reported in 2021 than in 2020. Irrespective of the positive development, however, there is still a lot of room for improving reporting quality to increase reader usability as small reporting frequencies are identifiable for the following

ESG measures: violations of the code of conduct (mentioned by 1 time in 2020 and 2 firms in 2021), safety inspections of buildings (5 in 2020 and 8 in 2021), total number of suppliers (4 in 2020 and 6 in 2021), share of expenses for local suppliers in % (2 in 2020 and 3 in 2021), and obtained well-being certificates (5 in 2020 and 4 in 2021), energy consumption BOP MWh (6 in 2020 and 4 in 2021), emissions intensity of BOP kg CO<sub>2e</sub>/m<sup>2</sup> (8 in 2020 and 7 in 2021) and Scope 3 ↑ CO<sub>2e</sub> (7 in 2020 and 11 in 2021). The provided evidence highlights that it is key for individuals, organizations, and politicians introducing new sustainability reporting rules in Europe to understand that too complex rules may not be fully complied with and keep uniform EU taxonomy reporting requirements besides CSRD easy to apply in the future.

### **Do The ESG Factors Truly Enhance The Financial Market's Performance in The Era of Geopolitical Conflict and Uncertainty?**

**Presenting author:** Anh Tran Nguyen Tram (*Van Lang University*)

**All authors:** Nguyen, Duc (1), Nguyen, Huu Huan (1), Tran, Nguyen Tram Anh (2), Nguyen, Ha Minh Tam (1), Nasir, Muhammad Ali (3)

1 - School of Banking, University of Economics Ho Chi Minh City (UEH), Vietnam (Vietnam), 2 - VanLang University (Vietnam), 3 - University of Leeds / University of Cambridge, United Kingdom (United Kingdom)

#### **Abstract**

In the context of global uncertainty fuelled by the Russia-Ukraine war and COVID-19, this study employs a difference-in-differences approach to examine stock market performance, specifically abnormal returns and stock volatility, among publicly listed companies in 44 countries. The empirical findings indicate that within a period devoid of substantial disruptions (2016-2019), there was no substantial distinction in abnormal returns between companies with high Environmental, Social, and Governance (ESG) ratings and those with low ESG ratings. Furthermore, the trajectory of abnormal returns and stock volatility did not differ significantly between these two groups of companies. However, throughout the uncertain period (2020-2022), companies with high ESG ratings displayed notably higher abnormal returns, lower risk, and faster recovery following each shock in comparison to companies with low ESG ratings. The research outcomes emphasize the urgency of implementing and strengthening ESG practices in business operations, as well as encouraging sustainable and responsible investment.

### **The Impact of Economic Uncertainty on Corporate ESG Performance**

**Presenting author:** Geyao Zhang (*University Of Leeds*)

**All authors:** Zhang, Geyao (1)

1 - University of Leeds (United Kingdom)

#### **Abstract**

Economic uncertainty has become a prominent and widely discussed concept in recent years, exerting significant influence on corporate decisions and the overall corporate performance. In this paper, we employ panel data of 8,664 global listed firms from 2002 to 2021 and examine the impact of economic uncertainty on corporate ESG performance. Furthermore, we investigate the moderating effects of factors such as media freedom, national development level, and industry characteristics on the relationship between WUI and ESG. Using firm fixed effects and industry-year fixed effects, the paper finds a significant positive relationship between economic uncertainty and corporate ESG performance. The results suggest that, in response to heightened economic uncertainty, firms tend to send positive signals by boosting their ESG performance. Heterogeneity analysis shows that the positive impact of economic uncertainty on corporate ESG performance is more significant for firms in consumer-facing and low-pollution industries. Additionally, the highly uncertain economic environment has had a significant positive impact on the ESG performance of firms in countries with lower media freedom and upper-middle income levels. Our research provides evidence for understanding the impact of economic uncertainty on ESG performance and has made breakthroughs in explaining the motivation behind using uncertainty to enhance ESG performance.



### A2.1 (Onsite)

#### Risk Management in Financial and Environmental Contexts

##### Charging Up on Lithium: The Metal or The Miner?

**Presenting author:** Dirk Baur (UWA)

**All authors:** Baur, Dirk (1)

1 - UWA Business School (Australia)

##### Abstract

Until the recent introduction of lithium futures, there was no direct way to invest in the lithium commodity itself. We find that an indirect way to invest via a portfolio of lithium miners provides full exposure to lithium price movements. However, the miner portfolio has higher average returns and volatility than the commodity, reflecting the systematic and industry-specific risks of lithium mining. In addition, miner returns lead lithium returns implying that lithium trades at lagged prices in the physical market with negative welfare consequences.

##### Public climate attention and European electricity prices systemic risk

**Presenting author:** Michal Wodjewoodzki (Lingnan University)

**All authors:** Dai, Xingyu (1), Wojewodzki, Michal (2), Lau, Chi Keung Marco (3), Wang, Qunwei (1)

1 - College of Economics and Management and Research Center for Soft Energy Science, Nanjing University of Aeronautics and Astronautics, China; 2 - Department of Finance, Faculty of Business, Lingnan University, Hong Kong; 3 - Teesside University, United Kingdom

##### Abstract

This paper uses 1125 Google Trends keywords to construct six categories of European public climate attention (PCA) indices and reveals their impact on European electricity market (EUEM) prices systemic risk. The results shows that the impact of all PCA indices on the Iberian market has the shortest duration, while its effect on the Nordic market lasts the longest. Climate risk opportunity attention is an important factor in maintaining EUEM returns co-movement. PCA levels change increase the activity of extreme high electricity price spillover among EUEM. This paper also reveals the benefits of PCA information in optimizing hedging strategies.

