

# GC12B: MultiSector Dynamics: Science and Modeling for Societal Transformations II Oral

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Societal goals such as enhancing ecological resilience, achieving the Sustainable Development Goals, and managing risks from climate change involve major transitions in integrated systems (water, transport, energy, etc.). These challenges require dynamic and adaptive action pathways that balance diverse societal objectives and account for complex feedbacks, uncertainties, and thresholds (e.g., ecological tipping points). The session seeks to develop a MultiSector Dynamics (MSD) community focused on advancing our understanding of the co-evolution of human and natural systems over time and developing the next generation of tools needed to support major societal transformations. MSD research occurs within a perspective that bridges sectors (e.g., energy, water, land, transportation, economy, etc.) and scales (spatial, temporal, and institutional) to better understand coupled human and natural systems. This session broadly invites submissions addressing these challenges and contributing promising new modeling tools.

## Index Terms

1630 Impacts of global change

1817 Extreme events

1834 Human impacts

6620 Science policy