





# Call for Contributions:

# Beyond the 2°C:

# Business and Policy Trajectories to Climate Change Adaptation

An edited collection to be published by Palgrave Macmillan Under consideration for the Palgrave Studies in Sustainable Business: In Association with Future Earth

Co-edited by:

Thomas Walker, PhD Stefan Wendt, PhD Sherif Goubran Tyler Schwartz

The John Molson School of Business at Concordia University kindly invites contributions to the forthcoming edited book *Beyond the 2°C - Business and Policy Trajectories to Climate Change Adaptation* to be published by **Palgrave Macmillan** and being considered for the "Palgrave Studies in Sustainable Business: In Association with Future Earth" book series.

#### ABOUT THE BOOK

Climate change mitigation, understood as an approach to reduce human-induced emissions, has taken centre stage in climate action debates and efforts in the last decades. Currently published reports and studies present scenarios under which we can limit the global temperature rise to a 2°C threshold. However, to stay within the 2°C threshold, we need to move towards net-negative global emissions. This would require mobilization on a global scale and improvements in our approaches to mitigating global warming. After passing the symbolic 400 parts per million (PPM) threshold of carbon dioxide equivalents (CO2-eq) in the atmosphere in 2016, recent studies have highlighted that the current emission trajectory can easily lead to concentrations of up to 1,000 PPM of CO2-eq – leading to an average global warming of up to 5.4°C by the end of this century.

While many governments, businesses and researchers like to believe that a mitigation-focused approach can keep the 2°C threshold within reach, this edited book intends to investigate the business and policy adaptation trajectories beyond what are currently understood to be some of the major tipping points in the climate system. In these scenarios, the planet will be on an accelerated path towards deforestation, biodiversity loss, erosion of inhabited and uninhabited coastal areas, and the possible disappearance of entire island states. These events will be coupled with the possible proliferation of disease, human migration, and increased conflicts over resources. This calls for academics, practitioners, and policymakers to shift their attention away from the almost exclusive focus on climate change mitigation, to also consider adaptation plans.

Beyond the 2°C - Business and Policy Trajectories to Climate Change Adaptation is an edited collection that will review and critically analyze new and innovative business and policy approaches to climate change adaptation across different economic sectors and for different locations. The edited collection will aim to ignite an academic discussion regarding the necessary, and potentially urgent, adaption strategies that could address the risks induced by the fast-changing climate. The contributions should demonstrate how we can adapt to a world where fresh water is scarce, where extreme weather events are a daily reality, where global sea levels are up to 2.4 m higher than today, and where flooding and wildfires are no longer discrete events. The collection plans to evaluate the readiness of our businesses and policies to adapting to this "new" world and to explore strategies that move beyond the current incremental approaches.

#### CALL FOR CONTRIBUTIONS

Beyond the 2°C - Business and Policy Trajectories to Climate Change Adaptation aims to explore and propose business and policy solutions for climate-induced economic, technical, and societal challenges. The editors are accepting contributions by experts in both the **academic** and **practitioner** communities in business and policy, as well as related fields such as economics, management, development studies, finance, and entrepreneurship. The editors are inviting contributions that:

- Shed new light on our understanding of climate-related vulnerabilities and risks
- Explore innovative risk management procedures
- Present new and emerging processes for internalizing adaptation in existing business and policy approaches
- Identify new barriers to large scale and/or local climate change adaptation
- Introduce methodologies for mapping and understanding synergies and trade-offs in adaptation
- Investigate approaches to overcoming conflicts in business and policy adaptation trajectories

The editors are encouraging contributions that move beyond the current disciplinary divides and present novel interdisciplinary approaches, which use scenario building methodologies in their investigations and study the social, economic, environmental, and cultural dimensions of the complex adaptation trajectories. Moreover, the editors will also be accepting chapters that incorporate new concepts or tools beyond the academic fields of business administration and political science. These fields will include the natural and social sciences, which make connections to the business and policy. The editors also encourage contributions that move beyond carbon emissions to focus on emerging challenges and themes regarding adaptation, which includes health, wellbeing, air quality, waste, and biodiversity. In addition, chapters that use case studies or comparative studies (between different solutions, applications in different industries, or variations between regions) are strongly encouraged. Finally, considering the global nature of climate change and its multi-scale consequences, the editors invite authors to critically consider the scalar relevance – local, regional, national, and supranational levels – of their contributions.

