
Contact Information

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SUVAJIT BANERJEE

Climate Transition Economist | Economy-Wide Modelling |
Industrial Decarbonization | Trade & Strategic Resource Policy

Summary

Applied economist specializing in economy-wide analytical framework development for climate transition, industrial decarbonization, trade competitiveness and strategic resource policy. Experienced in delivering policy-oriented research for governments, MDBs and international organizations through CGE modelling, MRIO analysis and integrated economic assessment. My research bridges advanced economic modelling with practical policy design for climate transition and industrial transformation.

SELECTED POLICY & RESEARCH ACHIEVEMENTS

- Recipient of the [2023 Leontief Memorial Prize](#) (*International Input-Output Association*). First Indian recipient since 2000.
- Contributor to [NITI Aayog's Scenarios Towards Viksit Bharat and Net Zero: Macroeconomic Implications \(Vol. II\)](#), supporting national climate-transition scenario analysis.
- Research collaborations with World Bank, ADB, Bezos Earth Fund, IIED and IGSD.
- Published 20+ empirical papers in leading international journals including *Energy Policy*, *Resource Policy*, *Structural Change and Economic Dynamics*, *International Review of Economics and Finance*, etc.

PROFESSIONAL EXPERIENCE

Fellow, July 2024 – Present

Research Vertical: CGE Modelling and Policy Analysis

National Council of Applied Economic Research (NCAER), 11, Indraprastha Estate, New Delhi 110002, India

- General equilibrium modelling for climate sustainability, trade competitiveness and industrial growth. Development of CGE-based policy simulation frameworks.
- Macroeconomic analysis of the impacts and implications of domestic carbon taxation, carbon border adjustment measures (CBAM), Emissions Trading Scheme (ETS) and industrial decarbonization tools, including Carbon Capture, Utilisation and Storage (CCUS), Green Hydrogen penetration, Electric Vehicle (EV)-based mobility transition, etc.
- Database construction (e.g., I-O, SAM, Satellite Matrices) for expanding modelling capability, particularly in the direction of resource economics.
- Stakeholder engagement with government and international organizations.

Previous Appointments

Government Education Service, West Bengal | 2011–2024

MAJOR POLICY ENGAGEMENTS

<i>Ongoing Research</i>	<i>Sponsor</i>	<i>Role</i>	<i>Period</i>
1 <i>Optimal Design of the Federative Emissions Trading System (ETS) in India</i>	International Bank for Reconstruction and Development (IBRD), World Bank	<i>Lead CGE Modeller and Economist</i>	Aug 2025 to Jan 2027
2 <i>The Economy-Wide Implications of Low-Carbon Electricity and Transportation</i>	Bezos Earth Fund	<i>Lead CGE Modeller and Economist</i>	Nov 2024 to Nov 2026
<i>Completed Projects</i>	<i>Sponsor</i>	<i>Role</i>	<i>Period</i>
3 <i>Macroeconomic Implications of India's Energy Transition Pathway</i>	International Sustainable Energy Foundation (ISEF)	<i>CGE Modeller & Contributing Economist</i>	May 2024 to Apr 2025
4 <i>Planning for Economic Recovery of South Asia from COVID-19: Strengthening General Equilibrium Modelling Capacity</i>	Asian Development Bank (ADB)	<i>CGE Modeller & Contributing Economist</i>	Apr 2024 to Oct 2025
5 <i>Implications of Arctic Ice Melting on the Indian Economy</i>	Institute for Governance & Sustainable Development (IGSD)	<i>CGE Modeller & Contributing Economist</i>	May 2024 to Dec 2024
7 <i>Enhancing Climate Resilience under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)</i>	International Institute for Environment and Development (IIED)	<i>Consultant on Climate-Resilient Social Budgeting Framework</i>	Feb 2021 to Apr 2021

