

## SESSION DESCRIPTION

ID: T14g

### Nature-based solutions for transformative change: Advancing Knowledge and Practice

#### Hosts:

	Name	Organisation	E-mail
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Co-host(s):	Dagmar Haase	Humboldt University Berlin, Germany; Helmholtz Centre for Environmental Research - UFZ, Leipzig, Germany	<a href="mailto:dagmar.haase@ufz.de">dagmar.haase@ufz.de</a>

#### Abstract:

Ecosystem services are increasingly under pressure as ecosystems are transformed by climate change, urban expansion, intensified land use, and pollution-related impacts. These pressures lead to habitat fragmentation, the spread of invasive species, and the expansion of managed landscapes, particularly in urban environments. Given that nature is essential for supporting human life and well-being, global initiatives such as IPBES, IUCN, CBD, IPCC, and ICLEI emphasize the need for systemic, rights-based, transformative actions to address the interconnected challenges of biodiversity loss, climate change, and sustainable development. These initiatives also highlight the importance of aligning climate, biodiversity, and development agendas, supporting local and regional governments in implementing transformative projects, and fostering rights-based, inclusive approaches that enhance resilience and human well-being.

This transformation entails a comprehensive restructuring of technological, economic, and social systems. It involves shifts in norms, paradigms, objectives, and values to secure ecosystem conservation and sustainable use, enhance human quality of life, and support sustainable development. But also changes in governance, economic systems, and societal structures are necessary, including the adoption of inclusive decision-making, sustainable financing mechanisms, and policies that integrate biodiversity conservation, climate resilience, and social equity across multiple scales. The interconnections between ecosystems, biodiversity, and climate underline the need for integrated approaches that simultaneously address the triple planetary crises and societal challenges. Nature-Based Solutions (NBS) are increasingly recognized by science and policy as critical tools in this context, delivering multiple co-benefits for biodiversity, climate adaptation, and social resilience. Yet, their effectiveness, trade-offs, and potential to drive transformative change have not been fully uncovered.

To address this gap, the session will explore how NBS can advance transformative change in Europe and other regions of the world, with emphasis on:

- Implementing NBS in ways that drive systemic change, achieving biodiversity conservation, climate adaptation, and ecosystem resilience.
- Showcasing case studies and strategies that illustrate how NBS contribute to transformative sustainability solutions for climate and ecological challenges.
- Approaches to ensure that NBS are contextualized and support long-term, transformative improvements in ecosystem service integrity.
- NBS solutions that combine ecological outcomes with inclusivity, equity, and justice, thereby transforming social and environmental governance.

- Governance mechanisms, participatory processes, social innovations, and other tools that enable transformative outcomes at local, regional, and larger scales.
- Engaging various stakeholder groups, including civil society, in NBS co-creation and knowledge co-production to foster transformative implementation and decision-making.

We invite scientists, practitioners, policymakers, and community representatives to share their experiences, frameworks, conceptual and practical approaches, social innovations, and practical strategies. The session will provide a collaborative space to identify actionable pathways for advancing transformative change for nature and people in Europe and beyond.

### **Goals and objectives of the session:**

The session aims to explore and advance the role of NBS in driving transformative change for biodiversity, climate, and human well-being. Its objectives are to:

1. Examine how NBS can contribute to systemic, sustainable, and socially equitable transformations in ecosystems and communities.
2. Showcase case studies, strategies, and social innovations that illustrate the effectiveness and co-benefits of NBS for biodiversity, climate adaptation, and resilience.
3. Discuss approaches to ensure NBS are context-specific, support long-term ecosystem service integrity, and integrate inclusivity, equity, and justice.
4. Highlight governance mechanisms, participatory processes, social innovations, and other tools that enable transformative outcomes across local, regional, and larger scales.
5. Facilitate knowledge exchange and collaborative dialogue among scientists, practitioners, policymakers, and civil society, to identify actionable pathways for implementing transformative NBS.

### **Planned output / Deliverables:**

We plan to co-produce a discussion paper with the session's contributors, drawing on the insights and outcomes generated during the session.

### **Session format:**

Dear organizers, depending on the number of contributors who expressed interest in participating in our session, we will schedule 8-10 minutes for each presentation, plus 10 minutes for an introductory note (given by session chairs) and 20 minutes for discussion. Therefore, we will definitely need at least 3-4 h (e.g., divided into two time slots with a break). Thank you!

### **Voluntary contributions accepted:**

Yes, I allow any abstract to be submitted to my session for review

### **Related to ESP Working Group:**

TWG 14 – Application of ES in Planning & Management