

Eighteenth Meeting of the SBSTA Research Dialogue

Note by the Chair of the Subsidiary Body for Scientific and Technological Advice (SBSTA)

19 May 2026

This note provides information on the mandated eighteenth meeting of the SBSTA research dialogue. The event will aim to provide a platform for direct exchange between participants with experts from the research and science community on the latest science and research, and research capacity building needs, particularly for developing countries.

The meeting will take place on 9th of June 2026 from 9:00 to 13:00 (CEST) in New York plenary.

Further information relating to this event is available on the UNFCCC's event [website](#) and will be updated regularly.

I. Introduction

1. The research dialogue¹ provides a forum between the research and scientific community, Parties and non-Party stakeholders to convey latest scientific information, research findings and lessons learned in support of the implementation of the Convention and the Paris Agreement. The dialogue also discusses needs for research and research capacity building, particularly those of developing countries. The SBSTA, at its 62nd session, invited Parties and relevant organizations to submit views in possible themes for the eighteenth meeting of the research dialogue, to be held in conjunction with SBSTA 64, via the submission portal.² The SBSTA also requested its Chair to present, at the eighteenth research dialogue, how research gaps identified by the SBSTA since its 22nd session are being addressed by the research and scientific community.

2. The eighteenth meeting of the research dialogue will be held on 9th of June 2026 from 9:00 to 13:00 (CEST) during the Bonn climate conference. Thematic areas and the organization of the dialogue are based on submissions made by Parties and relevant organizations. The topics for the research dialogue will consist of advances in climate modelling and scenario development; sectoral transformation, particularly energy transition; and understanding climate risks, impacts and tipping points.

3. The dialogue will be held under the overall facilitation of the SBSTA Chair and consist of an opening segment, plenary session and three parallel breakout sessions. The breakout sessions will provide a platform for direct engagement and dialogue between Parties, other participants and the scientific community. The dialogue, as identified in the provisional agenda and annotations for SBSTA 64³, may inform the negotiations on research and systematic observation that will take place under SBSTA agenda item 3. I encourage Parties to utilize the information highlighted by this year's dialogue as well as other relevant events in their work, ensuring that climate policy and action are guided by the best available science.

II. Organization and themes

4. In response to the call for submissions referenced in paragraph 1 above, and as of 30 April 2026, 23 submissions⁴ were received: 12 from Parties, one from a United Nations (UN)

¹ See decisions 9/CP.11 and 16/CP.17.

² Submissions can be accessed through the submissions portal <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx> (search "research")

³ See <https://unfccc.int/documents/655980>

⁴ Alliance of Small Island States (AOSIS), Arab group, Brazil, Chile, European Union (EU), Iceland, India, Japan, Kenya, least developed countries (LDCs), Philippines, United Kingdom, World

entity and 10 from admitted non-governmental organizations (NGOs). A total of 66 topics were proposed, with synergies across some of the topics. Three themes have been identified for the eighteenth meeting of the research dialogue based on frequency of the themes listed in the submissions, consideration of topics discussed at previous dialogues and ongoing work and processes under the UNFCCC.

5. The eighteenth meeting of the research dialogue will feature plenary updates from relevant organization such as the Intergovernmental Panel on Climate Change (IPCC), World Meteorological Organization (WMO) and World Climate Research Programme (WCRP), and a presentation⁵ on how research needs identified by Parties since SBSTA 22 are being addressed by the research and scientific community. Thematic discussions through three thematic breakouts will facilitate in-depth discussions and exchange among participants and members of the research and scientific community.