##### The inevitable Role of The Oil Market: Does Its Price Really Matter for Green investment?

**Presenting author:** Meng Qin (West University of Timisoara)

**All authors:** Qin, Meng (1), Su, Chi-Wei (2), Lobont, Oana-Ramona (3), Moldovan, Nicoleta Claudia (4)

1 - Doctoral School of Economics and Business Administration, West University of Timisoara (Romania), 2 - Faculty of Economics and Business Administration, West University of Timisoara (Romania), 3 - West University of Timisoara, Faculty of Economics and Business Administration, Finance, Business Information Systems and Modelling Department (Romania), 4 - Finance, Business Information Systems and Modelling Department, Faculty of Economics and Business Administration, West University of Timisoara (Romania)

##### Abstract

Delving into the intricate roles of oil prices holds the key to attaining sustainable growth of green investment. Utilising the full- and sub-sample approaches, this article aims to reveal the dynamically evolving relationships between oil price (OP) and forest investment (FI). The quantitative outcomes underscore the complex interplay between OP and FI, highlighting both favourable and unfavourable impacts. Notably, the findings indicate that a substantial surge in oil prices could potentially pose obstacles to forestry investment, whereas a decline in OP could serve as a stimulus. Nevertheless, it is imperative to acknowledge that this inference is not uniformly applicable when the effect turns positive, primarily influenced by sluggish economic conditions resulting from the global trade wars. Conversely, FI positively influences OP, underscoring that the decline in forestry investment could drive down oil prices through psychological and environmental factors. In the midst of escalating economic and energy uncertainties across the globe, essential policy suggestions will be proffered to certain regions, aiming to ensure the robust development of the oil market and green investment.

### Accounting and Renewable Energy Sector: Global Evidence

**Presenting author:** Anup Chowdhury (*Leeds University Business School*)

**All authors:** Uddin, Moshfique (1) (2), Chowdhury, Anup (3), Anderson, Keith (4)

1 - *University of Leeds (Woodhouse Lane ; Leeds ; LS2 9JT United Kingdom)*, 2 - *University of Leeds (United Kingdom)*, 3 - *Leeds Beckett University (United Kingdom)*, 4 - *University of York (United Kingdom)*

#### Abstract

This paper examines the impact of firm-level accounting practice on the performance and growth of the renewable energy sector. Using data from 33 countries, this paper finds that accounting practice significantly influences firm-level performance in the RE sector. An RE firm could improve its Tobin's Q ratio by following a consolidating approach when reporting their long-term investment. Similarly, the Q ratio increases with auditors' opinions and the publishing of a separate sustainability/CSR/H&S report. However, the reporting standards, such as IFRS and GAPP, are adversely related to a RE's performance. Instead, the Q ratio is positively linked with an RE firm that follows local or other accounting standards. In addition, country-level governance quality significantly moderates the effect of auditors' opinions on Tobin's Q in the RE sector and country's legal system plays a vital role in the RE firm's accounting standards and reporting practice of their long-term investment.

### Producing AI innovation and Its Value Implications

**Presenting author:** Ambrus Kecskes (*School of Administrative Studies at York University*)

**All authors:** Ahmadi, Ali (1), Kecskes, Ambrus (1), Michaely, Roni (2), Nguyen, Phuong-Anh (3)

1 - *Schulich School of Business at York University (Canada)*, 2 - *University of Hong Kong Faculty of Business and Economics and ECGI (Hong Kong SAR China)*, 3 - *School of Administrative Studies at York University (Canada)*

#### Abstract

We document that artificial intelligence is a significant and growing share of innovation produced during the past three decades, and is diffuse across industries. We then study publicly traded firms, finding that firms direct their production of innovation toward AI, motivated by their own, and their customers', labor's exposure to AI technology. We interact exogenously measured innovation capacity and AI exposure to instrument actual AI production. Our central findings are that producing AI increases a firm's future stock returns, with risk decreasing durably and profitability increasing transitorily. The results suggest that AI production increases firm value.

### Impact of Green Trade, Technological innovation and Renewable Energy on India's Ecological Footprint

**Presenting author:** Priyanshu Chavda (*School of Liberal Studies, Pandit Deendayal Energy University*)

**All authors:** Chavda, Priyanshu (1), Mehta, Dhyan (1)

1 - *Pandit Deendayal Energy University (India)*

#### Abstract

Environmental sustainability has emerged an urgent global issue, with India being particularly vulnerable to the impacts of climate change and ecological degradation. This study investigates the effects of green trade, technological innovation, renewable energy and economic growth on ecological footprints. Using annual time series data from 2000 to 2023, the study used Autoregression distributive lag (ARDL) to examine the relationship. The findings show a long-term association between ecological footprint and other factors. Green trade, technological innovation and renewable energy have a negative impact of ecological footprint, significantly reducing the ecological footprint, proving their crucial role in driving ecological sustainability. However, economic output, represented by GDP, is estimated to have a positive impact on ecological footprint, validating Kuznets' hypothesis in India, posing that economic growth initially deteriorates environmental quality before improvement occurs. This finding underscores the importance of sustainable economic policies that prioritized transition towards cleaner energy sources, liberalizing green trade and support to technological innovation.

