Carbon content measurement for products, organisations and aggregates: creating a sound basis for decision making

A workshop organised by the
IMF, BIS/IFC, Eurostat, Deutsche Bundesbank, Central Bank of Chile
and the University of Oxford Blavatnik School of Government

Operating partner:
E-liability Institute
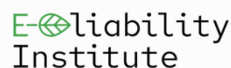
Hamburg, 21-23 February 2024, Deutsche Bundesbank Regional Office

Website and Registration: Carbon content measurement for products, organisations and aggregates

The carbon content of output is at the heart of sustainability policy, and rightly so – controlling and bringing down carbon emissions is equivalent to controlling and bringing down carbon content at all levels: country and sector, company and product. Meaningfully measuring carbon content is nothing less than a precondition for meaningful policy on climate change.

Important developments are taking place. Statisticians, ESG reporting standard setters and corporate accountants all over the world are adapting their tool-boxes to making reliable account of aggregate emissions. Emission statistics are also a priority area of the G20 Data Gaps Initiative. Moreover, as a foundation for sustainable finance, the disclosure of carbon emissions in corporate reports is becoming mandatory in the EU, subject to agreement on final standards in the near future. Ultimately, a universal carbon accounting system with specific rules for different sectors is taking shape.

On each of these levels – country, sector, company and product – important new data will be produced, and when taken together, these data will be a game-changer. There are important synergies between these levels, and common problems to be addressed. National or sectoral-level statistics can be used as the basis for estimations on a company level, while the micro data from companies, including information on products, will be an entirely new source of information for statistical work. Carbon accounting needs to evaluate input goods, and the data from statistics and company level reporting can be the key to success. At each of the three levels this requires that data producers and data users know what is available, that the concepts can be related to each other, and that data are accessible.

This is the time to take an encompassing view and exchange information on ongoing developments to explore a potential information interchange across levels, learn from each other and jointly look at the latest developments in this field.

The workshop will be organised around open issues, and the stakeholders on the different levels are represented by (1) Statisticians (eg. Input-Output Analysis, Emission Statistics, National Accountants), and (2) ESG standard setters and (3) corporate accountants, as well as the users of micro level data. How best learn from each other, how best to use the data generated at the other levels? Participants will receive up-to date information on the relevant developments. Experts will discuss possible solutions to open issues. Concrete questions will be formulated beforehand to encourage direct interaction with other stakeholders. What is the relevant scope of carbon content? How shall sectors for statistical and for corporate reporting be defined, how avoid double-counting? Who will report, what sort of data will be available, what data is needed at each level? How can micro data be collected, how make best use of it? Working on these issues requires close interaction among participants and an in-person-meeting, but the results will be shared and discussed with a broad international audience in virtual mode.

Universities, statistical offices, standard setters, central banks and international organisations have specific responsibilities and comparative advantages in improving data on carbon content. They have knowledge about and experience in data production, and they already co-operate with their national clients, including companies, and among each other. This workshop is about joining forces to develop new and vital data needed to address the challenges of mitigation and transition to a low carbon economy.
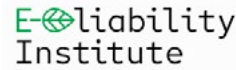
Leading questions for Statisticians:

(1) What is the scope of carbon content measurement needed? For companies, countries, sectors?

(2) Statistics and the micro level – what aggregate information does micro level measurement need, and how can aggregate measurement benefit from micro level disclosure?

(3) Who will report, what sort of data will be available, how can they be used ? How shall we form sectors, how avoid double counting?

(4) How can company level data be collected for statistics or for monitoring purposes? Is a centralised access point needed? What is the appropriate data format for what intended use?

Leading questions for standard setters and corporate accountants:

(1) What are the key carbon emission concepts and indicators needed for accountability?

(2) How do we drive the creation of more *primary* data on emissions and removals at the corporate and transaction levels? What is to be done in cases where primary information is missing?

(3) What measurement and data-exchange standards are needed if primary (rather than secondary) data is the objective? How shall we organise and make available existing information – both on the company and on the product level?

(4) What auditing standards and competencies are needed for a carbon-accounting system driven largely by primary data ?

