

Research Conference on Climate- and Nature-Related Risks in the Economic and Financial System

The economic and financial system is increasingly exposed to climate- and nature-related risks. Beyond extreme weather events and long-term changes in climate, the degradation of ecosystems, biodiversity loss, and the depletion of natural resources are emerging as critical challenges. These risks not only affect financial institutions, such as banks and insurance companies, but also have far-reaching implications for asset valuations, investment strategies, and the functioning of financial markets.

The conference seeks to explore how climate- and nature-related risks, both physical and transition ones, are reshaping the economic and financial landscape, building on the most recent developments from research. In a period where some jurisdictions challenge these approaches, it aims to highlight the importance of pursuing dialogue on innovative and adapted approaches, tools, and strategies to address these risks, while balancing sustainability objectives with the need for systemic resilience.

Location: Banque de France Conference Center, 31 rue Croix des Petits Champs, Paris 1, France

Time Schedule for contributed sessions: Presentation: 25 min, discussion: 10 min, public discussion: 10 min.

Day 1: Thursday, 12 March 2026

08:30 – 09:00 Registration and Coffee

09:00 – 09:30 **Opening Speech** (Michael Theurer, Board member, Deutsche Bundesbank)

Session 1 — 09:35–11:05 Risk assessment and Macroeconomic Impact (I)

Room A — Session 1A: Public Finance, Sovereign & Municipal Climate Risk

- *Climate Change, Adaption, and Sovereign Risk* — Sarah Duffy (University of Oxford)
Discussed by Caterina Seghini, Banque de France
- *Navigating Structural Change: Evidence from Municipal Finances and Bond Market Pricing During the Coal Transition* — Andreas C. Rapp (Federal Reserve Board), joint work with Marcelo Ochoa.
Discussed by Sophie Moinas, Toulouse School of Economics

Room B — Session 1B: Macro Impacts of Disasters & Weather Shocks

- *Weather Shocks and Sectoral Dynamics in European Economies* — Daniele Colombo (London Business School, joint work with Laurent Ferrara)

Discussed by Gauthier Vermandel (Ecole Polytechnique, Paris)

- *Financial Stability and Natural Disasters under Endogenous Adaptation* — Koen van den Bosch (Erasmus University, Rotterdam School of Management), joint work with Christina Kolerus and Joana Pereira

Discussed by Joss Roman, Paris School of Economics

Room C — Session 1C: Biodiversity Markets & Measuring Nature Degradation

- *Can Environmental Markets Solve the Biodiversity Crisis?* — James Blume (MIT Sloan), joint work with Boris Vallee

Discussed by Anouch Misirian, Toulouse School of Economics

- *The ecosystem service degradation sensitivity indicator (EDSI): Understanding the financial risk repercussions of nature degradation* — Sébastien Gallet (De Nederlandsche Bank), joint work with Antje Hendricks and Julja Prodani

Discussed by Paola d'Orazio, IESEG

11:05 – 11:30 Coffee Break

11:30 – 12:30 **Keynote Speech:** Christian Gollier, Toulouse School of Economics -
How should we Value the Climate Impacts of our investments?

12:30 – 13:45 Lunch

Session 2 — 13:45–15:15 Risk assessment and Macroeconomic Impact (II) / Pricing nature and climate risk

Room A — Session 2A: Nature Risk Pricing in Financial Markets

- *Not Just Knocking on Wood: The Short- and Long-Term Pricing of Deforestation Risk on Global Financial Markets* — Marc-Philipp Bohnet (Humboldt University Berlin), joint work with Philip Fliegel and Tycho Max Sylvester Tax

Discussed by Christoph Meinderding, Deutsche Bundesbank

- *Thirsty for Returns? The Impact of Water Risk on the Global Stock Market* — Marloes Hagens (Rotterdam School of Management Erasmus University), joint work with Rómulo Alves, Thalassa de Waal, Eline ten Bosch and Mathijs van Dijk

Discussed by Guillaume Coqueret, EM Lyon

Room B — Session 2B: Biodiversity transition risks & Carbon-Pricing Transmission

- *Employment responses to biodiversity transition risk* – Duc Duy Nguyen (Durham University), joint work with Huyen Nguyen, Trang Nguyen and Vathuyoo Sila

