



SESSION 4: BEYOND THE “BALANCE”

Session 4 will focus on the questions and challenges related to “keeping 1.5°C in reach” given that we are close to exceeding this warming level and the option is to reach 1.5°C “from above”. Consequently, building on the preceding sessions, the following questions and issues will be discussed and addressed by the group:

- *When and how can it be agreed that the 1.5°C level has been exceeded?*
 - *Can agreement on “bending the temperature curve” be achieved?*
 - *If the global community aims to return to 1.5°C, do we have the right approach and policy framework for this? Do we need to reframe policies and frameworks when we aim for global net negative emissions (NNE)?*
 - *Will focus on global NNE shift focus away from immediate efforts (“moral hazard”)? Or can it help to accelerate near-term emission reductions?*
 - *Can a framework and accountability principles be established for achieving an approach to 1.5°C from above? What new governance challenges are we facing?*
 - *How can these challenges related to the overshoot (i.e., exceedance and return) be communicated?*
 - *What are the implications for European climate policies?*
- ☐ **Chair: Claudia Hitaj** - Ministry of the Environment, Climate and Biodiversity, Luxembourg
- ☐ **Lead: Jan Sigurd Fuglestad** - CICERO, Norway
- ☐ **Oliver Geden** - German institute for international security and affairs, Germany (Online)

WORKSHOP AGENDA

DAY ONE : 10 FEB 2026

10:00 - 11:00	Registration
11:00 - 11:00	Workshop Welcome and Introduction
11:30 - 13:00	SESSION 1: Pathways to limit warming to 1.5°C
13:00 - 12:00	LUNCH
14:00- 14:00	SESSION 2: A balance of GHG emissions and removals
16:00- 17:00	Discussion and Outcomes of day one

DAY TWO : 11 FEB 2026

09:00 - 10:00	Coffee
10:00 - 10:15	Review of Day 1
10:15 - 12:30	SESSION 3: Land and Non-land Based Removals
12:30 - 13:30	LUNCH
13:30- 15:30	SESSION 4: Beyond the “Balance”
15:30- 16:00	Outputs and messages for CNF 2026

Find the detailed
Workshop Agenda
on the JPI Climate
Website

Scan the QR Code
here to find the
Agenda **and more!**



EQUINOX WORKSHOP

10 - 11 FEBRUARY 2026
- BRUSSELS -

10 YEARS AFTER THE PARIS AGREEMENT



KEEPING 1.5 DEGREES CELSIUS IN REACH



MAGICA



Funded by
the European Union



INTRODUCTION TO THE EQUINOX WORKSHOP

TEN YEARS after the adoption of the Paris Agreement, limiting global warming to 1.5°C has become central to the articulation of for actions to address the drivers of climate change, as has been articulated in COP and CMA outcomes. The proximity of 1.5°C highlights the urgency to advance of actions to reduce GHG emissions and enhance removals to achieve to global balance specified in Paris Agreement.

This workshop is part of the roadmap for the **Climate Neutrality Forum 2026 (CNF2026)** which aims to explore how 1.5°C can be kept in reach including consideration of a limited overshoot. During the next two days, experts are invited to reflect on progress since the Paris Agreement and consider the information from the latest science and its implications for policies and actions.

The workshop will explore the following themes:

- Understanding warming of 1.5 °C
- Emissions pathways for key greenhouse gases consistent with 1.5 °C and 2 °C, including the scale of removals
- Reconciling analyses of terrestrial emissions and removals, including LULUCF trends
- The current state of play of carbon dioxide removals (CDR)

The outcomes of this workshop will feed into the CNF2026 held in May 2026,



FROM PARIS, TO BELEM, AND BEYOND...

The Temperature Goal of the Paris Agreement adopted in 2015 at COP21 is to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C. Subsequently, limiting warming to 1.5°C has become totemic for Parties to the Paris Agreement. The first Global stocktake under the Paris Agreement (GST1) in 2023 identified limiting global warming to 1.5°C as the North Star for climate action.

The outcome from COP30 in Belem in November 2025 noted that while the global transition towards low Greenhous Gas (GHG) emission, climate-resilient development is irreversible that both ambition and progress are insufficient. Parties reiterated their “resolve to pursue efforts to limit the temperature increase to 1.5 °C, they also acknowledged the possibility of an “overshoot” of 1.5⁰C but noted that such a temperature “overshoot” should be limited both in magnitude and duration. This serves to highlight the inadequacy of global mitigation actions to date along with the urgency to progress them.

