



Universiteit
Leiden
The Netherlands



ASIAN DEVELOPMENT BANK



GLOBTAXGOV

A NEW MODEL OF GLOBAL GOVERNANCE IN INTERNATIONAL TAX LAW MAKING



Cofinanciado por
la Unión Europea



Impact of Carbon Border Adjustment Mechanism (CBAM) and AI on Sustainable Development in Asia

Workshop 1-2 October

Online

On 1 and 2 October, Sandeep Bhattacharya from the Asian Development Bank (ADB) together with Irma Mosquera Valderrama ([GLOBTAXGOV](#) Project at the Leiden Law School -Leiden University the Netherlands), Suranjali Tandon (National Institute of Public Finance and Policy, New Delhi, India), Marta Villar ([DIGICCTAX](#) G20/2-05 San Pablo CEU University, Spain) and Mahmoud Abdellatif (Qatar University) organize an online (via zoom) workshop on The impact of CBAM and AI on Sustainable Development in Asia.

Date and Time

Leiden, The Netherlands: First day (1 October) from 10:00-13:00 p.m. and Second day (2 October) from 9:00-12:00 Time zone: Central European Summer Time CEST (Amsterdam, Berlin, Paris)

Manila, Philippines: First day (1 October) from 16:00-19:00 p.m. and Second day (2 October) from 15:00-18:00 p.m.

Who should attend?

This workshop is addressed to academics, including junior and senior researchers, government officials, policy makers (EU, regional and international organizations), among others.

Link to registration [here](#)

Registration is free.

Venue

Online via ZOOM.

When registered, you will receive the zoom link.

Moderator

Irma Mosquera Valderrama, is Full Professor Tax Governance at Leiden Law School (Leiden University), the Netherlands. She is also the EU [Jean Monnet](#) Chair Holder on the topic EU Tax Governance ([EUTAXGOV](#)), and Lead Researcher of the [European Research Council](#) (ERC) Funded Project that investigates Global Tax Governance ([GLOBTAXGOV](#)).

Contact details: Email i.j.mosquera.valderrama@law.leidenuniv.nl

Background

Carbon border adjustment mechanism is a policy tool that the EU is using to ensure that trade with EU complies with its internal standards on emissions. That is, emissions embedded in imports are capped and priced implicitly equivalent to the EU. While in its first phase it applies to six sectors, over time the scope of the measure will expand. This is expected to have an impact on developing countries that export products such as iron and steel, cement, aluminum and fertilizers to the EU. Not all exporters have similar emissions standards and pricing mechanisms. While the measure is a step in the right direction, it does not take into account different levels of development and pace of decarbonisation. CBAM will impose costs of compliance on exporters from developing countries and in many cases render them uncompetitive.

While CBAM applies to goods exports, there is an interlinkage between the technological advancements and carbon emissions. To run complex computational models would require more energy and this would mean that unless countries meet their energy requirements from renewables, the technological advancements including trade of bitcoins would lead to higher emissions. A more important point to consider is that data centers are located in United States (3736) and Europe (3017). Thus it is important to explore the spatial contribution to the emissions. Export of digital services also contributes to emissions and it is [estimated](#) that at the end of the decade 2.5 billion tonnes will be emitted by the data centers. A large contribution to this will be from the big tech companies. As per another estimate data centers currently contribute 2% of GHG emissions. Their contribution is therefore not insignificant. Thus even as EU plans to impose an emission standard for goods trade where CBAM certificates are priced equivalent to the emission trading system, such emissions that are generated from services also need thought as countries and regions plan digitalization.

This workshop wants to address these challenges with a focus on ADB Member Countries. The first day of the workshop will focus on the understanding of the CBAM, some ADB countries practices, and an assessment on whether the CBAM will be effective to cut carbon emissions. In order to do that, the first day will provide a multidisciplinary perspective from trade, economy, tax and investment.

The second day of the workshop will address the challenges of ADB countries in achieving a sustainable environmental policy in light of the AI development and the growing digital transformation in Asia. The main question addressed will be how to reduce carbon emissions from the use of data centers? What are the obstacles, challenges and opportunities for ADB countries. Finally this day will conclude with a proposal for a Sustainable Green AI adoption policy for all countries.

Several authors from Asian Development Bank Member countries in Asia and Europe have been invited to present their papers on topics such CBAM, AI, Environmental Sustainable Development, Regional Frameworks, among others. This workshop is also organized in the framework of the Strategic Partnership between Leiden University and ADB. More information on this partnership available [here](#).