TECHNICAL EXPERTISE

<i>Thematic Research Interest</i>	<i>Methods & Tools</i>
- Industrial Decarbonization & Transition - Carbon Adjustment in Trade, CBAM, ETS, CCUS - Strategic Resources (Water, Land, Scrap, Minerals) - Critical Minerals, Permanent Magnet & Semiconductor Manufacturing	- CGE Modelling - Multiregional IO Analysis; Dynamic I-O Modelling - Index & Structural Decomposition Analysis (IDA & SDA); Structural Path Analysis (SPA)
<i>Software Skills</i>	<i>Data Skills</i>
- GAMS - GEMPACK - Python & MS-Excel	- Database construction (e.g., I-O, SAM, Satellite Matrices) for expanding modelling capability - NAS Database, MoSPI-SUT, ADB-MRIO, FIGARO, EXIOBASE, OECD-ICIO

Education and Awards

Recipient, [2023 Leontief Memorial Prize](#), International Input-Output Association.

- Winner of **Travel Grant** for attending the 29th *International Input-Output Association (IIOA)* Conference in Alghero, Italy in June 2023.

Ph.D. in Economics in April 2022. Thesis Title: *International Trade under Climate Change: An Indian Perspective*

- Department of Economics and Politics, Vidya Bhavana, Visva Bharati University, Santiniketan, West Bengal

Best Paper Award at the 6th IIFT Conference on *Empirical Issues in International Trade & Finance* (eiitf) 2018.

- Indian Institute of Foreign Trade (IIFT), New Delhi

M.Sc. in Economics, 2009. **1st in the 1st Class Award** on the 20th Convocation of the University of Kalyani, West Bengal.

CURRENT RESEARCH AGENDA

Current research focuses on developing economy-wide analytical frameworks for climate transition in emerging economies. The programme integrates four interconnected themes:

- *Industrial Decarbonization: Low-carbon Technology Transitions*
 - *Strategic Resource Dynamics: Water Scarcity, Land Use Change, Scrap Recycling, Critical Minerals, etc.*
 - *Economy-wide Dynamic CGE and Advanced I-O modelling*
 - *Trade Competitiveness under CBAM, Indian Carbon Credit Trading System (CCTS)*
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SELECTED JOURNAL PUBLICATIONS

Economic Modelling

- [Searching appropriate system boundary for accounting India's emission inventory for the responsibility to reduce carbon emissions](#) *Journal of Environmental Management*, 2021 (ABDC-A)
 - [Conjugation of Border and Domestic Carbon Adjustment and Implications under Production and Consumption based Accounting of India's National Emission Inventory: A Recursive Dynamic CGE Analysis](#) *Structural Change and Economic Dynamics*, 2021 (ABDC-B)
 - [Carbon adjustment in a consumption-based emission inventory accounting: a CGE analysis and implications for a developing country](#) *Environmental Science and Pollution Research*, 2021
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Climate & Trade

- [Exploring the NDC-misspecification Margins due to the Trade-induced Spillover and Feedback Effects for Top-Three Emitters](#) *Margin: The Journal of Applied Economic Research*, 2025 (ABDC-C)
 - [Bolstering critical minerals trade between India and other MSP countries: A gravity model evaluation](#) *Resource Policy*, 2025 (ABDC-B)
 - [Examining the India-Middle East-Europe Economic Corridor \(IMEC\) as a collaborative infrastructure for transcontinental policymaking: an ICIO-LP analysis](#) *Asia Europe Journal*, 2024 (ABDC-B)
 - [Investigating India's pollution-intensive 'dirty' trade specialisation: analysis with 'revealed symmetric comparative advantage' index](#) *Environmental Science and Pollution Research*, 2021
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- [Addressing the carbon emissions embodied in India's bilateral trade with two eminent annex-II parties: with input-output and spatial decomposition analysis](#) *Environment Development and Sustainability*, 2020
 - [Carbon emissions embodied in India-United Kingdom trade: a case study on north-south debate](#) *Foreign Trade Review*, 2020 (ABDC-B)
 - [Addressing the drivers of carbon emissions embodied in Indian exports: an index decomposition analysis](#) *Foreign Trade Review*, 2019 (ABDC-B)
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Energy & Environment

