



Irving Fisher Committee on
Central Bank Statistics



Building a Primary Product-level Emissions Data Platform

Participant List (in alphabetical order)

Nadim Ahmad, OECD

Alessandra Alfieri, International Monetary Fund

Roberto Astolfi, OECD

Dr. Vincent Aussilloux, European Commission

Miranda Ballentine, formerly Clean Energy Buyers Association

Nuno Baptista, European Commission - Eurostat

Claudia Baranzelli, OECD

Dr. Annemarie Berkhout, De Nederlandsche Bank

Anouk Broshuis, De Nederlandsche Bank

Andres Casallas, WBCSD

Jerome Cazes, Carbones sur factures

Pratik Chatterjee, Tata Steel Nederland

Nathan Cole, CDP

Dr. Justin Dijk, De Nederlandsche Bank

Max Dovala, Chan Zuckerberg Initiative

Dr. Roel Drost, PwC

Dr. Patty Duijm, De Nederlandsche Bank

Hilary Eastman CFA, Confluence Advisory

Milan Elkerbout, Resources for the Future

Fabienne Fortanier, De Nederlandsche Bank

Antonius Gagern, Carbon to Sea Initiative

Rahul Garg, Aramco

Nicholas Gogerty, Carbonsig

Omid Harraf, Stanford Law School

Professor Thomas Heller, Stanford University

Professor Rutger Hoekstra, Institute of Environmental Science (CML), Leiden University

Lauren Holloway, E-ledgers Institute

Sophie Janaskie, Three Cairns Group

James Johnson, Capital+SAFI

Professor Robert S. Kaplan, Harvard Business School

Dr. Matthew Lawrenson, Tolam Earth, Inc.

Roy Linthorst, EY

Delia Meth-Cohn, Rethinking Removals

Julie Mulkerin Ortiz, Chevron

Dr. Gregory Norris, Massachusetts Institute of Technology

Dr. Jim Owens, Sesame Sustainability

Dr. Mauro Pisu, OECD

Salil Pradhan, Google X

Professor Karthik Ramanna, Blavatnik School of Government, Oxford University

Kitty Rang, De Nederlandsche Bank

Robert Ravas, Finance Executive

Alexandra Ringsby, Stanford University

Dr. Marc Roston, Stanford University

Abhishek Sankritik, Finternet Labs

Dr. Christian Schmieder, Bank for International Settlements

Siddharth Shetty, Finternet Labs

Dr. Vijay Swarup, Exxon Mobil Corporation

Aniek Sweijen, De Nederlandsche Bank

Natasha Thakoer, De Nederlandsche Bank

Larissa Van der Feen, WBCSD

J R Van Order, EY

Ulf von Kalckreuth, Deutsche Bundesbank

Dr. Pramod Varma, Finternet Labs

Dr. Michael Wang, Argonne National Laboratory

Caroline Willeke, European Central Bank

Dr. Maria Zuber, Massachusetts Institute of Technology

Participant Biographies (in alphabetical order)

Nadim Ahmad

Deputy Director, Centre for Entrepreneurship, SMEs, Regions and Cities (CFE), OECD

Nadim Ahmad is Deputy Director at the OECD Centre for Entrepreneurship, SMEs, Regions and Cities (CFE), helping to drive momentum in the development of integrated policies that look holistically at people, places, and firms, and, in doing so, better policies for better lives, and resilient and sustainable economic growth.

In his role, Mr Ahmad provides intellectual leadership and quality control to ensure that the OECD is at the forefront of policy thinking in the domains covered by CFE. Ahmad joined the OECD in 2000. Before joining CFE in 2020, he worked in the OECD's Statistics and Data Directorate, where he led international efforts to better account for globalisation, entrepreneurship and business performance, and, in particular, the role of MNEs and SMEs in global value chains, and the OECD's Directorate for Science Technology and Innovation, where he developed the OECD's first estimates of carbon dioxide emissions embodied in international trade.

Prior to joining the OECD, Mr Ahmad worked in the UK's office for National Statistics (1996-2000) and the UK's Ministry of Finance (1993-1996).

Alessandra Alfieri

Assistant Director, International Monetary Fund

Ms. Alessandra Alfieri is currently Assistant Director in the Statistics Department of the IMF, where she leads the program on environment and climate change statistics. Prior to joining the IMF, she worked for over 30 years at the United Nations Statistics Division, holding different positions in environment and economic statistics. She led the program on Environmental Economic Accounts at the United Nations where she oversaw the elevation of the System of Environmental Economic Accounting to a statistical standard and led the implementation program. She holds a PhD in statistics.

Roberto Astolfi

Head of the Environmental Economic Accounting Unit, Statistics and Data Directorate, OECD

Roberto Astolfi is currently Head of the Environmental Economic Accounting Unit within the Statistics and Data Directorate at the OECD. Roberto has served the Organisation for nearly twenty years, contributing across a broad spectrum of statistical domains, including business cycle analysis and various thematic accounts.

In his current role, he coordinates the methodological development and application of [Air Emission Accounts \(AEA\)](#), [Physical Energy Flow Accounts \(PEFA\)](#), and Asset Accounts for [Mineral and Energy Resources](#). He also serves as Chair of the UNCEEA-AREA C Working Group, which focuses on the implementation of global databases under the System of Environmental Economic Accounting (SEEA). As part of the revision of the SEEA Central Framework Handbook, he is Co-Chair of Task Team B, responsible for updating the chapter on Physical Flow Accounts.

Prior to joining the OECD, he worked as a researcher in the National Accounts Department at ISTAT (Italy) and as a Business Cycle Analyst at Eurostat (Luxembourg). He holds a PhD in Economic, Mathematical, and Statistical Analysis of Social Phenomena from the University of Rome “La Sapienza”. His principal research interests lie in the fields of time series analysis and forecasting, business cycle analysis, and applied macroeconomics.

Core projects relevant to this workshop include the development of global databases on [emissions](#) and [energy use](#) in the aviation transport sector, based on microdata derived from the geospatial tracking of aircraft and vessel movements worldwide. Another line of work focuses on estimating [emissions from maritime transport](#) linked to trade in energy products—particularly oil and gas—by analysing the movements of tankers from the ports of exporting countries to those of importing countries.

Dr. Vincent Aussilloux

Economist, DG Trade, European Commission

Since July 1, 2024, Vincent Aussilloux has been with the European Commission. He is once again serving as an economist at DG Trade, where he previously worked from 2004 to 2012.

After serving as Director of the Economics Department from 2014 to 2023, Vincent Aussilloux became Special Adviser to the Commissioner General of [France Stratégie](#), a public think tank responsible for anticipating major challenges for the country, evaluating public policies, informing public debate, and improving its quality.

A doctor of economics from the University of Montpellier, his work focuses particularly on European issues, international economics, structural reforms, industry, ecological transition, productivity, competitiveness, and social and societal challenges, including the education and training system as well as housing.