Programme

Each presentation will have 15-20 minutes followed by 15-20 minutes Q&A

First day 1 October

10:00-10:15 a.m. CEST Welcome and Introduction by Sandeep Bhattacharya ADB and Irma Mosquera Leiden University

16:00-16:15 p.m. Manila time

10:15-11:05 a.m. CEST CBAM: EU and Asia Perspective

16:15-17:05 p.m. Manila time

Rita Szudoczky CBAM EU perspective -Institute for Austrian and International Tax Law, WU Vienna University

Suranjali Tandon CBAM – Asia perspective National Institute of Public Finance and Policy, India ([slides](#))

Anna Marhold EU unilateral policies and the Global South: CBAM as a double-edged sword - Leiden Law School ([slides](#))

Additional reading

Suranjali Tandon [Tax, Trade, and Investment for Green Transition](#)

11:05-11:55 a.m. CEST Response ADB Member Countries and CBAM Readiness

17:05-17:55 p.m. Manila time

Hadi Setiawan, Indonesia DGEFS, MoF

Ulmas Jurayev, Uzbekistan MoF/Tax Policy([slides](#))

11:55-12:10 a.m. CEST Coffee Break

17:55-18: 10 p.m. Manila time

12:10-13:00 Measuring implementation CBAM: Case studies

18:10-19:00 p.m. Manila time

Neil Foster-McGregor [A Computable General Equilibrium Analysis of Carbon Pricing in Asian Economies](#) Asian Development Bank

Nadiya Mankovska Case Study Kazakhstan DIW Econ GmbH

Additional Reading

[European Union Carbon Border Adjustment Mechanism: Economic Impact and Implications for Asia](#)

Second day -2 October

9:00-9:30 a.m. CEST The Green Transition: Challenges and opportunities

15:00-15:30 p.m. Manila time

Rik Rozendaal: [Market Power, Innovation, and the Green Transition](#)
Leiden Law School ([slides](#))

Regina Coeli Tan [Three Strategies to Curb Artificial Intelligence's Insatiable Energy Appetite](#) Asian Development Bank ([slides](#))

Additional Reading:

[Energy and AI](#) by International Energy Agency

[Market Power, Innovation, and the Green Transition](#) by Rik Rozendaal

9:30-11:00 a.m. CEST How to reduce carbon emissions from the use of data centers?

15:30-17:00 p.m. Manila time

Jason Rudall A Call for Due Diligence and Environmental Impact Assessment in the Development of AI – Leiden Law School ([slides](#))

Javier Porras GHG Reduction policies: challenges and opportunities of a global approach - San Pablo CEU University

Mahmoud Abdellatif Data Center and Tax Incentives - Qatar University ([slides](#))

Additional Reading:

[Harnessing Digital Transformation for Good](#) (ADB May 2025);

[The State of Data Center Tax Incentives and Legislation in 2023](#) by Christopher Tozzi Data Center Knowledge

[7 Top Data Center Sustainability Strategies for 2025](#) by Christopher Tozzi Data Center Knowledge

[UN Environment Programme, 'AI has an environmental problem. Here's what the world can do about that'](#)

[World Economic Forum, 'How to manage AI's energy demand — today, tomorrow and in the future'](#)

[UNESCO Recommendation on the Ethics of AI](#), esp. paras 17 and 18

11:00-11:10 a.m. CEST Coffee Break

17:00-17:10 p.m. Manila time

11:10-12:00 a.m. CEST Sustainable Green AI and Taxation

17:10-18:00 p.m. Manila time

Francesco Ricciardi Senior Environment Specialist, ADB Office of Safeguards - Sustainable Green AI Adoption: A proposal ([slides](#))

Nate Vernon-Lin Economist in the Climate Policy Division of the Fiscal Affairs Department. Carbon Emissions from AI and the role of Tax Policy ([slides](#))

Reading

[How AI Can Drive Inclusive and Transparent Environmental Progress](#) by Francesco Ricciardi

[Green AI: Revolutionizing Sustainability in Artificial Intelligence for a Greener Future](#) by [E-SPIN](#)

12:00-12:10 a.m. CEST Closing words Sandeep Bhattacharya ADB and Irma Mosquera
Leiden University

18:00-18:10 p.m. Manila time