- [Emission-decoupling accounting framework of the Environmental Kuznets Curve \(EKC\) for India with structurally decomposed production and consumption-based drivers](#) *Management of Environmental Quality*, 2022
 - [Exploring the relevance of crude oil prices and installed generation capacity in prognosticating the NIFTY Energy Index](#) *Millennial Asia*, 2022
 - [Scrutiny of income related drivers of energy poverty: A global perspective](#) *Energy Policy*, 2021 (ABDC-A)
 - [Do emissions implied in net export validate the pollution haven conjecture? Analysis of G7 and BRICS countries](#) *International Journal of Sustainable Economy*, 2020
 - [Calibrating the impacts of regional trade integration and renewable energy transition on the sustainability of international inbound tourism demand in South Asia](#) *Sustainability*, 2020
 - [Consumption of liquefied petroleum gas and the EKC hypothesis in South Asia: evidence from cross-sectionally dependent heterogeneous panel data with structural breaks](#) *Energy Ecology and Environment*, 2020
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Macroeconomics

- [Schumpeterian Dynamics and Inclusive Economic Resilience: Digitalization-Driven Recovery in SAARC and ASEAN Economies](#) *International Review of Economics and Finance*, 2026 (ABDC-A)
 - [Nearing National Boundaries and Narrowing Gender Divides: Addressing Female Diaspora and Development for Europe and Central Asia \(ECA\)](#) *Economic Change and Restructuring*, 2026 (ABDC-B)
 - [Is there any Dichotomy between India's new FTA strategy and its Trade policy?](#) *Economic and Political Weekly*, 2022 (ABDC-B)
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BOOK CHAPTERS & OTHER SCHOLARLY OUTPUTS

- [Use of Computable General Equilibrium Modelling for Energy Policy Analysis](#). *Book Chapter, Energy Crisis in Indian Sub-continent: Some Emerging Issues*, Routledge, 2025
 - [Desalination of ocean water: How far does it contribute to the blue economy?](#) *Book Chapter, The Blue Economy: An Asian Perspective*. Springer Nature, 2022
 - [Reinvigorating Green Bond as an Alternative Energy Investment amidst Foreseeable Funding Crisis due to the Great Lockdown](#) *Conference Proceedings, Doctoral Symposium 2020, IIM-Kozhikode*
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OP-EDs & PUBLIC ENGAGEMENT

- [The Missing Measure in India's Magnet Mission](#)

Hindu, Sep 21, 2026

- [Europe's India Strategy Cannot End at the Border: The CBAM Trade-Off](#) *The Europe India Journal, Aug 28, 2026*
- [Will CBAM undercut gains from the India-EU trade pact](#) *Ideas for India, Aug 17, 2026*
- [When the Energy Transition Stops at the Kitchen Door](#) *The Telegraph, August 12, 2026*
- [Bengal's Chance to Plant a New Tree](#) *The Statesman, Jul 03, 2026*
- [Critical minerals and dependence on China](#) *Hindu Businessline, Jun 27, 2026*
- [The climate promise that won't survive geopolitics](#) *Hindustan Times, Jun 05, 2026*
- [Find the Hidden Reserves](#) *The Telegraph, Feb 16, 2026*
- [India's carbon sink is weakening — climate policy can no longer ignore it](#) *The Indian Express, Nov 25, 2025*
- [Why Bengal, Odisha should create an eastern symphony](#) *Statesman, Jun 4, 2025*
- [How India could counter the CBAM](#) *Hindu, Nov 20, 2024*
- [How to counter EU's carbon border adjustment mechanism at the COPs](#) *Sunday Guardian, Nov 17, 2024*