He is also President of the association [L'Abri Cocoon](#), which aims to improve the pathway from homelessness to housing, notably by providing intermediate housing solutions—such as shelters known as “Cocoons”—and by mobilizing citizens for solidarity, support, and reintegration.

Relevant publications:

- Pisani-Ferry J. and Mahfouz S. (2023), "[The economic implications of climate actions](#)".
- Will Martin (2023): [Border Carbon Adjustments: Should Production or Consumption be Taxed?](#) World Trade Review, 22, 395–407.
- [JRC Working Papers on Taxation & Structural Reforms](#) 2024-10, Joint Research Centre.

Miranda Ballentine

Former Founding Chief Executive Officer, Clean Energy Buyers Association

Miranda Ballentine is a corporate executive, CEO/founder, and board member. Ballentine brings 25 years of leadership experience in defense, energy, and retail, having served as a Pentagon executive overseeing energy security for the Nation's largest energy consumer as well as a global director for a Fortune #1 company.

Miranda was the [founding CEO](#) of the Clean Energy Buyers Alliance, where she created a community of energy customers to accelerate their influence in grid decarbonization. In 2014, Miranda was appointed by President Obama and confirmed by the U.S. Senate as the [4th Assistant Secretary of the Air Force \(Installations, Environment, & Energy\)](#). She was responsible for a \$9 billion energy budget and a \$4.5 billion infrastructure budget. Previously, Miranda was Director of Sustainability for Global Renewable Energy at Walmart, where she led a team in 15 countries toward Walmart's goal to be supplied by 100% renewable energy, identifying \$1+ billion in potential annual energy savings and 9 MMT of avoided GHG potential.

Ballentine has been recognized globally: 2023 inaugural [TIME100 CLIMATE list](#), World Economic Forum's [Young Global Leaders](#) in 2013, and 2020 [Woman of the Year](#) by the Women's Council on Environment and Energy. In 2016, Miranda was honored with the Air Force's highest civilian award, the Decoration for Exceptional Civilian Service to the United States Air Force. She holds a BS degree from Colorado State University and an MBA from George Washington University specializing in energy and environmental management. Miranda lives near Washington, DC with her husband and their daughters.

Nuno Baptista

Statistical Officer, European Commission - Eurostat

Nuno Baptista is a statistical officer in Eurostat. He holds a Master's degree in environmental engineering from the Higher Technical Institute in Lisbon and currently works on physical environmental accounts and environmental input-output modelling. He contributes to the production and dissemination of EU-wide accounts, including [quarterly air emissions accounts](#) and [greenhouse gas emission footprints](#). Previously, he worked as a consultant in the field of environmental accounts, namely on air emissions accounts, physical energy flow accounts, and economy-wide material flow accounts.

Claudia Baranzelli

Lead of Geospatial Analysis team. Centre for Entrepreneurship, SMEs, Regions and Cities (CFE), OECD

Claudia Baranzelli leads the Geospatial Analysis team at the OECD's Centre for Entrepreneurship, SMEs, Regions and Cities (CFE). She manages projects in various fields related to territorial development and leads the geospatial analytical work on energy and climate change.

In her current role, Claudia coordinates the [OECD Geospatial Lab](#), the OECD initiative to promote the widespread use of geospatial data analysis to support effective policies, currently focusing on 5 workstreams, from integrating statistics & EO data, to data fusion between public & private sources. She is also responsible for the city and local area sections of [the Regions, Cities and Local Areas Database](#) maintained and developed by OECD/CFE. She also leads the development of the [Local Data Portal](#), dedicated to the dissemination of local indicators on demography, environment, climate change, energy, transport, economy and labour, territorial organization, housing, services, and municipal finance.

Claudia previously worked at the Joint Research Centre of the European Commission (EC-JRC) as a project leader for the development of spatial analysis tools and indicators applied to land use and urban dynamics, energy, transport, and Africa-EU Strategic Corridors. She holds an MSc in Environmental Engineering and a PhD in Urban, Regional, and Environmental Planning.

Core projects relevant to this workshop:

- The chapter dedicated to environment and climate in the biennial flagship publication [Regions and Cities at a Glance](#), covering sub-national analysis on GHG emissions for various sectors and sustainable energy systems and industries in regions.
- The [Climate Monitor for Regions and Cities](#), included in the Local Data Portal, is specifically dedicated to indicators on climate change mitigation and climate-related hazards and vulnerability. Both the Local Data Portal and the Climate Monitor currently cover 41 countries.

Andres Casallas

Manager, Climate Accounting & Standards, World Business Council for Sustainable Development

Andres Casallas manages the work of the World Business Council for Sustainable Development (WBCSD) on corporate GHG accounting and voluntary net zero standards. In this role, he focuses on technical engagement with industry and practitioners to understand key priorities and challenges facing companies, channeling the progressive voice of business to inform the standards development and revision processes. Prior to joining WBCSD, Andres was the Associate Director and Practice Lead for Sustainable Finance at South Pole.

Jérôme Cazes

Founder, Carbones sur factures

Jérôme Cazes is the founder of Carbones sur factures, a group of volunteer experts promoting a “common”, the carbon economy, which is a universal approach to ESG emission management based on existing scientific and accounting standards. He founded and still runs a small digital company (MyCercle) and headed for 23 years a French services, credit insurance, and factoring group (Coface), which he expanded from 1 to 65 countries. Trained in statistics and public management, he initially worked for the French Ministries of Finance and Foreign Affairs.

Pratik Chatterjee

Deputy Chief Financial Officer and Chief of Transformation, Tata Steel Nederland

Pratik Chatterjee is currently the Deputy Chief Financial Officer and Chief of Transformation at Tata Steel, Netherlands. Until October 2024, Pratik was the Group Chief for TSL’s Financial Reporting and Group Financial Planning vertical at Tata Steel India, overseeing the groups Financial reporting and Financial Planning across the Tata Steel and its group companies.

With a professional career spanning over 28+ years with eminent Indian and multinational companies and joint ventures, of which 24+ years has been in the Tata Steel group, where he has held various management and senior leadership positions in areas of finance and commercial functions in Tata Steel and its various large Group Companies (subsidiaries and joint ventures).

As part of his journey in the steel sector, Pratik has not only worked in leadership positions in the integrated steel value chain but also in various leadership roles in few of its major downstream entities.

Nathan Cole

Head of Sustainable Business, CDP

Nathan leads CDP's strategy and evolution across key issue areas, including Sustainable Finance, Sustainable Procurement, SMEs, as well as CDP's evolving practice focusing on Plastics disclosure and wider Circular Economy principles. Previously, Nathan's role focused on supporting CDP disclosers with their reporting and cascading action on Scope 3 target setting and data collection from suppliers.