An “Overshoot” conference was held in IIASA. Laxenburg, Austria, in 2025. This considered a range of topics arising from an Overshoot. These included highest possible mitigation ambition, Earth system responses, Adaptation, Losses and Damages, and challenges of communication of overshoot and related issues.

SESSION 1: PATHWAYS TO LIMIT WARMING TO 1.5°C

Global emissions scenarios describe the nature and pace of future transitions. As such, they have been critical to inform international policy and efforts to limit global warming to specific levels. Since the IPCC Sixth Assessment Report (AR6), the global mitigation landscape has changed substantially, yet many scenario-based benchmarks continue to rely on static assessments. The Scenario Compass Initiative (SCI) responds to this gap by providing a continuously updated, transparent, and curated collection of global emissions scenarios, combined with a systematic benchmarking framework that tracks how mitigation requirements evolve over time.

The 1.5°C target only remains within reach after considerable temperature overshoot of 0.1 to 0.2°C. Based on an analysis of the SCI scenario ensemble, including some 300 quality-controlled, up-to-date pathways, limiting warming to below 1.5°C while minimizing overshoot requires the following:

- Global GHG emissions reductions of around 60% by 2035, and 80-90% by 2050 compared to 2019,
- Global net-zero CO2 emissions between 2050 – 2060,
- Increase global deployment of non-biomass renewables by a factor of 2 to 3.5 by 2035,
- Reducing global coal use by 75-100%, oil use by 50-70% and gas by 40-90% by 2050,
- Cumulative net-negative emissions of 50-400 GtCO2 between 2025 and 2100 meeting feasibility and sustainability concerns.

Beyond these systematic benchmarks based on large scenario ensembles, individual scenario studies remain important to understand specific questions and conditionalities of reaching the 1.5 and 2°C targets. Examples include the role of lifestyles, circular economy strategies, phasing out fossil fuels, and specific considerations of equity.

- **Chair: Ole-Kristian Kvissel** - Norwegian Environment Agency, Norway & JPI Climate
- **Lead: Volker Krey** - International Institute for Applied Systems Analysis, Austria
- **Detlef van Vuuren** - PBL Netherlands Environmental Assessment Agency
- **Chris Smith** - International Institute for Applied Systems Analysis, Austria



SESSION 2: A BALANCE OF GHG EMISSIONS AND REMOVALS

The session will address the question of the Balance of GHG and further discuss the concept of NET ZERO. This includes the means to meet the Global Temperature Goal as set in Article 2 of the Paris Agreement. Presentations will address the need for durable balance and what that means, and the principle of “like to like” compensation between sources and sinks.

A second talk will focus on the current status of the ocean sinks and predictions thereof, and the question of how the Ocean capacity is expected to evolve over the next few decades, as well as the overall role of the Oceans as a passive sink. In a third presentation, the status of land sink will be presented including a consideration of the definition of land sink.

- **Chair: Frank McGovern** - Environmental Protection Agency, Ireland & JPI Climate
- **Lead: Myles Allen** - University of Oxford, UK
- **Peter Landschützer** - Flanders Marine Institute, Belgium
- **Pierre Friedlingstein** - University of Exeter/Global Carbon Project



SESSION 3: LAND AND NON-LAND BASED REMOVALS

This session will discuss recent advances and remaining challenges in carbon dioxide removal (CDR), with a focus on both land-based and non-land-based approaches. For land-based removals, the session will present progress in reconciling different analyses of terrestrial carbon sinks, alongside updated assessments of their scale, mitigation potential, and associated uncertainties. Discussions will also address key considerations related to costs, governance arrangements, and financing mechanisms, as well as European and global trends and future projections.

The session will further examine non-land-based removals, including emerging CDR technologies and storage options. A presentation will be given on the global and independent scientific assessment of CDR. The session will further explore their current and projected deployment potential, cost trajectories, and the governance and finance frameworks needed to support responsible scaling. Throughout, the session will situate both land-based and technological removals within broader European and global pathways toward net-zero and net-negative emissions.

- **Chair: Zoltán Rakonczay** - DG RTD, European Commission;
- **Lead: María José Sanz Sánchez** - Basque Centre for Climate Change, Spain
- **Sabine Fuss** – Potsdam Institute for Climate Impact Research, Germany
- **Giacomo Grassi** - Joint Research Centre (European Commission), Italy