

**Climate Change – Global Standardizations
Stocktaking, Gaps, Needs**



ISO's 'London Declaration' Commitment to UN-SDG 13 'Climate Action'



RIFS Potsdam Workshop 29/30 March 2023

Programme

Abstracts

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Agenda March 29

- **Welcome: Mark Lawrence**
- **Agenda and Introduction: Eberhard Seifert**

I. Achievements of Standards

Session 1:

GHG assessment and verification systems: origin, update, perspectives of the basic ISO Standard 1406x series

- **Romain Poivet** / World Benchmarking Alliance/France:
Quantification and reporting of GHG emissions and removals at the organization level
- **Daniele Pernigotti** / Amministratore Unico Venezia:
Carbon footprint of product and GHG verification and accreditation system.

Chair: Eberhard Seifert / RIFS

COFFEE BREAK

II. Standards under Development

Session 2:

'Carbon Neutrality' and 'Net Zero'

- **Burkhard Huckestein** / EPA:
The path to GHG-neutral Organizations - Stages and Challenges
- **Jürgen Giegrich** / independent expert:
5 Challenges to declare Carbon Neutrality for products
- **Massamba Thiolyé** / UNFCCC:
Forward looking standards for a net zero world
- **Daniel Scholz** / FutureCamp Climate: user view to 'Corporate Net-Zero'

Chair: Hanna Schreiber / Environment Agency Austria

Lunch

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Session 3:

,Avoided Emissions' What is the rational, purpose and benefit?

- **Johannes Auer** / Siemens Germany: Carbon FootPrint and GHG emission reductions/avoided emissions from electric products and systems
- **Romain Poivet** / World Benchmarking Alliance: Avoided emissions: AMD to ISO 14064-1
- **Eva Schmincke** / EPD Expert construction sector: "Chain of custody models" and avoided emissions for construction products.

Chair: Peter Saling / BASF-Germany

COFFEE BREAK

III A. Further Activities / Guidelines / Research

Session 4:

- **Christiane Textor** / DLR-German Unit IPCC: Radiative Forcing Management
- **Till Strunge** / RIFS: Utilization of Carbon Dioxide - Guidelines for CCU
- **William Lamb** / Mercator Institute: Global assessment of Carbon Dioxide Removals

Chair: Charlotte Unger / RIFS

III B: New Proposals / Regulation

Session 5:

- **Romain Poivet** / World Benchmarking Alliance/France: Sectoral decarbonization plans
- **Daniele Pernigotti** / Amministratore Unico Venezia: Land agronomic management
- **Ruth Weber** / Humboldt Universität/Berlin EU Regulation framework on CCU and CCS

Chair: Daniele Pernigotti / Amministratore Unico Venezia

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IV. Climate Change and Finance Sector

Session 6

Investments - Taxonomy - Sustainable Finance

- **Massamba Thioyé** / UNFCCC-Secretariat: Framework for assessing and reporting the climate contribution of investments and other financing activities (ISO 14097)

- **Beate Hollweg** / European Environmental Agency: European Sustainability Reporting Standards within International Standard Setting – State, Outlook & Gap Analysis, Assessment

- **Franz Knecht** / Connexis/CH: Sustainable Finance – Objectives, Work Program, Status, Outlook

Chair: David Ryfisch / Germanwatch

COFFEE BREAK

V. Challenges, Gaps and Needs

Session 7:

Politics - Law – Governance

- **Burkhard Huckestein** / EPA/Germany: Standardization and Regulation in the Climate Regime – Perspectives and Contributions of Stakeholders

- **Charlotte Unger** / RIFS: Global climate policy, climate clubs and the 'new' appeal of climate standards

- **Dana Ruddigkeit** / EPA/Germany: Function of standardization for International Climate and Environment Governance

Chair: Jürgen Giegrich / independent expert

LUNCH

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PIK Address:

Prof. Dr. Elmar Kriegler / Potsdam Institute for Climate Impact Research:

IPCC mitigation scenarios for transition pathways and the challenges for the economy and the finance sector

Co-chair of the Transformation Pathways Research Department at PIK and lead author of the IPCC Fifth and Sixth Assessment Reports (Working Group 3) as well as of the chapter on 1.5°C mitigation pathways in the IPCC Special Report on 1.5°C Global Warming:

COFFEE BREAK

DIN Report:

London Declaration Action Plan – Gaps and Needs

Jörg Megow / Project coordinator climate action at DIN:

*DIN on climate change and survey of climate related standards

*ISO London Declaration TMB Action Plan supporting the ISO climate commitment

Closing & Farewell

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Abstracts

(according to sessions)

Daniele Pernigotti

The ISO 14067 is the generic standard for the quantification of the carbon footprint of products and its results are often communicated according to ISO 14026. Another set of standards has been developed for the verification of GHG (ISO 14064-3) and for the accreditation (ISO 14065), with the purpose to have data recognized and comparable at the international level.