### **Biotechnology or bioeconomy: Six of one and half a dozen of the other?**

**Presenting author:** Stephane Lhuillery (*Neoma Business School*)

**All authors:** Stephane Lhuillery (1) (2), Nicolas Befort (1) (3), Samih Atmane (1)

1 - *Neoma Business School, France*, 2 - *BETA, University of Strasbourg*, 3 - *INRAE, UMR LISIS Université Paris-Est Marne-La-Vallée*

#### **Abstract**

Different views and definitions pertain to the concept of bioeconomy. Few propose a workable definition enabling scholars and decision makers to identify analyze and manage the bioeconomy. Two technological delineation based on patent IPC codes delimitate a bioeconomy based on biotechnology inventions or based on a broader set of technologies. The two definitions are applied to two samples of firms, one with biotech firms and one with biorefineries that are considered by scholars as core to the bioeconomy. The relevance of these definitions for identifying the innovation practices of bioeconomy companies and reporting on their development of sustainable activities is assessed.

### **A2.3 (Onsite)**

#### **Carbon Emissions and Trade Policies**

### **Exploring CO2 Emission Factors in Vietnam Towards Sustainable Consumption**

**Presenting author:** Huu Nguyen Xuan Nguyen (*The University of Danang-University of Economics*)

**All authors:** Nguyen, Huu Nguyen Xuan (1), Nguyen, The Phu (1)

1 - *The University of Danang - University of Economics (Vietnam)*

#### **Abstract**

This study aims to identify factors influencing CO<sub>2</sub> emission levels from final consumption in Vietnam to promote sustainable consumption practices. Structural Decomposition Analysis (SDA) and the Social Accounting Matrix (SAM) are applied to explore the impact of household, government, investment, inventory, and exports on CO<sub>2</sub> emissions. Exports are considered the primary emission driver compared to other final consumption types, while emissions from inventory decline. The findings indicate that emissions are mainly driven by final consumption, with additional but lesser impacts from emission intensity and economic structure. The results also show that high-emission sectors and emissions inequality among household groups are due to the differences in income levels and areas. The new point of the research is clarifying the factors affecting CO<sub>2</sub> emission of various types of final consumption, unlike previous studies that examined each effect separately. So, it provides a detailed perspective on the drivers of emissions from consumption in developing countries with socioeconomic characteristics similar to those in Vietnam, thereby filling a gap in the literature. The insights from this research are valuable for policymakers and managers as they highlight how adjustments in final consumption can inform the design of effective strategies for reducing emissions.

### **Exploring the Impact of foreign Direct investment on Ecological Footprint in Southeast Asia with Heterogeneous Effects**

**Presenting author:** Yan Tan (*Yulin Normal University*)

**All authors:** Tan, Yan (1)

1 - *Yulin Normal University (China)*

#### **Abstract**

This study investigates the relationship between foreign direct investment (FDI) and the ecological footprint in five ASEAN countries, in light of FDI's significant inflows and its environmental implications. Utilizing a panel quantile regression analysis with data from 1990 to 2022, our findings reveal a complex interaction between FDI and ecological footprints across different pollution levels, challenging the pollution haven hypothesis. At lower pollution quantiles (5th to 10th), FDI's impact on the ecological footprint is positive but not significant, suggesting an inconsequential effect in less polluted environments. However, at higher quantiles (70th to 95th), FDI shows a significant negative impact, indicative of environmentally beneficial technologies and practices associated with foreign investment in more polluted settings, particularly in Malaysia and Singapore. Additionally, the study examines the influences of GDP per capita, trade openness, and population size on ecological footprints, uncovering varied effects across quantiles. These results highlight the nuanced role of FDI in environmental sustainability within ASEAN, underscoring the need for policies that encourage green FDI and consider the specific ecological dynamics of each country to foster sustainable development.

## Impact of Green Trade and Green Energy Consumption on Energy Intensity: Evidence From India

**Presenting author:** Mandar Bhatt (*Pandit Deendayal Energy University*)

**All authors:** Bhatt, Mandar (1), Mehta, Dhyan (1)

1 - *Pandit Deendayal Energy University (India)*

### Abstract

This study tries to examine the impact of, Low carbon technology trade and Green energy consumption on energy intensity in India, between the time span of, 2000- 2022. This study incorporates Auto regressive distributed lag models to examine the short run and long run impact between the variables taken out for the study. F-bound test has been employed to investigate the long run association. The results suggest that all the variables are stationary at order of integration I (1), as well as there is an existence of co-integration between the variables. Furthermore, the short term and long run estimates reveals that green trade and green energy use improve energy efficiency in India. Besides rising in Gross domestic product also reduce energy intensity, indicating improvement in energy efficiency with rising income of the country. Furthermore, normally distributed error is an indication of robustness of the model.

### A2.4 (Online)

#### Climate mitigation and adaptation

## Energy Poverty and Low-Carbon Transition in Sub-Saharan Africa

**Presenting author:** Younes Ben Zaied (*EDC Paris Business School*)

**All authors:** Younes Ben Zaied (1) (2), Nidhaleddine Ben Cheikh (3), Duc Nguyen (4)

1 - *EDC Paris Business School (70, Galerie des Damiers - Paris La Défense 1 - 92415 Courbevoie Cedex France)*, 2 - *EDC Paris Business School (France)*, 3 - *essca paris (France)*, 4 - *École de management Léonard de Vinci (France)*

### Abstract

Improving access to adequate energy forms in sub-Saharan Africa (SSA) is a challenging task, and there is an ongoing debate about the policies and interventions that can effectively alleviate energy poverty. In this paper, we contribute to the literature by carrying out a state-dependent analysis using nonlinear panel data local projections, which allows the dynamics of energy poverty to vary under different regimes. Our findings highlight the role of financial development and institutional quality in shaping the dynamics of energy affordability in SSA. In particular, we find that a higher quality of governance is required for the low-carbon transition to enhance household access to energy infrastructure. There is also evidence of an asymmetric response of energy poverty to institutional quality, depending on the degree of financial development. Overcoming governance issues and strengthening the financial system are critical for SSA to combat energy precarity and make the low-carbon transition viable.