Max Dovala

Advisor, Chan Zuckerberg Initiative

Max has over a decade of experience helping philanthropies, corporations, and governments design and scale initiatives that deliver measurable social and environmental impact. As founder of Verdant and former principal at Redstone Strategy Group, he has helped philanthropies enter the climate field and build their grantmaking programs. He's attending this conference in his capacity advising the Chan Zuckerberg Initiative, where he is helping build out the grantmaking portfolio on open data architectures to enable carbon accounting. He lives in Austin, TX, where he enjoys traveling, hiking, and cooking with family and friends.

Relevant projects CZI is working on:

- Building the field of carbon accounting and driving increased adoption of carbon accounting practices, in partnership with E-ledgers Institute and others.
- Creating early components and pilots of open data architecture to house and share the primary data required for carbon accounting algorithms.

Dr. Roel Drost

Director Climate & Nature, PwC

Roel joined PwC as a director 'climate and reporting in 2022'. He has over 17 years of experience in sustainability and GHG accounting in particular. He worked on company GHG accounting, as well as product footprinting and lifecycle assessment. In the past, he also worked on 'activity-based footprinting', reconciling the worlds of product and company GHG accounting. Roel is a chemist, holds a PhD in physics, and holds a degree as 'Certified Management Accountant'. In his current role, he focuses on topics such as decarbonization, climate targets, GHG accounting, life cycle assessment, circular economy, and 'digital product passports under the EPSR'. Before joining PwC, Roel worked for Philips, EY, and Ecochain in various roles.

Relevant projects:

- [Activity based footprinting with Ecochain.](#)
- [Implementing scalable product passports.](#)

Dr. Patty Duijm

Head of Department Securities, Payments and Sustainability Statistics, De Nederlandsche Bank

Patty Duijm is Head of Department Securities, Sustainability and Payment Statistics at De Nederlandsche Bank (DNB). Before that, she was involved in setting up the [Data Science Hub](#) at DNB: a completely new team aiming to guide policymakers and supervisors to leverage their data more smartly by using new data techniques. In 2019, she completed her part-time PhD in Finance at the Rotterdam School of Management, Erasmus University in Rotterdam. During her PhD, she worked at the Financial Stability Division and the Supervisory Policy Division. Her research interests include the impact of policy reforms on financial institutions, sustainability, interconnectedness, and macroprudential risk.

Hilary Eastman, CFA

CEO & Founder, Confluence Advisory

Hilary is CEO & Founder of Confluence Advisory, a boutique strategic corporate reporting and communications consultancy founded on the belief that sustainability reporting can only be truly useful for companies and their investors when it focuses on what genuinely matters for the business. She is an expert in sustainability and sustainability reporting regulation and is a member of the UK Sustainability Disclosure Technical Advisory Committee (TAC), advising the UK government on the endorsement of the International Sustainability Standards Board's (ISSB) standards.

Before founding Confluence Advisory, she was a partner at KPMG UK, where she led the firm's ESG reporting practice, advising multinational companies on the implementation of voluntary and mandatory sustainability reporting. She also led PwC's global investor engagement programme and developed and implemented PwC UK's first stakeholder engagement strategy. She was on the staff of the International Accounting Standards Board, where she led the project to develop IFRS 13 Fair value measurement and developed and led the investor liaison programme.

She is chair of the board of CFA Society of the UK and a member of the Institute of Chartered Accountants of Scotland (ICAS) research panel.

Milan Elkerbout

Fellow, Director International Climate Policy Initiative, Resources for the Future

Milan Elkerbout is a fellow at RFF working on international climate policy and on European climate policies to decarbonize energy-intensive industries in particular. He has worked extensively on the European Union's emissions trading system (EU ETS), its various reforms, and its role in decarbonizing industry.

Elkerbout has led policy research on green steel, carbon capture and carbon removals, carbon leakage, climate clubs, as well as the EU's response to the COVID-19 pandemic, energy crisis, and the US Inflation Reduction Act. He has also written on industrial and innovation policy, the trade-climate policy nexus, and supranational governance, and has worked with policymakers, industry, civil society, and academia.

Elkerbout has a background in European political economy. Between 2014 and 2023, he was working for CEPS, a policy think tank in Brussels, as a research fellow and head of its climate program. From spring 2019, he spent a year as a visiting fellow at IVL Stockholm as part of the Mistra Carbon Exit research program.

Fabienne Fortanier

Director of Statistics and Data, De Nederlandsche Bank

Fabienne Fortanier is Director of Statistics and Data at the Dutch Central Bank. She is also the co-sponsor of the ESCB Expert Group on Climate Change and Statistics. Prior to joining the Dutch Central Bank, Fabienne worked at the OECD, ING Bank, and Statistics Netherlands. She holds a PhD from the University of Amsterdam, where she conducted research and taught on international business and economics, sustainability, and statistics.

Relevant projects:

- DNB [Sustainability Dutch financial sector | Dashboard | De Nederlandsche Bank](#)
- ECB [Climate change-related indicators](#)

Antonius Gagern

Executive Director, Carbon to Sea Initiative

Antonius is the Executive Director of Carbon to Sea, an international non-profit dedicated to evaluating and advancing ocean alkalinity enhancement (OAE) as a carbon dioxide removal (CDR) solution. Carbon to Sea was launched in 2022 as a spinout from the US-based philanthropic foundation Outlier Projects, where Antonius led the ocean CDR program. He previously directed ocean CDR work at CEA Consulting, advising leading philanthropies such as ClimateWorks on strategy and grantmaking in the field.

Before entering the CDR space, Antonius worked as a natural resource economist with a focus on tropical fisheries, marine conservation, and climate-smart agriculture. He holds degrees in Biology (BSc), Marine Ecology (MSc), and Natural Resource Economics (PhD).

[Carbon to Sea](#) has made >\$30M in grants to research institutes and private companies to evaluate the safety, efficiency, and measurability of OAE as a CDR pathway. Specifically, projects focused on efficiency and measurability (or more broadly, monitoring, reporting, verification - MRV) are relevant to the E-assets side of the conversation, these projects are listed on the [initiatives page](#). Two highlights worth checking out:

- A recent blog post by Carbon to Sea's MRV lead Anna Madlener: [Let Earth Move the Molecules: The Power of Open-System CDR and Implications for MRV](#).
- A recent [announcement about the release of our data management protocol](#), the first of its kind in the OAE space.

Rahul Garg

Climate Change Specialist, Aramco

Rahul Garg is an environmental engineer and a post-graduate in environmental planning with more than 23 years of experience in contemporary disciplines of sustainability and climate change. He is currently working in the capacity of a climate change strategist with the corporate sustainability department of Aramco, one of the world's largest integrated energy and chemicals companies. Prior to this, he worked with Rio Tinto and Ernst & Young, complementing his experience in both advisory and corporate profiles. Garg is passionate about advancing climate change accounting and incentivizing carbon inventory management.