Burkhard Huckestein

Carbon Neutrality & Net Zero:

Net Zero is initially an approach for states whose ghg emissions are not higher than their ghg removals. Transferred to organizations, this approach refers to a corporate carbon footprint of zero and does not include offsetting. In contrast, carbon neutrality addresses entities that counterbalance its CCF by offsets. In practice, many companies prefer „net zero“ to conceal the poor environmental integrity of carbon credits used for offsets.

Jürgen Giegrich

5 Challenges to declare Carbon Neutrality for products

The ISO 1468 standard is drafted to give recommendations and guidance about how to achieve carbon neutrality for organisations and products. In the case of products ISO 14067 is the underlying GHG accounting standard for calculating the so-called carbon footprint of products. The presumably simple statement to reach a carbon footprint of zero for carbon neutrality is connected with a couple of challenges. First of all, the product must not be regarded as a physical good as such but with the function it fulfils. Then, the system behind the use of products is not confined to a specific country or area because the connected value chains are usually global. The timing of GHG emissions and removals associated with a product can be instantaneous but also spread over long periods of time. Doubts might occur about how bio-based material in products can influence carbon neutrality claims. Finally, who is allowed to claim carbon neutrality for a product while being whether close to consumption or in an early stage of the value chain. Short spotlights are directed on these challenges when trying to make a product carbon neutral.

Massamba Thioyé

Forward looking standard for a net zero world

The Net-Zero guidelines which is expected to become an ISO standard aims to drive the transition from voluntary governance of net zero to regulated net zero governance. Indeed, voluntary efforts alone cannot deliver the progress needed to reach net zero and standards have a crucial role to play in the evolving regulatory framework needed to operationalize net zero governance. It is critical that operationalizing the net zero governance does not lead to a drop in integrity and ambition.

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Daniel Scholz

As short intervention, Daniel will offer personal insights from his daily consultancy work with corporations on neutrality claims and certification issues at large. He will shortly feature problematic aspects in today's claims markets as he sees them, happy to offer some food for thought.

Eva Schmincke

"Chain of custody models" and avoided emissions for construction products. The report will deal with the ongoing work on standardization of "chain of custody models" in standards for sustainable construction with focus on PrEN 15941. This standard is one of a series of standards by CEN TC 350 dealing with sustainable construction and has a role for the CPR Acquis discussions. The standardization work is grappling with green washing at one hand and supporting the transformation of industry towards decarbonization on the other.

Christiane Textor

Despite the Paris Agreement's long-term global goal to limit warming to 1.5 degrees Celsius, greenhouse gases have continued to rise and global mean temperature increase is already at about 1.1 °C. Science has clearly shown that every bit of further warming matters to avoid dangerous climate change. Therefore, the benefits of mitigation options with short-term effects to shave peak warming are receiving increasing attention. This is mainly related to emissions reductions of short-lived climate forcers (SLCF, i.e., non-CO2 greenhouse gases and aerosols) and other radiative effects such as changes in surface albedo. When in a steady state on longer time scales, short-term effects become relevant to climate change, which usually refers to periods of a few decades at least. However, during the ISO discussions, maintaining a steady state on long time scales, i.e., at least decades to centuries, does not seem a feasible mitigation action to be managed and evaluated at organisation and project levels. In addition, the concept of "radiative forcing" (RF) that was proposed as an approach to aggregate the radiative effects of different forcers has been identified as inappropriate due to a lack of scientific robustness.

Till Strunge

Information-driven decision-making on investments in CO2 utilization technologies is key to achieve the goal of reaching net-zero greenhouse gas emissions by 2050 and needs to be based on solid scientific evidence. Ex-ante system analysis tools, among which techno-economic assessments (TEA) - evaluating the economic performance – and life cycle assessments (LCA) - evaluating the environmental performance – are needed to guide decision makers in this process. However, these tools can be very flexible in how they are applied, with the potential to produce significantly different results depending on how the boundaries and assumptions are defined. Built on ISO standards for generic LCAs, RIFS in cooperation with TU Berlin, the Global CO2 Initiative (University of Michigan) and RWTH Aachen developed guidance documents that further define assessment specifications for carbon capture and utilization which will be presented here.