## A Bibliometric Analysis of The inclusive Green Growth

**Presenting author:** Trang Nguyen Doan Doan (*Danang University Economic*)

**All authors:** Nguyen, Doan Doan Trang (1); Hoang, Van Hai (1)

1 - *Danang University Economics*

### Abstract

**Background:** "Green growth" is one of the most debated topics among the OECD and other organizations, given the challenges of climate change and environmental degradation (Golub et al., 2011). The 2015 international agreements on Sustainable Development Goals (SDGs) and climate change represent a major milestone, shifting the focus from rapid growth to growth with quality (Shikha Jha, Sonia Chand Sandhu, 2018). In this regard, comprehensive green growth can be seen as a solution for growth with quality, encompassing three pillars: economic growth, social justice, and environmental sustainability (GGKP, 2016; Shikha Jha, Sonia Chand Sandhu, 2018).  
**Purpose:** The article aims to offer a thorough overview of green growth over the time span of 2002-2024 as well as to explore emerging trends and research topics related to comprehensive green growth. **Method:** This study employs bibliometric analysis to investigate articles encompassing two keywords: "green growth" and "comprehensive green growth." Data was compiled from the Scopus database, which includes results spanning from 1961 to 2024. However, a preliminary screening of publications from 1961 to 2001 revealed only one publication per year, none of which were relevant to the research topic. Therefore, the analysis focuses exclusively on studies published between 2002 and 2024. The analysis was conducted using VOSviewer application version 16.01.20 and Excel 2003 software to examine all 2,813 documents indexed in Scopus during this period. **Result:** Our research findings indicate that the academic background of green growth and comprehensive green growth was established in 2002, with merely one publication in that year. However, there has been a significant increase in the number of publications over the past decade, rising from 118 in 2014 to 467 in 2024. Additionally, China leads in the number of publications related to inclusive green growth. A co-analysis of emerging keywords reveals the most prominent terms in inclusive green growth studies, including: green innovation, sustainable development, green economy, renewable energy, climate change, economic growth, and recession.

## **Fossil Fuel Costs and Their Effect on The Australian Electricity Market: Evidence From Russia-Ukraine Conflict**

**Presenting author:** Songze Qu (*University Of Sydney*)

**All authors:** Qu, Songze (1), Neill, Kelly (1), Ancev, Tiho (1)

1 - *The University of Sydney (Australia)*

### **Abstract**

We investigate how the Russia-Ukraine conflict has affected the wholesale electricity price in Australia. We show that increased prices for internationally traded energy commodities raised the domestic electricity generation cost. International coal and natural gas prices were passed through to Australian electricity prices at a rate of 56 percent and 100 percent, respectively, during the most intense period of the conflict. Overall, the higher international energy prices directly raised Australian electricity prices by 132% during the conflict period. The remainder of the electricity price increase should be attributed to extreme weather that coincided with the conflict and strategic responses by generators. Our findings confirm that the impact of the conflict on Australia's wholesale electricity prices has been short-term. The impact has also varied by state, reflecting the differences in the generation mix.

## **Natural Events in Peru: A Multidimensional Analysis**

**Presenting author:** Jhonatan Vicuna (*Central Reserve Bank Of Peru*)

**All authors:** Vicuna, Jhonatan (1), Garcia, Maria Fe, Castellares, Renzo (2)

1 - *Central Reserve Bank of Peru (Peru)*, 2 - *Central Reserve Bank of Peru (Peru)*

### **Abstract**

Natural hazard events are occurring at an increasing rate worldwide, posing significant challenges for Peru. Using data from the National Institute of Civil Defense (INDECI), this study describes the spatial and temporal evolution of natural events in Peru from 2003 to 2023. We examine the frequency and distribution of these events across the Peruvian territory and describe its impact on affected and displaced populations, relative to both local and national populations. The descriptive analysis suggests that extreme precipitations represent the greatest risk for Peruvian households given their high frequency and geographic distribution, while low temperatures also show a significant capacity to affect the population. We introduce a multidimensional metric to identify the provinces most prone to experiencing natural events, located primarily in the southern Andes and the high jungle regions. We also compare this method for identifying the most affected areas with household reports of experiencing natural disasters, using data from Peru's National Household Survey (ENAHO). Our findings reveal a direct relationship between the frequency and intensity of natural events in the district of residence and the probability that a household reports experiencing this type of shock. Natural hazard events are occurring at an increasing rate worldwide, posing significant challenges for Peru. Using data from the National Institute of Civil Defense (INDECI), this study describes the spatial and temporal evolution of natural events in Peru from 2003 to 2023. We examine the frequency and distribution of these events across the Peruvian territory and describe its impact on affected and displaced populations, relative to both local and national populations. The descriptive analysis suggests that extreme precipitations represent the greatest risk for Peruvian households given their high frequency and geographic distribution, while low temperatures also show a significant capacity to affect the population. We introduce a multidimensional metric to identify the provinces most prone to experiencing natural events, located primarily in the southern Andes and the high jungle regions. We also compare this method for identifying the most affected areas with household reports of experiencing natural disasters, using data from Peru's National Household Survey (ENAHO). Our findings reveal a direct relationship between the frequency and intensity of natural events in the district of residence and the probability that a household reports experiencing this type of shock.