The submissions will be reviewed with an open mind and with a particular focus on the relevance of the chapter with respect to adapting to climate change and its consequences beyond the 2°C threshold. The edited book will serve as an academic reference for senior undergraduate, graduate, and post-graduate scholars in the fields of business, public affairs, social science, environmental studies, and law across the globe. It will also function as a practical guide and a reference for emerging best practices on the topic of climate change adaptation for industry and business leaders, regulators, and policymakers around the world. Although the book can be used as a reference book in academic courses, it will not be specifically organized as a textbook.

#### POTENTIAL TOPICS FOR CHAPTERS

#### 1. CLIMATE CHANGE HAZARDS AND THEIR MANAGEMENT

- a. Understanding the hazards and their management
- b. Technological hazards
- c. Political hazards
- d. Natural hazards (cyclones, floods, storms, floods, droughts)
- e. Socio-economic risks
- f. Human health risks
- g. Planetary health and biodiversity risks
- h. Geoengineering and climate management
  - i. Greenhouse gas management
  - ii. Solar radiation management

#### 2. THE FUTURE OF FOSSIL FUELS AND EMISSIONS

- a. Fossil fuel subsidies
- b. Carbon pricing/carbon taxation
- c. Biofuel and other alternative fuels
- d. Renewable energy (wind, solar, geothermal)
- e. The future of nuclear power (challenges and opportunities)
- f. Battery electric vehicles (BEVs)
- g. Hydrogen fuels

# 3. ADAPTING CITIES, URBAN SETTLEMENTS, AND CHANGES TO HUMAN BEHAVIOUR

- a. Urban planning, urban design, and cities beyond the 2°C
- b. Waterfront settlements, island states, and other high-risk human settlements
- c. Buildings and construction (design, materials, codes/standards/certifications, retrofitting)
- d. Local modes of transportation (cars and other private transport, public transit, collective passenger transport, human-powered transport, etc.)
- e. Intra-continental travel (rail, advanced trains and emerging technologies)
- f. Inter-continental travel (aviation fuel, turbofan/turboprop engines, emissions and contrails, emerging technologies, etc.)
- g. Global product transport and logistics

# 4. ADAPTING THE PRODUCTION AND CONSUMPTION PATTERNS

- a. Agriculture, soil, and forests
  - i. Animal and marine farming
  - ii. Agriculture, agroforestry, reforestation
  - iii. Soil and its rehabilitation
- b. Demand-side management
  - i. Incentive and financing programs
  - ii. Change and development in consumption patterns
  - iii. Consumer behaviour beyond a 2°C warmer climate
- c. Supply-side management
  - i. Change and development in production patterns
  - ii. Recycling, upcycling, reuse, and regeneration
  - iii. Closed-loop production models
  - iv. Living and biotic natural resources
  - v. Non-living natural resources (metals, minerals, and stone)
  - vi. Renewability of resources
- d. New and emerging modes of production and consumption

#### 5. FINANCING GLOBAL CLIMATE ADAPTATION

- a. Microfinance (micro-credit, micro-insurance, risk, etc.)
- b. Philanthropy and venture capital
- c. ESG investment (trends, renewable energy investment, partnerships, water, etc.)
- d. Climate finance (private climate finance, green funds, adaptation funds, the low carbon market, divestment, etc.)
- e. Evaluating and managing the financial risks of adaptation
- f. Natural capital accounting (efforts, innovations, and effects)
- g. Financial policies

#### 6. LIMITATION AND THE FUTURE OF CLIMATE ADAPTATION

- **a.** The limits to climate change mitigation
- b. Political and policy limits
- c. Capital limits
- d. Technological limits
- e. Societal and cultural limits

### **IMPORTANT DATES**

- Abstract and CV submission deadline **June 30<sup>th</sup>**, **2020**
- Selection of abstracts and notification to successful contributors July 31st, 2020
- Full chapter submission November 30<sup>th</sup>, 2020
- Revised chapter submission February 28<sup>th</sup>, 2021

### **GUIDELINES FOR CONTRIBUTORS**

Submissions should be written in English using a non-technical writing style. The contributions may include diagrams/illustrations in order to present data, or photographs/figures (all in black & white) to better illustrate the topic of discussion. Submitted chapters should be original and exclusively prepared for the present book. No part of the article should be published elsewhere. Chapters must not exceed 7,000 words (including all references, appendices, biographies, etc.), must use 1.5-line spacing and 12 pt. Times New Roman font, and must use the APA 7th edition reference style.