Workshop on Carbon Content

Hamburg, Germany, 21−23.02.2024

Day One - 21.02.2024

9:00−9:55 a.m.	*Open space* **Start and welcome coffee**
9:55−10:00 a.m.	Welcome by **Robert Kirchner** and **Ulf von Kalckreuth** for the on-site participants

10:00−11:30 a.m.	*In-person, plenary*
	1) Levelling-Up on carbon accounting, reporting and statistics
	
	  − Statistics: **Stephan Moll,** Eurostat, Statistical Officer
	  − Reporting and Carbon Accounting: **Karthik Ramanna,**
	    University of Oxford, Professor of Business and Public Policy

11:30 a.m.	*Open space* **Lunch**
1:00−3:30 p.m.	*Hybrid: Plenary plus world-wide broadcast* **2)** Introduction and moderation **Robert Kirchner,** Deutsche Bundesbank, Deputy Director General Data and Statistics. − Welcome speech: **Bo Li,** International Monetary Fund, Deputy Managing Director **3)** Opening Panel: **Caroline Willeke,** European Central Bank, Deputy Director General Statistics, to moderate: **Overarching questions in accounting and statistics of climate change** The opening panel will set the scene for subsequent discussions and contribute to overarching questions like: What are the key information needs for analysis and policy? What kind of data are available or will become available in the near future? What are the most important and urgent gaps? How can they best be covered? What is needed for what purpose from whom? What are potential fields of synergies and collaboration?

	Statistics – **Jim Tebrake,** International Monetary Fund: "Aggregate data collections and the G20 DGI: where do we stand, where are we heading and how can we be of use?" – **Fabienne Fortanier,** De Nederlandsche Bank, Director Statistics and Chief Data Officer: "Finance and CO2-data: status quo, gaps and potentials" **Reporting Standards and Accounting** – **Kerstin Lopatta,** European Financial Reporting Advisory Group, Sustainability Reporting Board Vice Chair and University of Hamburg, Chair of Financial Accounting, Auditing and Sustainability: "Climate Reporting in Sustainability Reporting Standards" – **Alexander Bassen,** Greenhouse Gas Protocol, Chair Independent Standards Board and University of Hamburg, Chair of Capital Markets and Management: "GHG Protocol's standards update process" **Industrial companies:** – **Thomas Becker,** BMW, Vice President Sustainability, Mobility "What can and should corporate carbon accounting and reporting look like" **View of the organisers:** Karthik Ramanna: "What's coming up in the next three days?"
3:30–4:00 p.m.	*Open space* **Afternoon Tea**
4:00–5:30 p.m.	*In-person plenary* **4) Panel - Statistics** **What do statisticians offer, what do they need from accounting and reporting standard setters?** Moderation: **John Verrinder,** Eurostat, Head of Unit This session will explore the approaches taken in official statistics to measure carbon content and greenhouse gas emissions, including examples from country practices, and how detailed source data impact on statistics. Some key questions to be addressed will be: What are the key data sources and assumptions made? Where are the gaps to be addressed, and what plans are there to develop these statistics in the future? What is the potential of industry level data? How could statisticians benefit from developments in sustainability reporting and direct measurement? Contributions by: – **Stephan Moll,** Eurostat, Statistical Officer – **Bram Edens,** OECD, Senior Statistician – **Matthew Chambers,** Bureau of Economic Analysis, Research Statistician – **Ulf von Kalckreuth,** Deutsche Bundesbank, Principal Advisor
After 6:00 p.m.	Dinner (Off-Site)

	Day Two - 22.02.2024
From 9:00 a.m.	*Open space* **Start and welcome coffee**
09:20 a.m. − 12:00 p.m.	*In-person, plenary* **5) Direct and indirect emissions – company-level information management and input-output statistics. Accounting, recordkeeping, and auditing of emissions data in supply chains.** Moderation: **Tom Heller,** Stanford University, Professor for International Legal Studies How to account for the data as it moves through supply chains, including how to do product-level allocations of site and entity-level emissions? Do standard ABC-style allocations result in meaningful information on the company level? What is the contribution of industry- and regional-level emissions factors? How to audit the data as it is collected, allocated, aggregated, reported, and transferred? Does an accounting system that does all of the above actually motivate de-carbonisation decisions? Is such an accounting system cost-effective? How should carbon accounting data be distributed and disseminated? **Kick-off panellists:** – **Nadja Picard,** PricewaterhouseCoopers – **Jérôme Cazes,** Carbones sur Factures – **Bastian Distler,** SAP, Chief Product Owner for the Green Ledger and Transactional Carbon Accounting initiatives – **Guy Winter,** IDG Security, Consultant – **Alessandro Pistillo,** BASF, Director digital strategic projects
12:00 p.m.	*Open space* **Lunch**
1:00 − 3:00 p.m.	*Hybrid: Plenary plus world-wide broadcast* **6) Direct measurement of primary emissions data** Direct measurement on the company level and by other means, e.g. satellites Moderation: **Karthik Ramanna,** University of Oxford, Professor of Business and Public Policy **Kick-off panellists:** – **Piyush Jha,** Tata Steel, Climate and Sustainable Finance – **Julie Mulkerin Ortiz,** Chevron, General Manager, Decarbonization Strategy – **Teresa Landaverde Lorenzo,** Heidelberg Materials, Manager, CO_2 Strategy – **Luisa Teixeira,** Planet, Program Manager – **Chris Rezendes,** Context Labs BV, Chief Business Officer – **Yasjka Meijer,** European Space Agency
3:00 p.m.	*Open space* **Afternoon Tea**