Relevant resources: Case study of [product level carbon accounting for crude oil](#).

Nicholas Gogerty

Managing Director, CarbonSig

Nick Gogerty leads product-level carbon innovation at Carbon Finance Labs, part of Oxy Low Carbon Ventures at Occidental Petroleum—one of the world's largest energy companies actively transforming carbon management. His CarbonSig.com platform (patent pending since 2020) uses AI to enable real-time carbon accounting through supply chains, solving the exact challenge this conference addresses: creating trusted, granular emissions data that flows with products across borders. His E-liabilities v0.5 framework, detailed in comparative studies with GHG Protocol, shows how transaction-based accounting systems can deliver the HS6-to-HS10 level granularity the Data Hub envisions.

Nick's track record proves global-scale environmental data systems work. As co-founder of SolarCoin—the world's first blockchain renewable energy program—he deployed across 130 countries. His practical experience implementing distributed ledger systems earned UN COP22 recognition and MIT Solve awards, directly informing the tokenization and data architecture challenges facing the proposed emissions platform. His Carbon at Risk framework (currently under review by Nature) establishes standardized risk metrics essential for comparing emissions data quality across different product carbon removal instrument categories and timeframes.

His strategic insights span from advising the G20 on blockchain implications for sustainable finance to publishing in Duckbucks' "Web3 and Internet of Value" on monetary system design for central banks. As former Chief Analyst at Starlab, overseeing 70 PhD projects in AI and advanced sciences, Nick brings deep technical understanding to both the computational challenges and governance structures needed. Working within Occidental Petroleum's decarbonization efforts provides a crucial perspective on how major emitters can become data contributors, making him uniquely positioned to bridge the gap between industry reality and the ambitious vision of a universal product-level emissions data platform. In addition, he is a Sr. Advisor to Cambridge University's Governance Labs.

Omid Harraf

Non-Resident Fellow, Stanford Law School

Omid Harraf has worked at the intersection of consulting, corporate governance, securities and derivatives law, and investor protection. Most recently, Omid was the Public Company Accounting Oversight Board's (PCAOB) Chief of Staff. In this role, he advised the PCAOB Chair on all matters that come before the PCAOB, worked closely with Board Members and the staff, and assisted the Chair in her management of the organization.

Prior to joining the PCAOB, Omid served as the Deputy Chief Counsel in the Office of the Chief Accountant at the Securities and Exchange Commission (SEC). Prior to becoming the Deputy Chief Counsel, Omid served as Senior Special Counsel for legal policy in the SEC's Office of the General Counsel where he worked on enforcement and rulemaking matters.

Before joining the SEC, Omid practiced law at an international law firm, where he advised clients on corporate, securities, derivatives, and M&A matters. Previously, Omid has worked for the Commodity Futures Trading Commission as an advisor to Commissioner Bart Chilton, the U.S. Department of State, and two multinational organizations, and was a Peace Corps volunteer in Guinea.

Omid has taught several courses and lectured in law schools and business schools in the US and abroad, including on securities regulation, corporate transactions, structured products, and Valuation.

Omid holds a JD from American University Washington College of Law, where he graduated summa cum laude and Order of the Coif. Omid also holds a Master of Public Policy from American University, as well as a Master of Science in Economics and a Bachelor of Science in Physics from the University of Nevada, Reno.

Professor Thomas Heller

Director, Sustainable Finance Initiative, Stanford University

Thomas Heller is the Charles and Nadine Shelton Professor of International Legal Studies (emeritus) at Stanford University Law School. He also currently directs the Precourt Energy Institute's Sustainable Finance Initiative at Stanford's Doerr School of Sustainability. In 2009, Heller founded the Climate Policy Initiative, where he was Executive Director until 2018, and remains Senior Advisor and Board Chair. From January 2021, he has been Senior Director (Risk) at Climate Transition Analytics WTW—a global insurance and investment advisory company headquartered in London.

His research has focused on risk analytics, global energy use, international climate regimes, public finance and taxation, international technology investment, and the rule of law-- with particular attention to legal and economic structures in the developing world. Professor Heller has worked with the Intergovernmental Panel on Climate Change (1995-2003) and with the

European University Institute (Florence) as Jean Monnet Visiting Professor. At Stanford, he has also served as Deputy Director and Senior Fellow of the Freeman Spogli Institute for International Studies at Stanford University, and as Senior Fellow at the Woods Institute for the Environment.

Relevant publications:

- [Settling Climate Accounts: Navigating the Road to Net Zero](#) (with Alicia Seiger), 2021, Palgrave Macmillan Cham.
- [What's next after carbon accounting? Emissions liability Management](#) (with Marc Roston & Alicia Seiger), Oxford Open Climate Change, 2023, 3(1).

Rutger Hoekstra

Associate Professor, Institute of Environmental Science (CML), Leiden University

Rutger Hoekstra is an associate professor at the Institute of Environmental Sciences of Leiden University. He is the coordinator of [WISE Horizons](#), a European project to redesign the European Economy. He is the author of [Replacing GDP by 2030](#), which was published by Cambridge University Press in 2019. He has worked with/for the United Nations, World Bank, European Commission, OECD, European Central Bank, KPMG, Statistics Netherlands, and many other organizations.

He has worked on carbon footprints from statistical, corporate, and academic perspectives (at Statistics Netherlands, KPMG, and Leiden University, respectively). He is currently working with the IMF to extend the MARIO database with socio-economic and environmental extensions.

Lauren Holloway

Chief of Staff, E-ledgers Institute

Lauren Holloway is the Chief of Staff at the E-ledgers Institute and has been a core team member since its founding in November 2022. She oversees the Institute's day-to-day operations, leading strategic initiatives, managing the team, and coordinating stakeholder engagement.

Prior to joining the Institute, she held advisory roles at the Reserve Bank of New Zealand and the New Zealand Treasury, working on fiscal, economic, and regulatory issues. She also served as Chair of the Social Change Collective, a network supporting emerging changemakers, and was recognized with the University of Otago 20Twenties Young Alumni Award for her leadership during the COVID-19 pandemic.

Relevant publications:

- Karthik Ramanna, Lauren Holloway, Lara Panjkov, Chloe Wenye Zhang, and Robert S. Kaplan, [A Proto-Standard for Carbon Accounting and Auditing using the E-Liability Method](#) (v. 2) (August 20, 2025).
- Karthik Ramanna and Lauren Holloway. 2025. [“How BMW Started Auditing Emissions Across Its Supply Chain.”](#) Harvard Business Review Online (February 26, 2025).
- SUERF Policy Brief, [“Carbon accounting: policy solutions for an important information gap,”](#) No 1042, December 2024.