# List of Participants

Name	Mode	Affiliation	Country
Summit Agarwal	ONSITE	National University of Singapore	Singapore
Ian Bateman	ONSITE	University of Exeter Business School	United Kingdom
Dirk Baur	ONSITE	UWA	Australia
Younes Ben Zaied	ONSITE	EDC Paris Business School	France
Mandar Bhatt	ONSITE	Pandit Deendayal Energy University	India
Heni Boubaker	ONLINE	IPAG Business School	France
Zakaria Boulanouar	ONSITE	United Arab Emirates University	United Arab Emirates
Priyanshu Chavda	ONSITE	School of Liberal Studies, Pandit Deendayal Energy University	India
Anup Chowdhury	ONSITE	Leeds University Business School	United Kingdom
Tuan Chu	ONSITE	RMIT University Vietnam	Vietnam
Man Dang	ONSITE	University of Danang - University of Economics	Viet Nam
Thuy Dao	ONSITE	IPAG Business School	France
Hung Xuan Do	ONSITE	Massey University	New Zealand
Israel Finkelshtain	ONLINE	Hebrew University	Israel
Dominika Galkiewicz	ONLINE	Fachhochschule Kufstein Tirol Bildungs Gmbh	Austria
Dzikri Firmansyah Hakam	ONSITE	Institut Teknologi Bandung	Indonesia
Bertrand Hassani	ONLINE	Université Paris 1 Panthéon-Sorbonne	France
Khanh Hoang	ONLINE	Lincoln University	New Zealand
Md Nirab Hossain	ONSITE	Bangladesh Open University	Bangladesh
Ambrus Kecskes	ONSITE	School of Administrative Studies At York University	Canada
Prodia Nur Kemala	ONLINE	Husky-Cnooc Madura Limited	Indonesia
Doori Kim	ONSITE	Chonnam National University	South Korea
Marc Kouzez	ONLINE	ICN Business School- Cerefige Université De Lorraine	France
Huong-Quynh Nguyen Le	ONSITE	University of Economics - The University of Danang	Vietnam
Stephane Lhuillery	ONSITE	Neoma Business School	France
Yangsiyu Lu	ONSITE	Hong Kong University of Science and Technology (Guangzhou)	China
Vishal Narain	ONSITE	Management Development Institute Gurgaon	India
Huyen Nguyen	ONSITE	Halle Institute for Economic Research and University of Jena	Germany
Duc Duy Louis Nguyen	ONSITE	Durham University	United Kingdom
Huu Nguyen Xuan Nguyen	ONSITE	The University of Danang-University of Economics	Vietnam
Trang Nguyen Doan Doan	ONLINE	Danang University Economic	Vietnam
Chul-Hi Park	ONSITE	Gwangju National University of Education	South Korea
Betty Pallard	ONSITE	Cofounder, ESGs and Climate Consulting	Vietnam
Linh Pham	ONLINE	Lake Forest College	United States
Meng Qin	ONSITE	West University of Timisoara	Romania
Ziang Qiu	ONSITE	University of Macau	Macao SAR China
Songze Qu	ONLINE	University of Sydney	Australia

Klaus Schaeck	ONSITE	University of Bristol	United Kingdom
Wafid Sophian	ONLINE	Universiti Brunei Darussalam	Brunei Darussalam
Yan Tan	ONSITE	Yulin Normal University	China
Anh Tran Nguyen Tram	ONLINE	Van Lang University	Vietnam
Nhan Tran-Danh	ONSITE	Faculty of E-Commerce, University of Economics – The University of Danang	Vietnam
Ha Tran-Thi-Phuong	ONSITE	Faculty of Marketing, University of Economics – The University of Danang	Vietnam
Bao Truong-Dinh	ONSITE	University of Economics, The University of Danang	Vietnam
Jhonatan Vicuna	ONLINE	Central Reserve Bank of Peru	Peru
Thuy Anh Vo	ONSITE	University of Danang - University of Economics	Viet Nam
Michal Wodjewodzki	ONSITE	Lingnan University	Hong Kong
Mengya Wu	ONLINE	Newcastle Univeristy	United Kingdom
Tianle Yang	ONSITE	Zhejiang Univeristy of Technology	China
Geyao Zhang	ONLINE	University of Leeds	United Kingdom

# Organizers

The **Association of Vietnamese Scientists and Experts (AVSE Global)** was founded in May 2011 with the main purpose of connecting intellectual sources in a systematic way to identify ideas, strategies, and implementation in all fields of science and techniques in foreign countries and at the same time orient to make contribution to the development of Vietnam. AVSE Global has worked and exchanged with high level institutional, industrial and university partners in order to organize technical sessions – seminars - conferences, training courses and realize a number of technical reports. The association is also supported by Vietnam and France State Organizations. The partnership is built and based on the respect and understanding of partner’s fields of interest, with the constructive exchange and the high quality of works.



The **University of Economics (DUE)** is a university member of the **University of Danang**, one of the three regional universities in Vietnam. With over 49 years of experience in educating and training, the DUE has played an important role in providing a labour force specializing in business, management and economics, partly contributing to Vietnam’s economic development. We offer a wide range of under-graduate and post-graduate programs, including 04 doctoral programs, 07 master programs, and 31 under-graduate programs. High qualified teaching and research staff, including professors, senior and experienced lecturers together with learner-centered curriculums are the reflection of our aim to ceaselessly raise teaching standard. The University currently has about 15,000 students for both full-time and part-time courses. The DUE has cooperated with a number of companies to not only provide our students with opportunities for internship courses, but also equip them with necessary skills and capabilities to work within the context of global integration. Forty-nine years of vigorous growth witnesses our university achieving a variety of historical milestones. The DUE has become not only a nationally prestigious multidisciplinary higher educational institution, but also a leading research center for business management consultancy and business & economic knowledge transfer in Vietnam. Annually, the DUE has about 8 to 10 key research projects carried out at state, ministerial, provincial levels, and dozens of university-level projects. Additionally, the DUE collaborates with its international partner network to organize academic conferences, seminars, workshops on business, management and economic matters. These assist the University in improving teaching materials and training quality. Research activities also bring more accessibility to business environment, practices and legal aspects.