1. Themes

6. In identifying topics for the research dialogue, initial synthesis involved the categorization of the proposed research topics, review of the topics against the scope of previous research dialogues, and synergies and complementarity with work under other UNFCCC workstreams. Following the synthesis, topics related to climate modelling and scenarios were reflected in fourteen (63 per cent) submissions, topics related to sectoral transformation were reflected in eight submissions (36 per cent), and topics related to climate hazards, risks and tipping points were reflected in nine submissions (41 per cent). Further, three submissions proposed topics related to Indigenous knowledge systems, to on assessing effectiveness of adaptation actions, two on greenhouse gas (GHG) emission budgets, particularly non-carbon dioxide (CO₂) emissions and two on attribution science. Other topics proposed by Parties include those related to carbon dioxide removal (CDR) and carbon capture, utilization and storage technologies (CCUS), application of Artificial Intelligence, early warning systems (EWS) and climate services, attribution science, research capacity needs of developing countries, and communicating climate science effectively.

7. Consideration was also made for proposed topics that were covered during immediate past research dialogues, emerging research, and wider processes and ongoing work under the UNFCCC. For instance, EWS and climate services were discussed at the 14th research dialogue and 2025 Earth Information Day, regional modelling at the 14th research dialogue, Indigenous knowledge systems at the 17th Research dialogue, CDR at the 14th, 15th and 17th research dialogue, non-CO₂ emissions at the 15th and 17th research dialogue, transition to low-emission and climate resilient development at the 16th research dialogue and attribution science at the 17th research dialogue. These topics may also be considered at future research dialogues, to consider new research and knowledge. Further, synergies between proposed topics and other ongoing work under the UNFCCC are also recognized. These include linkages between Indigenous knowledge and work under the Local Communities and Indigenous Peoples Platform (LCIPP), between response measures and the forum on the impact of the implementation of response measures, and between energy transition and decarbonization and the UAE Just Transition Work programme.

8. The themes of the eighteenth meeting of the research dialogue therefore comprise of:

- Advances in climate modelling and scenario development,
- Pathways for sectoral transformation,

Meteorological Organization (WMO), and Coalition for Disaster Resilient Infrastructure (CDRI), GEOMAR Helmholtz Centre for Ocean Research Kiel, International Cryosphere Climate Initiative (ICCI), International Institute for Applied Systems Analysis (IIASA), joint submission by the Global Climate and Health Alliance, the Lancet Countdown on Health and Climate Change, the climate solutions for health at the University of Wisconsin-Madison and the Pathfinder initiative of the London School of Hygiene and Tropical Medicine, University of Leeds, Potsdam Institute for Climate Impact Research (PIK), Science Europe, South South North Projects Africa, Wellcome and Lancet countdown, and Woodwell Climate Research Center.

⁵ Information note will be made available on the 18th research dialogue webpage.

- Understanding climate risks, impacts and tipping points.

(a) Climate modelling and scenario development

9. The dialogue will consider recent advances in methods and approaches for climate modelling and scenarios development, noting the importance of climate scenarios in understanding climate response options. Participants will therefore discuss how varying national circumstances, such as levels of socio-economic development, technological advancements and readiness, institutional capacity and data availability, equity and fairness are being considered in scenarios, particularly those that are aligned with 1.5 °C of global warming. In doing so, advances made at both regional and national level, including downscaling efforts will be considered. The scientific community will also reflect on the advances made in understanding annual temperature changes and temporary overshoot timeline, in the context of 1.5 °C of warming. Further, current gaps and needs in capacity for developing countries, including for integrated climate planning and resilience scenarios, and efforts to address these will be discussed.

(b) Pathways for sectoral transformation

10. The theme will explore pathways and associated enablers for sectoral transformation, by reducing greenhouse gas emissions and enhancing climate resilience. The discussion will illustrate relevant research in the energy, and agriculture and land-use sectors. Participants will therefore explore advances made, co-benefits and trade-offs with sustainable development as well as with ecosystems, and human health and well-being. Optimal, nationally determined and inclusive pathways that also consider non-CO₂ emissions reduction, emerging and novel technologies, and wider societal implications will be discussed. The discussions will further consider varying national and regional circumstances, starting points, approaches and contexts, distributional impacts and implications under varying warming scenarios.