Sophie Janaskie

Principal, Three Cairns Group

Sophie Janaskie is a Principal at Three Cairns Group (3CG), where she works on initiatives to unlock scale in the carbon market. Her work focuses on developing the Atmospheric Impact Framework (AIF) to advance carbon credit fungibility and on strengthening carbon emissions disclosure to improve accountability and enable consistent comparability across markets.

Previously, Sophie was on the founding team at Commons, where she led the carbon strategy function, developed a consumer carbon footprint methodology rooted in LCA, EEIO, and GHG Protocol methods, launched a carbon credit purchasing program, and conducted the company’s annual corporate emissions inventory.

She holds a B.S. in Environmental Engineering and a Master of Environmental Management from Yale, and an MBA from Stanford.

James Johnson

Independent Board Member, Capital+SAFI

James studied Agricultural and Forest Sciences at Oxford University, completing an MSc in Agricultural Economics at London University. He first worked in Bolivia at the Centre of Tropical Agricultural Research (CIAT) supporting the development of the agroforestry research programme. James later worked in Brazil with the G7 Pilot Programme for the Conservation of the Amazon, and the Brazilian National Agricultural Research Centre, EMBRAPA. James worked with the University of Freiburg, carrying out research into community forestry initiatives in the Amazon regions of Peru, Bolivia, Ecuador, and Brazil.

Since then, James has worked as an independent consultant on sustainable land use practices, working in particular with indigenous communities across the Amazon region. James has developed a small family business, Canavalia Green Services, working with private farms and indigenous communities to promote the adoption of resilient landscapes in the region. James and his family manage a small farm “El Jichi” where they apply the principles of integrated land use. As an independent member of the board of Capital+SAFI, James contributes to the

development of sustainable, inclusive value chains in the agricultural sector in Bolivia, supporting the piloting of the E-ledger methodology on cattle farms.

Professor Robert S. Kaplan

Emeritus Professor of Leadership Development, Harvard Business School; Co-founder and Senior Fellow, E-ledgers Institute

Robert S. (Bob) Kaplan is Marvin Bower Professor of Leadership Development, Emeritus at the Harvard Business School. Kaplan co-developed both activity-based costing (ABC) and the Balanced Scorecard (BSC), recognized as seminal contributions to management theory and practice.

In 2021, Kaplan and Oxford University professor Karthik Ramanna, introduced the [E-liability carbon accounting method](#), the first system to measure corporate greenhouse gas emissions accurately across complex corporate supply chains. They co-founded the nonprofit [E-ledgers Institute](#) to apply their carbon accounting innovation for global decarbonization.

With HBS Professor, Michael Porter, he extended the theory and practice of Value Based Health Care, helping providers deliver superior patient outcomes at lower societal cost. Kaplan's time-driven activity-based costing has become the global standard for measuring health care costs.

Kaplan also helps entities create inclusive-growth regional ecosystems that generate strong financial returns while transforming the productivity and socio-economic status of residents in low-income communities around the world.

Kaplan, a member of the Accounting Hall of Fame, earned a BS & MS in Electrical Engineering from M.I.T., and a PhD in Operations Research from Cornell. He has authored or co-authored 14 books and more than 250 published papers.

Dr. Matthew Lawrenson

Chief Strategy Officer, Tolam Earth, Inc.

A seasoned deep-tech entrepreneur, Matthew previously co-founded an AI-driven invention company and personally created more than 200 patents, later acquired by Sony, Philips, and other global innovators. His experience spans the intersection of science, technology, and market design, from blockchain-based carbon tracking to lecturing on innovation at IMD, EPFL, and ETH Zurich.

Holding a PhD in Applied Physics and an MBA, Matthew bridges technical precision with strategic foresight. At [Tolam](#), he's helping shape the digital infrastructure for next-generation climate markets, systems built on transparency, interoperability, and verifiable trust.

Roy Linthorst

Partner, Climate Change and Sustainability Services, EY

Roy is a partner within EY climate change and sustainability services. He has been providing assurance on sustainability information, including GHG emissions, for over 15 years. He is very knowledgeable about the different reporting standards such as ESRS, ISSB, GRI, and the GHG Protocol. Roy leads EY's subject matter group on GHG accounting on a global level.

Relevant publications:

- [Sustainability reporting developments - Greenhouse Gas Protocol](#)
- [Transition plans are crucial to build resilient businesses](#)
- [Introduction to IFRS S1 and IFRS S2 Updated June 2025](#)
- [Greenhouse Gas Protocol \(GHGP\) Disclosure Checklist December 2024](#)

Delia Meth-Cohn

Co-founder, Rethinking Removals

Delia Meth-Cohn is the co-founder of [Rethinking Removals](#). She has a deep understanding of the carbon removals ecosystem and works with rule-setters to get clear standards and guidance on removals. She is currently involved in drafting ISO's corporate net zero standard and has recently launched an initiative to accelerate the development of credible and future-proofed carbon accounting standards to unlock corporate climate action, on both reduction and removals, at scale.

Delia worked with The Economist Group for 20 years and has decades of experience working with business, government, and civil society at the highest levels.

Julie Mulkerin Ortiz

Lead, Low Carbon & Carbon Accounting, Chevron

Julie is Lead, Carbon Accounting & Lower Carbon Strategy in Chevron's Corporate Strategy team. She leads cross-functional teams in setting external and internal incentives for driving a lower carbon future, like GHG targets, advancing carbon accounting, developing enterprise climate policy positions, and leading other strategic initiatives. She has been the lead author on five TCFD-aligned Climate Resilience Reports.

Julie also serves on the board of the International Emissions Trading Association and S&P Global's Meta Registry. In addition, she is Chevron's primary representative to the World Business Council for Sustainable Development and the Corporate Eco Forum.

Julie joined Chevron to work in environmental markets in 2008 after completing her MBA at the University of Southern California and working in agricultural commodity trading and for the government. She earned her BA in Spanish at University of California, Davis.

Relevant projects:

- <https://www.opengroup.org/openfootprint-forum>
- <https://www.carbon-transparency.org/pact-technology>
- <https://www.spglobal.com/commodity-insights/en/products-solutions/carbon-scenarios/meta-registry>
- <https://www.vakt.com/>
- <https://blockchainforenergy.net/>
- <https://www.theclimatewarehouse.org/work/climate-warehouse/>

Dr. Gregory Norris

Research Scientist, Massachusetts Institute of Technology

Gregory Norris directs SHINE (the Sustainability and Health Initiative for Netpositive Enterprise) in the Material Systems Laboratory at MIT, where he advances and applies methods for creating handprints: positive impacts outside the scope of the actor's footprint. He has also taught Life Cycle Assessment (LCA) and handprinting at Harvard for the past 25 years. Norris co-founded and is Director of Science at Earthster.org, a web-based platform for assessing and improving resource efficiency across supply chains and life cycles of products. In 2012, Time Magazine named his work on Handprints as one of "10 ideas that are changing your life."