**Massey University** is a leading New Zealand university, world-renowned for unique practical qualifications, ground-breaking research, and online courses. Massey provides a creative and connected learning environment. For business majors, Massey Business School is New Zealand’s largest business school, rated first in the country by Shanghai Rankings, with internationally accredited qualifications, strong industry connections, and vibrant research. Regarding Finance subject, Massey is ranked in the top 200 globally and the second in the country by the QS Universities Rankings.





# Guideline for Participants

## Session Participation Instruction

**Conference dates:** 08:00 – 22:00 (Vietnam time, GMT+7), Thursday, December 12, 2024  
08:00 – 13:00 (Vietnam time, GMT+7), Friday, December 13, 2024

**Conference venue** (In-person participants): University of Danang – University of Economics, 71 Ngu Hanh Son Street Ngu Hanh Son District, Danang, Viet Nam

**Platform** (Online participants): Virtual meeting via Zoom Webinar

Please follow the links summarized at the end of the booklet or those embedded in the Program at A Glance's tables to access various sessions of VSCT2024. **Note** that **passcode** to attend the sessions was sent to you privately via email. If you cannot find your passcode, please **contact** Hung Do ([h.do@massey.ac.nz](mailto:h.do@massey.ac.nz)) or Man Dang ([man.dang@due.edu.vn](mailto:man.dang@due.edu.vn)).

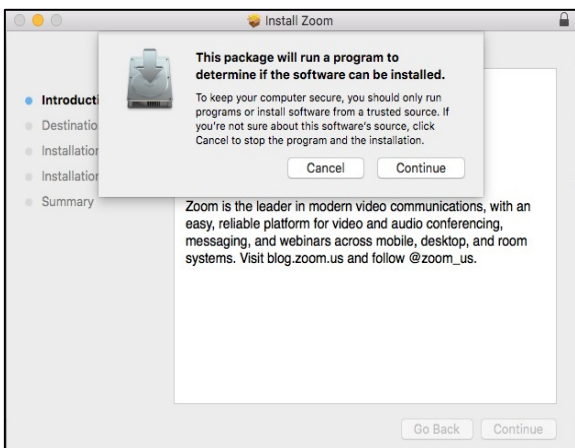
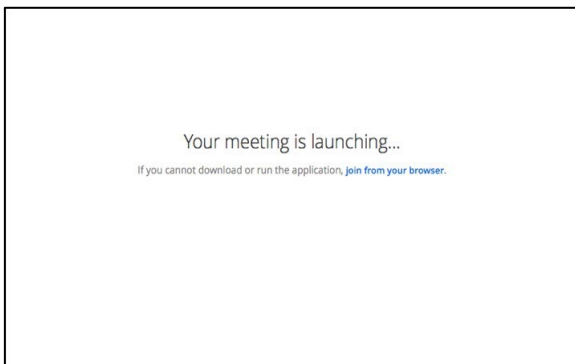
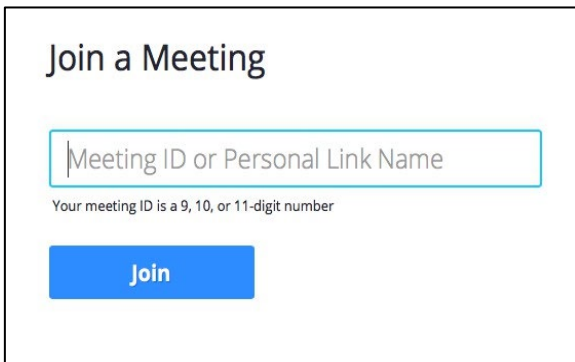
### Note for presenters:

1. Make sure you have the following: a laptop or desktop with a microphone and webcam, a recent version of Chrome or Firefox and Zoom app and a strong internet connection. We recommend wearing earbuds or headphones to prevent audio echoes.
2. Please send your presentation slides to us ([h.do@massey.ac.nz](mailto:h.do@massey.ac.nz) and [vsct2024@sciencesconf.org](mailto:vsct2024@sciencesconf.org)) before the presentation day as a backup plan. Please name your file as <Day>\_<Session number>\_<Name of Presenter>, e.g., Thu\_A2.1\_Hung Do
3. Please control your own presentation material which should be loaded on your desktop/ laptop in advance. When it is your turn to present, you will need to share your file or your screen.
4. If you have any technical issues whilst you are presenting, please don't panic. We have a copy of your presentation as a backup, so we can load it up for you in the event of any technical difficulties.
5. Keep the presentation to time. Each presentation is generally allowed 20 minutes. Each Q&A discussion is allowed up to 10 minutes. for sessions of four papers, each presentation is allowed 15 minutes, and discussion is allowed up to 7 minutes.

# ZOOM: Instruction Manual for Program Participants

Welcome! This support document provides step-by-step instructions for participants on how to use ZOOM.