(c) Climate risks, impacts and tipping points

11. The dialogue will discuss research aimed at understanding and/or assessing the scale and level of compounding and cascading transboundary climate risks and impacts across regions and ecosystems. It will explore the interaction, amplification and interconnectedness of the extreme events, such as between droughts, extreme heat, floods, glacial lake outburst floods, and slow-onset events. Further, it will also present tipping points of various ecosystems and regions, and associated Earth system responses, including under various warming scenarios as well as during overshoot period. Considerable attention will be given to changes in the ocean, and sea-level rise and ocean circulation, the cryosphere, and other freshwater resources. Participants may also discuss research on corresponding adaptation measures in response to the risks and hazards, such as measures in adapting to cryosphere loss for water and food security and infrastructure resilience.

(d) Guiding questions

12. For each thematic area, the following guiding questions are proposed to support and facilitate participation and engagement during the dialogue:

- What recent progress in understanding and advancing scientific research have been made at global and regional levels?
- What research needs and knowledge gaps have been identified, and what initiatives or efforts are underway to address them?

2. Organization

13. The eighteenth meeting of the research dialogue will commence with an opening plenary segment that will include updates from relevant organizations on latest scientific advances and related processes and a presentation on research gaps mapping. Following the opening segment, three breakout discussions will be convened for each of the thematic topics. These sessions will be facilitated by co-facilitators and structured to enable focused, interactive

exchanges in smaller groups. Each breakout will begin with brief expert presentations, followed by targeted discussions (questions and answers) between experts and participants. The dialogue will conclude with a reporting-back session in plenary where key insights from each breakout will be synthesized and reported back to plenary.

14. The structure of the dialogue aims to facilitate meaningful exchange of views, enable in-depth consideration of key topics, and strengthen engagement between participants and members of the scientific community. This approach responds to inputs made through many submissions and reflects feedback expressed during previous dialogue sessions. In particular, the inclusion of the three breakout discussions will foster more interactive exchanges and ensure participants, including those from smaller delegations and relevant organizations are able to actively contribute to the discussions. Extensive efforts are being undertaken to ensure balanced geographic representation and gender balance among experts and facilitators for the dialogue.

15. An overall schedule and preliminary agenda of the dialogue is provided in the section below.

(a) Preliminary agenda

<i>Date and time</i>	<i>Session title</i>	<i>Facilitators</i>
Opening segment 9 th June	Opening segment Opening remarks, UNFCCC	<i>SBSTA Chair</i>
	Opening remarks, SBSTA Chair	
	How research gaps identified since SBSTA 22 are being addressed by the research and scientific community	
	Address by IPCC: Updates on AR 7 including advances in scenarios and modelling for AR 7, assessing adaptation, integration of Indigenous and local knowledge systems	
	Plenary updates Advances in climate modelling, scenario development and use, WCRP Earth System Modelling and Observations, ESMO- Coupled Model Intercomparison Project (CMIP) 7	
	Pathways for accelerating sectoral transformation, across national and regional contexts and sustainable development needs	
	Understanding major transboundary, cascading and compounding climate risks	
Breakout sessions	Breakout 1: Climate modelling and scenario development Breakout 2: Pathways for sectoral transformation Breakout 3: Climate risks, impacts and tipping points	<i>Co-facilitators (TBC)</i>
Report back session	Reporting back from breakout sessions Closing	<i>Rapporteurs SBSTA Chair</i>

16. All titles and presenters may be altered in the final version of the agenda.

III. Additional information and next steps

17. The [science](#) and [RSO](#) webpages are undergoing revision in early 2026 to ensure that information is up to date and that navigation is seamless. All users are welcome to provide feedback, through rso@unfccc.int, to further support in improving the outline and user experience for enhanced access to information.

18. Information on the dialogue including a detailed programme will be posted online on the [webpage](#). An informal summary report on the event will be prepared, with the support from the secretariat, and made in advance of SBSTA.