Core projects relevant to this workshop include:

- [PAIA](#): Product Attribute-to-Impact Algorithms, a project that delivers the environmental footprint of information and communication technology (ICT) products. With participation of over 20 leading global ICT brands, the goal of PAIA is to enable the industry to perform quantitative and consistent environmental evaluations of their products.
- For the [International Civil Aviation Organization](#) (ICAO), MIT informs methods and data for identifying and evaluating Sustainable Aviation Fuels under ICAO's CORSIA framework. Reports about this work, which is funded by the US Federal Aviation Administration, are found [here](#).

Over the past 25 years, MIT has made leading contributions to the open data infrastructures that support sustainability assessments of products and organizations. This has included leadership of the United Nations Environment Program's Life Cycle Initiative with a focus on advancing availability, transparency, comparability, and exchange of life cycle inventory (LCI) data globally. Most recently, MIT chairs a newly forming working group within the American Center for Life Cycle Assessment focused on developing an open hierarchical taxonomy for goods and services to enable flexible and interoperable assessments of product and organizational sustainability.

Dr. Jim Owens

Head of Engineering, Sesame Sustainability

Jim Owens is Head of Engineering at [Sesame Sustainability](#), where he leads technical development of [Sesame One](#), an integrated energy transition intelligence platform that combines first-principles process modeling, life-cycle emissions analysis, techno-economic assessment, and optimization. He holds a PhD in Chemical Engineering from MIT, where he contributed to the academic foundations of Sesame's methodology during his doctoral research. Prior to his current role, Jim worked in R&D and refining at ExxonMobil and served as a research consultant.

Relevant Projects & Contributions:

- Contributor to the EFI's [Carbon Accounting Framework](#), which establishes principles for high-integrity, product-level emissions tracking.
- Leading carbon accounting case study modeling for HEFA (Hydroprocessed Esters and Fatty Acids) and AtJ (Alcohol-to-Jet) aviation fuel pathways, demonstrating primary data collection and cradle-to-gate emissions calculation methodologies for sustainable aviation fuels.
- Contributing author to forthcoming technical design papers on distributed ledger architectures for emissions data.

Jim's technical expertise spans chemical process simulation, cradle-to-gate emissions accounting, techno-economic analysis, and computational infrastructure for tracking embedded emissions across complex industrial supply chains.

Dr. Mauro Pisu

Senior Economist, Economics Department, OECD

Mauro Pisu is a Senior Economist in the Economics Department of the OECD. Currently, he leads and coordinates the work of the Economics Department on issues at the intersection of climate and economics, focusing on empirical research and policy-oriented analyses. Current projects focus on furthering the development and use of developing product-level carbon intensity metrics, quantifying carbon leakage risks, and assessing the effect of climate policies on firms' cost debt. At the OECD, he also worked on various country desks (Brazil, Costa Rica, Greece, Indonesia, Italy) and participated in various cross-country projects.

Before joining the OECD, he held positions as Research Economist at the National Bank of Belgium and Research Fellow at Leverhulme Centre for Research on Globalisation and Economic Policy at the University of Nottingham, working on applied international trade. He obtained his PhD in Economics from the University of Nottingham in 2005.

Salil Pradhan

Director, Google X

Salil Pradhan is a Director and Entrepreneur at X, Google's moonshot factory, with expertise in start-ups, cloud computing, SaaS, and venture capital. He has a strong background in product management, strategy, and mergers & acquisitions, and has invested in companies like MomentFeed and Chirp Microsystems.

Previously, Pradhan spent 10 years at Hewlett Packard (HP) in a variety of roles, including CTO of HP's Enterprise RFID/IOT business where he helped create and grow the nascent IOT solutions business to \$100m in revenue, and co-founding Tendril Software, Inc., which was later acquired by BEA/Webgain.

He serves on the Board of Momentfeed Inc., is a mentor at the Plug & Play Tech centre and Cincinnati-based Brandery, and an advisor to a number of tech startups. Pradhan is also an advisor to Washington DC based Govonomy, which helps technology startups grow into government markets. He has also served on the advisory boards of UCLA's WINMEC and UCSD's Center for Wireless Communications.

A founder of two startups, Pradhan's all-round experience as an entrepreneur, venture capitalist, product executive and corporate strategist makes him a sought-after panelist and judge at venture pitch events. He has been frequently quoted by leading publications. He has been issued 54 US patents, in areas related to sensors, IOT, and computer systems. He has an MS in Computer Science from Northeastern University in Boston and a B.E. (Computer Engineering) from the University of Pune, India.

Professor Karthik Ramanna

Professor of Business and Public Policy, University of Oxford's Blavatnik School of Government; Co-founder and Principal Investigator, E-ledgers Institute

Karthik Ramanna is Professor of Business and Public Policy at the University of Oxford's Blavatnik School of Government and a fellow at [St John's College](#). He teaches at the Blavatnik School on managing organisations in polarised times, which led to his 2024 book [The Age of Outrage](#).

An expert on business-government relations, sustainable capitalism, and corporate reporting and auditing, Professor Ramanna studies how organisations and leaders build trust with stakeholders. His scholarship has won numerous awards, including the *Journal of Accounting and Economics* Best Paper Prize, the Harvard Business Review McKinsey Award for "groundbreaking management thinking," and three times the international Case Centre's prizes for "outstanding case-writing," dubbed by the *Financial Times* as "the business school Oscars."

Professor Ramanna established the [Case Centre on Public Leadership](#) and the [Transformational Leadership Fellowship](#) at the School, the latter a bespoke, by-invitation programme for senior leaders looking to reimagine their public-service impact. In 2022, he co-founded the non-profit [E-ledgers Institute](#), where he serves as principal investigator, with a mission to drive decarbonisation processes through rigorous GHG accounting. From 2016 to 2023, he was director of the Blavatnik School's [Master of Public Policy](#) programme that has educated over a thousand public leaders from about 120 countries. From July 2023 to April 2025, Professor Ramanna was on partial public-service leave from Oxford to advise the US Public Company Accounting Oversight Board, an “auditor of auditors” in global markets.

Previously, Professor Ramanna taught at the Harvard Business School in both the MBA and senior executive-education programmes. He has a doctorate from MIT’s Sloan School of Management. He lives in Oxford with his husband, Jon, and they enjoy dinner parties and touring Caravaggios.

Robert Ravas

Finance Executive

Robert (Rob) Ravas was most recently the Special Adviser to former PCAOB Chair Erica Y. Williams, where he advised her on matters that came before the PCAOB Board. Previously, he was Special Adviser to former Acting PCAOB Chairperson Duane M. DesParte.