## Joining a ZOOM Meeting & Download

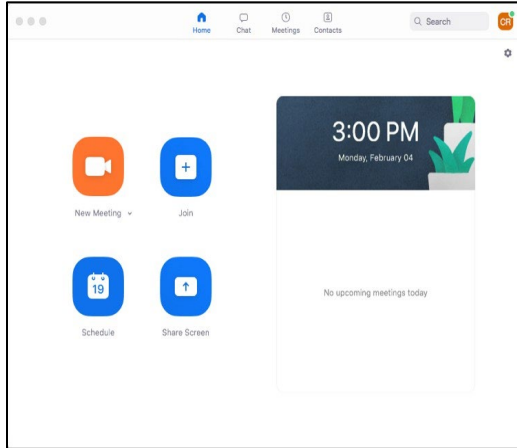


1. Go to <https://zoom.us/join>.
2. In the top right-hand corner, click "JOIN A MEETING".
3. The webpage will prompt you for your **Meeting ID or Personal Link Name**; type in the 9-11digit number that your instructor provided you with, and click "Join".

4. You will see this screen – the application may automatically download to your desktop or device.

5. Depending on what browser you are using, you may have to install the program on your computer; find where this installation package went on your computer; It should be downloaded as "Zoom.pkg" or something similar.

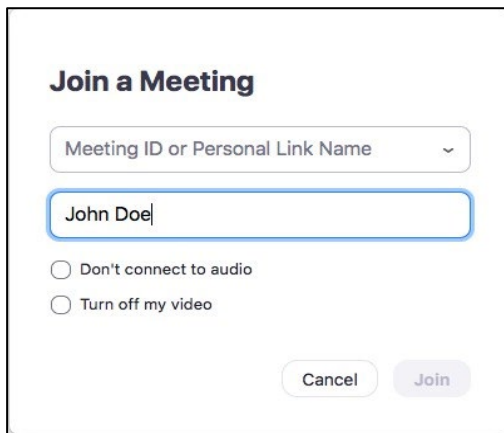
6. Begin the download process (it will take a moment).



7. Once downloaded successfully, the application will pop-up on your screen;
  - a. Click the orange “New Meeting” button if you wish to start a meeting with your own personal Meeting ID (you will be the host).
  - b. Click the blue “Join” button if you are attending a meeting hosted by someone else (If you are a student, this will be the option you will choose the most).



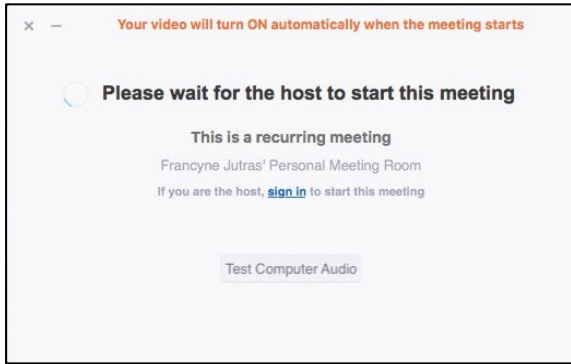
8. If you need to change the **language** of your application, find the application on your desktop, open it, then right-click the application; there should be an option to change the language in this drop-down menu.



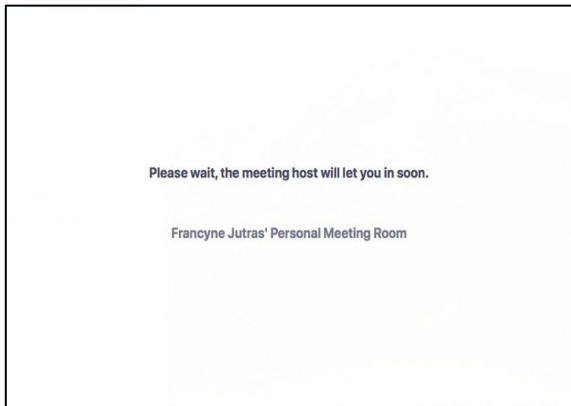
9. If you clicked the blue “Join” button, type in your instructor’s Meeting ID again.
10. Provide a screen name for yourself (Please use your first and last name so your instructor knows who you are).
11. If you do not want to join with audio or video, check those options before joining (you can add your video and audio again after you’ve joined the meeting).

12. Once you have been added to the meeting, you will be left in the “waiting room”.

13. You will see either one of two messages:



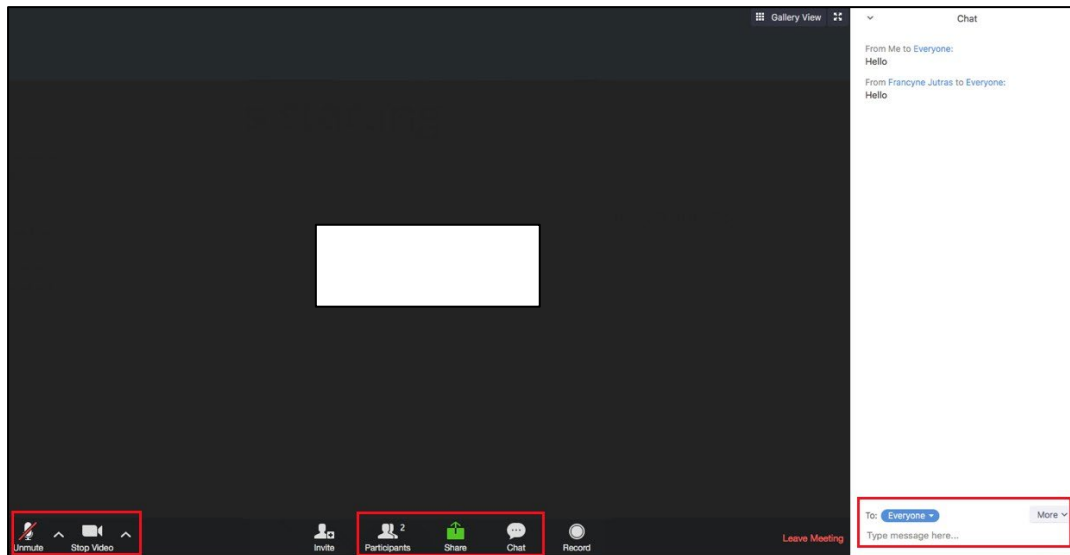
a) The first one you will see if you log in to your Host's meeting with the Meeting ID before the Host has started;