Researchers and practitioners are invited to submit abstracts of no more than 500 words, a bibliography for their proposed chapter, and a CV. Abstract submissions are expected by June 30th, 2020. Submissions should be sent via email to climatechange.adaptation@concordia.ca

Authors will be notified about the status of their proposals and will be sent complete chapter guidelines. Full chapters are expected to be submitted by **November 30<sup>th</sup>**, **2020**.

Please note there are <u>no submission or acceptance fees</u> for the manuscripts.

## **ABOUT THE EDITORS**

#### Thomas Walker<sup>1</sup>

Dr. Walker holds an MBA and PhD degree in Finance from Washington State University. Prior to his academic career, he worked for several years in the German consulting and industrial sector at firms such as Mercedes Benz, Utility Consultants International, Lahmeyer International, Telenet, and KPMG Peat Marwick. He has taught as a visiting professor at the University of Mannheim, the University of Bamberg, the European Business School, and the WHU – Otto Beisheim School of Management. His research interests are in sustainability & climate change, corporate governance, securities regulation and litigation, and insider trading and he has published over sixty articles and book chapters in these areas. He is the lead-editor of five books on sustainable financial systems, sustainable real estate, sustainable aviation, emerging risk management, and environmental policy. Dr. Walker has held numerous administrative and research positions during his career. For instance, he served as the Laurentian Bank Professor in Integrated Risk Management (2010-2015), Chair of the Finance Department (2011-2014), Director/Codirector of the David O'Brien Centre for Sustainable Enterprise (2015-2017), and as Associate Dean, Research and Research Programs (2016-2017) at Concordia University. In addition, he has been an active member of various advisory boards and steering committees including, among others, the human resources group of Finance Montréal, the steering committee of the Montreal chapter of the Professional Risk Managers' International Association (PRMIA), the academic advisory board of the MMI/Morningstar Sustainable Investing Initiative, and the advisory board for Palgrave Macmillan's Future Earth book series on sustainability.

#### Stefan Wendt<sup>2</sup>

Dr. Wendt is an Associate Professor and Director of the Graduate Programs in Business at Reykjavik University's Department of Business Administration. From March 2005 until March 2015 he was Research and Teaching Assistant at the Department of Finance at Bamberg University, Germany, where he received his doctoral degree in 2010. He has taught as a visiting lecturer at École Supérieure de Commerce Montpellier, France, and Baden-Württemberg Cooperative State University (DHBW), Mosbach, Germany. His fields of research include corporate finance and governance, risk management, financial markets and financial intermediation, small and medium-sized enterprises, and behavioural finance.

### Sherif Goubran<sup>3</sup>

Sherif is a PhD. candidate in the Individualized Program (INDI) at Concordia University, a Vanier Scholar, and a Concordia Public Scholar. He is conducting interdisciplinary research within the fields of design, architecture, building engineering and real-estate finance. His PhD research investigates the alignment between sustainable building practices and Sustainable Development Goals (SDGs). His research focus includes building sustainability and sustainability assessment, sustainability in architectural design and human approaches in design. Sherif completed a MASc in building engineering in 2016 with a focus on energy efficiency in commercial buildings. Before that, he completed a BSc in Architecture at the American University in Cairo (AUC-Egypt). Today, he is actively engaged in several research laboratories, centers, and groups where he teaches and conducts research in design, engineering, architecture, and business. He is also involved in several sustainability committees and projects at Concordia on the student as well as the administrative levels.

#### Tyler Schwartz<sup>4</sup>

Tyler is currently a research and book publication assistant in the Department of Finance at Concordia University. He recently completed his undergraduate degree at the John Molson School of Business in which he received an Honours in Finance. As part of his undergraduate degree, he completed a thesis project in which he wrote a paper focusing on the relationship between data breaches, security prices, and crisis communication. He was also presented with the CUSRA scholarship in 2017, which is awarded to undergraduate students who have an interest in pursuing research activities. His research interests include sustainable finance, machine learning, data breaches, and cognitive science.

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