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Ruth Weber

Regulating CCS and CDR as a challenge to law-making in the multi-level system
Ruth Weber will deal with CCS and CDR from a regulatory perspective questioning the functioning of law-making in the European multi-level system. First, she will start by clarifying the relationship between incentives and prohibitive regulation in the multi-level system with regards to CCS in particular. Secondly, she will take on a legal perspective on the regulatory conflicts resulting from this and analyse the solutions the law itself offers. Thirdly, she will look at specific problems of multi-level regulation arising from the newly proposed EU regulation for Certification of Carbon Removals for multi-level regulation. Her focus is thus the functionality of the European multi-level system in relation to climate protection law.

Massamba Thioyé

ISO 14097 standard: a framework for assessing and reporting the climate contribution of investments and other financing activities
To achieve the climate goals and maintain stability in the financial system, the world needs to transition to a low-carbon and climate-resilient economy. This requires a vast reallocation in the short, medium and long term of capital from high-carbon to low-carbon assets, assets with negative emissions and assets that are resilient. Financiers have a key role to play in this transformation because of their capability to influence the investment behaviour of their investees organizations. The 14097 ISO standard provide a framework for assessing and reporting climate contribution of investments and other financing activities.

Beate Hollweg

European Sustainability Reporting Standards within International Standard Setting Regimes - Assessing current initiatives
European Financial Reporting Advisory Group EFRAG -a private association established in 2001- extended its mission in 2022 following the new role assigned to EFRAG in the Corporate Sustainability Reporting Directive (CSRD), providing Technical Advice to the European Commission in the form of fully prepared draft EU Sustainability Reporting Standards. On November 2022, EFRAG submitted its first set of drafted horizontal European sustainability reporting standards -the ESRS- to the EU Commission who is assumed to publish the final versions of mandatory standards in June 2023. The first set includes 5 standards on environmental issues and 4 standards on social topics scoping on listed companies in Europe, with reaching 49,000 companies in Europe. The International Financial Reporting Standards (IFRS) -a private foundation- established its sustainability Standards Board (ISSB) in 2021 which hold its first board meeting on 20-21 July 2022 in Frankfurt. The ISSB's remit is to develop sustainability disclosure standards for capital markets.
The European Environment Agencies (EEA) is requested to issue an opinion on ESRS considering its usability for monitoring environmental progress towards the implementation of EU Green Deal and its related legislation and strategies. The sustainability transition program assesses European legislation by e.g., comparing different transparency regimes such as "double materiality" versus "risks and opportunities" for their effects.

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Franz Knecht

The insight about ISO's Technical Committee 322 Sustainable Finance, founded in 2018, comprises:

TC 322 Targets, structure, and cooperation with other sustainable finance initiatives, overview of published standards ISO 32210 Framework for organizations, and 32220 Basic Concepts and initiatives, information on running standardization projects ISO 32211 Sustainable Finance products and services and ISO 32219 Terminology, and outlook for 'Future Standards Development' topics on the radar by TC 322.

Burkhard Huckestein

Climate mitigation must be science based, policy effective and applicable for business. If it does not meet one of these, it fails. To be successful and effective, all three perspectives – science, policy and business – are needed. Good governance must carefully outbalance these perspectives by legal and institutional regulation that takes into account the outcome of proper standardization and implementation processes.

Dana Ruddigkeit

The presentation focuses on standardization from the perspective of global environmental governance. Some examples of ISO climate standardization (esp. ISO 14082 and ISO 14068) and their potential implications for international climate policies are shown. What are chances of private standardization for international climate politics? What are the pitfalls? How to improve the interplay of public policy and private standardization?

Elmar Kriegler

The presentation will give an overview on the assessment of climate change mitigation pathways in the IPCC's Sixth Assessment report (AR6). It will review key characteristics of pathways limiting warming to 1.5-2°C, including associated emissions reduction milestones and carbon dioxide removal, and the impact of delaying ambitious near term action. It will also look into investment needs and associated challenges to financing the transition towards net zero emissions.

Jörg Megow

Both, climate change adaption and climate change mitigation call for rapid, determined and simultaneous action in many sectors and areas. Standards can make an important contribution to achieving these goals. Hence, standards organizations around the world have made a pact to support the climate through the ISO London Declaration. The presentation will briefly highlight both, selected climate related actions at DIN (national) level as well as activities at ISO (international) level.