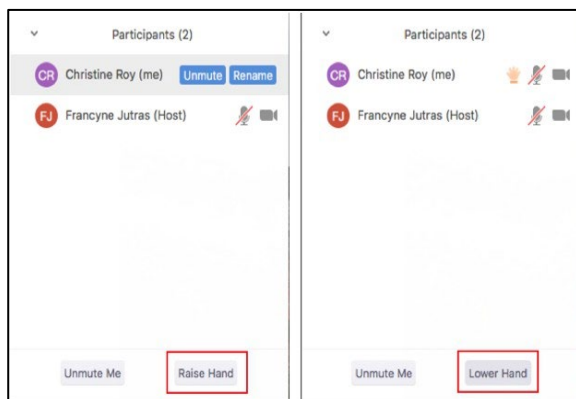
b) The second being the one you will see if you log in after the Host has arrived, but before they have provided you access.

## Navigating ZOOM

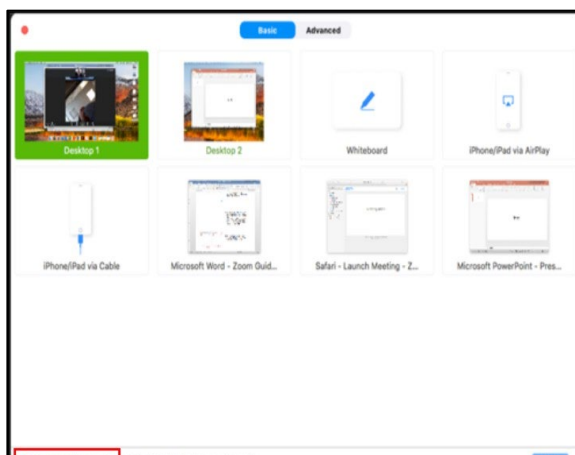
1. After joining a meeting, if you selected “Join with Computer Audio”, your speakers and microphone should now be working.
2. You can mute or unmute your microphone or start your video connection using the icons in the bottom left (highlighted in RED in the bottom left-hand corner).
3. To see a list of other people in your program, you can click the Participants icon, or engage in a text chat by clicking CHAT.



4. You can leave the meeting by clicking the red “Leave Meeting” link near the chat bar.



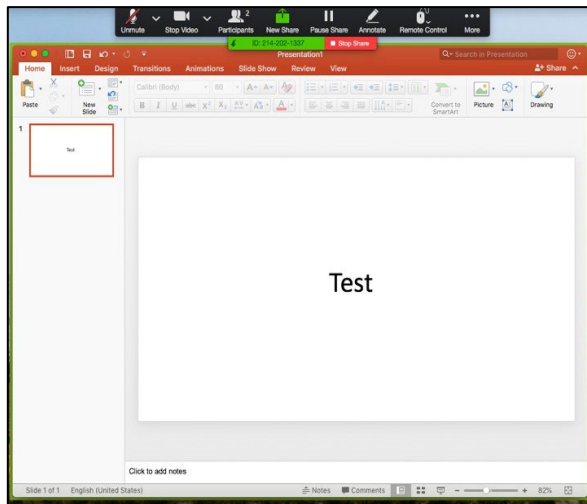
5. If you go to the participants icon, you can “raise your hand,” and the Host will see this indicated on their screen, and will answer your question.



6. Share anything (Word Documents, PowerPoints, YouTube videos, etc.) by clicking the SHARE button at the bottom of the screen, and choosing an already opened document/internet browser on your desktop.

7. You can choose to share your entire desktop screen, or individually opened applications/documents.

8. When sharing things with audio, be sure to check the checkbox for “Share Computer Sound” in the bottom left of the window that opens when you click SHARE (highlighted in RED).



9. Once selected, the document that is being shared will be highlighted in green on your desktop; your settings for the shared document are at the top.

10. Your audience will be able to see your cursor, and everything you do, within the highlighted green section (you can only work on the selected document – you cannot drag other documents into the selected document area).

11. If you wish to share a different document, exit, then click SHARE, and select a new document.

12. To join a breakout room: Click **Breakout**

**Rooms** in your meeting controls. This will display the list of open breakout rooms created by the host.

The Rooms are named after the parallel sessions.

(Optional) Click **Expand All** to expand all available rooms and see which participants are in that particular room. **Note:** The **Expand All** and **Collapse All** options require version **5.9.6** or higher.

Hover your pointer over the number to the right of breakout room you wish to join, click **Join**, then confirm by clicking **Join**.

Repeat as necessary to join other breakout rooms, or click **Leave Room** to return to the main session.

Please visit <https://support.zoom.us/hc/en-us> for more information about ZOOM.



## **The University of Danang – University of Economics**

71 Ngu Hanh Son street, Ngu Hanh Son district, Danang, Vietnam

<https://vsct2024.sciencesconf.org/>