INVITED TALKS, TRAININGS & CONFERENCES

Invited Talks & Trainings

- As a Session Chair on *Business, Technology, and Hospitality for a Sustainable Future* at the **Quest International Conference** *Kathmandu, Nepal*
1-2 May 2026
- As a Guest Lecturer on *Climate Policy in Practice: How Economists Use Models to Shape Trade and Climate Decisions* (On-line) for **Sarla Anil Modi School of Economics, NMIMS University**, Mumbai. *(Online)*
11 Apr 2026
- As Resource Person for *Input-Output Economics, Social Accounting Matrix, and Applications in Policy Modelling* workshop at **University of Kalyani**, West Bengal, India. *Kalyani, West Bengal*
29 Dec 2025
- As an Invited Speaker at **India Foundation** organized Roundtable Discussion at the India Habitat Centre on India's Critical Mineral Pathway. *New Delhi*
12 Dec 2025
- As Resource Person for Input-Output Training workshop for Maharashtra State government officials on the newly constructed Maharashtra Supply Use Table at **Gokhale Institute of Politics and Economics (GIPE)** *Pune, Maharashtra*
16-20 Oct 2023
- As Resource Person for Online methodology training workshop on the *Application of Input-Output Analysis in Economics Research* for the masters and PhD students of the **Indian Institute of Foreign Trade (IIFT)** *(Online)*
21-29 Sep 2021

Conference Presentations

- 35th Annual Conference on Contemporary Issues in Development Economics at Department of Economics, **Jadavpur University** *Kolkata on 6-8 Jan 2026.*

20 th East Asia Economic Association (EAEA) Conference , ADB Session on Glacial Melting	<i>Manila, Philippines on 8-9 Nov 2025.</i>
29 th International Input-Output Association (HIOA) Conference and 11th Edition of the International School of the Input-Output Analysis (ISIOA)	<i>Alghero, Sardinia, Italy from 25-30 Jun 2023.</i>
30 th Annual Conference on Contemporary Issues on Development Economics at Jadavpur University	<i>Kolkata on 27-29 Dec 2022</i>
2 nd Biennial Conference on Development at Indira Gandhi Institute of Development Research (IGIDR)	<i>Mumbai on 21-23 Dec 2022</i>
Doctoral Symposium 2020 at the Indian Institute of Management Kozhikode (IIM-K)	<i>(Online) on 10-11 Dec 2020</i>
23 rd GTAP Annual Conference on Global Economic Analysis at Center for Global Trade Analysis, Purdue University	<i>(Online) on 17-19 Jun 2020</i>
3 rd International Conference on Economics and Finance at Nepal Rashtra Bank (NRB)	<i>Kathmandu, Nepal on 28-29 Feb 2020</i>
5 th SANEM Annual Economists Conference (SAEC) at South Asia Network on Economic Modelling (SANEM)	<i>Dhaka, Bangladesh on 02-03 Feb 2020</i>
3 rd International Conference on Issues in Economic Theory and Policy at Economics Department, Presidency University	<i>Kolkata on 26-27 Dec 2019</i>
6 th IIFT Conference on Empirical Issues in International Trade & Finance at Indian Institute of Foreign Trade	<i>New Delhi on 13-14 Dec 2018</i>
Conversations on Research (CoRe): IGIDR PhD Colloquium at Indira Gandhi Institute of Development Research ,	<i>Mumbai on 13-16 Nov 2018</i>
6 th International Conference on WTO, Trade and Agriculture at Centre for WTO Studies, Indian Institute of Foreign Trade	<i>New Delhi on 11-12 Oct 2018</i>
28 th Annual Conference on Contemporary Issues in Development Economics at Department of Economics, Jadavpur University	<i>Kolkata on 21-22 Dec 2017</i>
One Day Research Scholar Workshop on Economics at the Department of Economics, University of Kalyani	<i>Kalyani, West Bengal on 28 Feb 2019</i>
2nd Research Scholars' Workshop at the Department of Economics and Politics, Visva Bharati	<i>Bolpur, West Bengal on 16 Mar 2018</i>