Before taking on the role of Special Adviser, he was an Associate Chief Auditor in the Office of the Chief Auditor (OCA), where he developed PCAOB professional standards, including auditing and quality control standards to be applied by the public accounting profession when performing audits of U.S. issuers and SEC-registered brokers and dealers. During his time working in OCA, he also provided feedback to project leaders at the Financial Accounting Standards Board regarding applying PCAOB auditing standards to their draft proposed accounting requirements. He joined the PCAOB in 2012 as an Assistant Chief Auditor in OCA.

Before joining the PCAOB, he worked for more than 14 years for a public accounting firm, spending most of his time auditing public companies in the manufacturing sector. His public accounting experience includes four years working on an international assignment in the Netherlands and Luxembourg. While on this assignment, he spent a significant amount of his time performing audits of a public steel company, including their accounting for carbon emissions credits.

Alexandra Ringsby

PhD Candidate, Department of Chemical Engineering, Stanford University

Alexandra (Lexi) Ringsby's research bridges materials science, carbon accounting, and systems design to strengthen how biomass supply chains and carbon-removal pathways are represented

in global decarbonization frameworks. She investigates the molecular and environmental factors controlling biochar durability and links these insights to standardized data and accounting architectures for tracking real-world emissions and removals.

Her recent work advances the Objective Atmospheric Basis (OAB) framework—an approach for consistent, flux-based assessment of carbon removal projects, designed to enable credible and interoperable accounting across markets and jurisdictions. Ultimately, she aims to align scientific understanding of carbon materials with institutional infrastructure for the long-term decarbonization of hard-to-abate sectors.

Relevant projects:

- [Do Oversimplified Durability Metrics Undervalue Biochar Carbon Dioxide Removal? \(Ringsby & Maher, Environmental Research Letters, 2025\)](#)
- [Sorption of Soil Carbon Dioxide by Biochar and Engineered Porous Carbons \(Ringsby, Ross & Maher, Environmental Science & Technology\)](#)
- An Objective Atmospheric Basis for Carbon Removal Accounting (in preparation)

Dr. Marc Roston

Senior Research Scholar, Stanford University

Marc Roston is a Senior Research Scholar at the Precourt Institute for Energy in the Stanford Doerr School of Sustainability, where he leads research efforts in carbon accounting and carbon markets, financial institution transitions, and climate-related insurance markets.

Prior to joining Stanford in 2020, Roston spent 25 years in the asset management industry, where he held senior investment positions ranging from quantitative equity to private equity and everything in between. Roston advises financial institutions large and small on a diverse range of investment activities, with a particular emphasis on the intersection of insurance, hedge funds, and private equity. He has served on the boards of public and private companies, as well as the investment committees of endowments and foundations.

Prior to forming his own investment and advisory firm, from 2004 to 2008, he was a Managing Director, chair of the investment committee, and head of risk management for a large alternative investment firm. In addition, he managed a financial services private equity fund where he launched several banks and insurance companies. Previously, he led equity strategies for the investment arm of a global consulting firm. He also managed asset allocation funds for the retirement plans, and developed a number of special situations investments. He began his career managing quantitative long/short equity for a major global bank.

Roston completed a PhD in Economics from the University of Chicago and a B.S. in Economics at Carnegie Mellon University.

Abhishek Sankritik

Director - Programs and Policy, Finternet Labs

Abhishek is a legal-tech policy practitioner focused on tokenization, digital public infrastructure, and high-integrity data systems for finance and sustainability. He leads policy and multi-stakeholder programs at Finternet Labs and has authored World Bank background work on standards for digital public infrastructure (DPI). His recent work bridges verifiable data, assurance, and market infrastructure—translating technical designs into implementable regulatory and governance frameworks. He has spoken on tokenized finance and policy at industry forums, including Solana APEX.

Core projects relevant to this workshop:

- World Bank background paper: [Digital Public Infrastructure—Setting Standards with the Hourglass Model](#) (2025).
- [Participation/speaking](#) at [Solana APEX](#) on tokenization & policy (panel with regulators and policy leaders).
- World Bank WDR 2025 seminar [speaker listing](#).

Dr. Christian Schmieder

Head of Operations, Monetary and Economic Department, Bank for International Settlements

Christian joined the Bank for International Settlements (BIS) in 2012, initially with the Secretariat of the Basel Committee on Banking Supervision, followed by a role with the Financial Stability Board, before assuming his current position as Head of Operations of the Monetary and Economic Department. Prior to this, Christian held positions as an Economist at the International Monetary Fund, the European Investment Bank, the Deutsche Bundesbank, and in the private sector. In recent years, he has represented the BIS in workstreams of the Irving Fisher Committee, the Financial Stability Board, G20 DGI-3, and the NGFS on climate risk-related issues.

Christian holds a PhD in business administration and has published numerous studies on a wide range of topics, including banking, financial stability, asset management, and climate risk matters.

Siddharth Shetty

CEO, Finternet Labs; former CTO, Sahamati

Siddharth designs and scales Digital Public Infrastructure (DPI) that empowers individuals and SMEs. He co-created the Finternet architecture and has led strategy and design for India's DEPA consent framework and the Account Aggregator (AA) ecosystem, advising regulators and governments globally. He has served as CTO of Sahamati (AA industry alliance) and is frequently invited to speak on DPI, open finance, and data governance.

Relevant projects:

- Finternet architecture and market-infrastructure vision ([BIS Working Paper 1178](#)).
- [Account Aggregator](#) / [DEPA](#) (open-finance data sharing)
- Speaker roles noting current position (CEO, Finternet Labs) and DPI focus ([World Bank WDR 2025 events page](#); [Point Zero Forum profile](#))

Dr. Vijay Swarup

Chief Climate Scientist, Exxon Mobil Corporation

Dr. Vijay Swarup currently oversees the corporation's strategy to reduce greenhouse gas emissions and address climate change. This includes climate policy and advocacy initiatives, along with the interplay between policy and the advancement and implementation of technology.

Swarup has been with ExxonMobil for over 30 years and has held a variety of leadership roles in both business and technology functions. From 2014-2022, he headed the research and development team, overseeing a research portfolio that focused on groundbreaking initiatives in biofuels, carbon capture, direct air capture, and hydrogen.

He has a BS degree in chemical engineering and chemistry from Purdue University and a PhD in chemical engineering from Rutgers University. He serves on the National Academies Board on Chemical Sciences Technology and the Rutgers Industrial Advisory Board.

Swarup previously served on the Advisory Board for the MIT Energy Initiative, Singapore Energy Center, Princeton Andlinger Center for Energy and Environment, India International Think Tank for Energy, and The Liberty Science Center.

Larissa van der Feen

Senior Associate, Partnership for Carbon Transparency, World Business Council for Sustainable Development

'You can't manage what you can't measure' is Larissa's personal guiding principle in her career. She is now the lead of the Partnership for Carbon Transparency (PACT) Methodology within the WBCSD climate team, where she works on improving the PACT's product carbon footprint methodology. She has worked with circularity indicators in WBCSD in the past, and is a Life Cycle Assessment practitioner by training. She loves to define what success looks like in sustainability and how that shapes our everyday decisions.