3:30 – 6:00 p.m.	*In-person, plenary*
	7) Carbon data platforms
	Moderation: **Jim Tebrake,** International Monetary Fund
	
	Countries need to develop policies that support climate change mitigation and adaptation. Unfortunately, there is a lack of international comparable, high-quality data to guide this work. Investing in the development of high-quality estimates of greenhouse gas emissions integrated with economic information is urgently needed to support evidence-based climate change policies. Standards and agreed methodologies for firm-level, product level and national estimates of greenhouse gas emissions are essential for effective decision making. There is a growing set of useful estimates of GHG emissions. These estimates are disseminated on various levels of granularity, from firm level data to national aggregates. The estimates are derived using differing sources and methods, from direct measurement by firms, to a combination of observed activities and models employed by national statistical organizations. They are collected and disseminated through a variety of platforms in a variety of formats. This session will explore those platforms, how the data are disseminated and the interoperability of these data to provide a clear and comprehensive perspective on global emissions.
	
	Contributions by:
	   – **Niels Angel,** BMW, Business Owner Sustainability for Catena-X
	   – **Simone Kramer** NZPDU, Global Head of Product
	   – **Eduardo Javier Moral Prieto,** ESMA, Senior Policy Officer
	   – **Todd Edwards,** Global Climate Action Portal (GCAP), United Nations Framework Convention on Climate Change (UNFCCC), Team Lead – Tracking and Recognition
	   – **Amir Sokolowski,** Carbon Disclosure Project (CDP), Global Director Climate Change
	   – **John Turner,** XBRL International, CEO
	   – **Matt Gray,** Transition Zero (representing ClimateTRACE), CEO

After 6:00 p.m.	**Unallocated (free) time**

Day Three - 23.02.2024

From 9:30 a.m.	*Open space* **Start and welcome coffee**
10:00 – 11:30 a.m.	*In-person plenary* **8) Bringing the elements together** Best data for industry, statistics and decision makers. Identifying main messages from the conference for the closing panel. Moderation: **Camilo Valladeres,** Central Bank of Chile, Senior Economist, Statistics and Data Division **John Verrinder, Karthik Ramanna** and **Robert Kirchner,** to give their vision and ask participants for feedback and discussion to prepare the closing panel.
11:30 a.m.	*Open space* **Lunch**
1:00 – 2:50 p.m.	*Hybrid: Plenary plus world-wide broadcast* **9) Closing Panel: Summarising Results, and ways forward.** Moderation: **Ong Li Ming,** Bank Negara Malaysia, Director Department of Data Management and Statistics – **Karthik Ramanna,** University of Oxford, Professor of Business and Public Policy – **James Tebrake,** International Monetary Fund – **Robert Kirchner,** Deutsche Bundesbank, Deputy Director General Data and Statistics, Chair of the European Committee on Monetary, Financial and Balance of Payments Statistics (CMFB) and of the European Committee of Central Balance Sheet Data Offices (ECCBSO) – **Sven Gentner,** European Commission, Head of Unit for asset management in the DG for financial stability, financial services, and capital markets union – **Harold Pauwels,** Global Reporting Initiative, Director of Standards – **Georg Lanfermann,** President of Accounting Standards Committee of Germany (ASCG) – **Niels Angel,** BMW, Business Owner Sustainability for Catena-X **10)** Final Remarks **Christian Schmieder,** Bank for International Settlements, Head of MED Administration
After 3:00 p.m.	Social Programme: Miniatur Wunderland followed by a visit to Cotton-Club.de in the evening