J R Van Order

Partner, Digital EHS and Sustainability Services, EY

J R works with corporate clients to select and implement digital solutions that enhance performance and manage risk across Environment, Health & Safety (EHS) and Sustainability domains.

With over 30 years of experience in the enterprise EHS & Sustainability software space, J R has held leadership roles in both major EHS consultancies and software firms. His diverse background in EHS consulting and software product management enables him to guide organizations through the business and technical complexities of planning, implementing, and operating transformational technology solutions.

Since joining Ernst & Young, J R has focused on helping clients address challenges at the intersection of EHS/Sustainability, operations, and technology (with a significant component focused on carbon footprints). He is a passionate advocate for operational sustainability and advancing industries toward meaningful, measurable impact.

J R currently resides in Den Haag, the Netherlands, and works with multinational clients across Europe and the MENA region.

Dr. Pramod Varma

Chief Architect, Finternet Labs; formerly Aadhaar, UPI & India Stack

Dr. Varma is a pioneering architect of India's DPI, serving as former Chief Architect of Aadhaar and India Stack, and currently CTO of EkStep. He co-founded FIDE (Foundation for Interoperability in Digital Economy) and co-created the Beckn protocol powering open commerce and mobility networks. He advises multiple public institutions and standard-setting efforts globally, and teaches widely on large-scale distributed systems and open digital infrastructure.

Relevant projects:

- EkStep/Sunbird DPI (education & skilling at population scale). See also [ITU bio overview](#) (DPI at population scale) and [Q&A on DPI architecture and lessons for finance](#) (Qorus/Infosys Finacle interview).
- India Stack / Aadhaar, UPI, DigiLocker (population-scale DPI).
- FIDE/Beckn for open, interoperable networks.

Ulf von Kalckreuth

Principal Advisor, Deutsche Bundesbank

Ulf is Principal Advisor in the DG Data and Statistics in the Deutsche Bundesbank, responsible for research coordination in the Directorate and topics in statistical concepts and international relations. He is a member of Scope 3 Technical Working Group of the Greenhouse Gas Protocol, the technical working group supporting the development of the E-liability

proto-standard for carbon accounting, the G20 Data Gaps Initiative Task Team, the NGFS Expert Network Research, and (until 04/2025 the ESCB Statistics Committee Expert Group on Climate Change Statistics).

His commitment to carbon accounting started in 2021, with a research paper published in 2025. The paper describes product-level carbon accounting as cumulative information processing driven by information exchange between producers. He shows that the system performance can be well described using the analytics of Input-Output economics, and that a system of product-level carbon content indicators will converge to the true values under rather general assumptions, even if the initial values are off the mark. Industry-level indicators may be used as initial values. Further work looks at aggregate indicators of carbon content and the carbon content of portfolios, from the perspective of statistics. He helped organise the 2024 Hamburg conference on carbon content measurement.

Earlier, Ulf directed the Corporate Balance Sheet Statistics and coordinated the implementation of an integrated micro-data based information and analysis system, designed to serve as a hub for micro-data in the Bundesbank – both externally and internally. In the Research Centre of the Deutsche Bundesbank, he set up the German PHF, a large-scale panel survey on household finance.

In 1998, Ulf entered the Deutsche Bundesbank, having completed his PhD studies at the University of Mannheim. Ten years later, he received a habilitation degree in Economics from the same university. Apart from carbon accounting, his past research involves theoretical and empirical work on micro-level carbon content, household and firm behavior, specifically issues related to corporate finance, household finance, investment, development, financial innovation, the distribution of income and wealth, as well as studies of the monetary transmission process.

Ulf lives in Frankfurt, Germany, with his wife and two daughters.

Dr. Michael Wang

Department Director, Argonne National Laboratory

[Dr. Michael Wang](#) is a Distinguished Fellow and the Director of the Life Cycle Analysis and Technology Assessment Department at Argonne National Laboratory. Dr. Wang leads the ongoing development of Argonne's [R&D GREET model for life cycle analysis](#) of transportation fuels, technologies, and energy systems (see greet.anl.gov for details). At present, there are more than 65,000 registered R&D GREET users globally. The R&D GREET model and its results have been used by agencies such as the California Air Resources Board, the U.S. Environmental Protection Agency, the U.S. Department of Agriculture, the International Civil Aviation Organization, and the fuel incentive provisions of the U.S. 2022 Inflation Reduction Act and the U.S. 2025 One Big Beautiful Bill Act. Besides, the model and results are used by automotive companies, energy companies, biofuel producers, and others to address energy and emission performance of their products and technologies.

Dr. Wang is a fellow of the Society of Automotive Engineers. He is on the editorial boards of four international journals. He has over 330 publications in the areas of transportation energy and environment effects.

Caroline Willeke

Deputy Director General, European Central Bank

Since the beginning of 2018, Caroline Willeke has held the position of Deputy Director General of the European Central Bank's Statistics Department. Previously, she was working in various managerial positions in the areas of Statistics and Economics at the European Central Bank. Her focus areas are macroeconomic statistics, surveys, and climate change data. Mrs Willeke holds a Ph.D. in Economics from the University of Cologne. She has been the Chair of various ESCB Working Groups (including co-chairing with Fabienne Fortanier the Statistics Committee Expert group on Climate Change Statistics) and a member of several European statistical bodies.

The ECB is, together with the national central banks of the ESCB, developing, compiling, and releasing [indicators on emissions](#) included in the financial portfolios of financial institutions.

Dr. Maria Zuber

Presidential Advisor for Science and Technology Policy and E.A. Griswold Professor of Geophysics, Massachusetts Institute of Technology

Maria T. Zuber is the E.A. Griswold Professor of Geophysics and Presidential Advisor for Science and Technology Policy at MIT. Zuber served as vice president for research from 2013 to 2024 and led the team that developed and provided oversight for MIT's [Climate Action Plan](#).

Zuber has been a leading figure in space exploration, playing key roles in scientific experiments for ten NASA missions and becoming the first woman to lead a NASA planetary mission. Zuber is also a member of the National Academy of Sciences, the American Philosophical Society, and the American Academy of Arts and Sciences. She served in key advisory roles to four U.S. Presidents, including chair of the National Science Board under President Trump from 2017-2018 co-chair of the President's Council of Advisors on Science and Technology by President Biden from 2021-2025. Beyond academia, Zuber serves as a non-executive director on the boards of Bank of America and Textron.

Zuber holds a B.A. in astronomy and geology from the University of Pennsylvania and a Sc.M. and Ph.D. in geophysics from Brown. Zuber also serves as Chair on the Board of Directors at the E-ledgers Institute.