Discussed by Stéphane Dees, Banque de France

- *Macroeconomic effects of carbon pricing: The role of bank credit* — Givi Melkadze (Georgia State University), joint work with Yunsang Kim

Discussed by Jean-Guillaume Sahuc, Banque de France

Room C — Session 2C: Bank Lending Under Nature & Climate Legal Risks

- *Nature-Related Risks in Syndicated Lending* — Jiri Tresl (University of Mannheim), joint work with Aras Canipek, Santanu Kundu and Lukas Zimmermann

Discussed by Elise Kremer, Banque de France

- *The impact of climate litigation risk on firms' cost of bank loans* — Andreas Beyer (European Central Bank), joint work with Lorenzo Nobile

Discussed by Olivier de Bandt, Banque de France

15:15 – 15:45 Coffee Break

15:45- 16:45 **Keynote Speech:** Michael Vause, lead economist, UNEP- **Why Biodiversity Matters?**

Session 3 — 16:45–18:15 Firms and Households

Room A — Session 3A: Firm Decarbonization, Productivity & Emissions

- *An anatomy of decarbonizing firms* — Thomas Giroux (ETH Zürich, D-MTEC), joint work with Guillaume Coqueret and Borui Qiu

Discussed by Frédéric Vinas, Banque de France

- *Why do productive firms pollute less?* — Asad Rauf (University of Groningen)

Discussed by Ulrich Hege, Toulouse School of Economics

Room B — Session 3B: Household/Insurance Exposure & Collateral Risk

- *Weathering the Storm – The Effects of Natural Disasters on Households under Universal Insurance* — Mathias Mæhlum (Norges Bank), joint work with Caroline Espegren, Sigurd Mølster Galaasen and Emilia Garcia-Appendindi

Discussed by Jean-Stephane Mesonnier, Banque de France

- *Severe Weather and Collateral Practices* — Valentin Schubert (Sveriges Riksbank), joint work with Cristina Cella

Discussed by Christian Gross, Deutsche Bundesbank

18:15 Transfer to Conference Dinner

19:00 Dinner, upon invitation only

Day 2: Friday, 13 March 2026

Session 4 — 09:30–11:00 Nature and Climate Policy and Management

Room A — Session 4A: Climate Stress Testing & Bank Transition Risk

- *Input–Output Cascades and Financial Contagion: System-wide Climate Stress Testing* — Yao Dong (King's College London)
Discussed by Remy Lecat, ACPR
- *Stress Testing European Banks' Transition Risk and Lending Behavior* — Johannes-Gabriel Werner (Deutsche Bundesbank), joint work with Olivier de Bandt and David Nefzi
Discussed by Klaus Schaeck, University of Bristol

Room B — Session 4B: Chain Disasters & Climate Risk Management

- *Misfortunes Never Come Singly: Managing the Risk of Chain Disasters* — Aleksey Minabutdinov (ETH Zürich), joint work with Lucas Bretschger and Alexandra Brausmann.
Discussed by Peter Tankov, ENSAE
- *Insuring Climate Risks in Integrated Markets* — Jan Starmans (Stockholm School of Economics), joint work with Deeksha Gupta and Michael Sockin
Discussed by Nicola Garbarino, Ifo Institute

Room C — Session 4C: Nature & Climate Policy

- *Cap and trade with imperfect hedging* — Johan Hombert (HEC Paris), joint work with Bruno Biais, Daniel Schmidt and Pierre-Olivier Weill
Discussed by Robin Döttling, Rotterdam School of Management
- *Interest Rates and Energy Efficiency* — Toan Phan (Federal Reserve Bank of Richmond), joint work with Òscar Jordà, Fernando Nechio and Felipe Schwartzman
Discussed by Matthias Kaldorf, Deutsche Bundesbank

11:00 – 11:30 Coffee Break

11:30 – 12:30 **Keynote Speech:** Nicola Ranger, University of Oxford

12:30 – 13:00 **Closing Remarks** Agnès Bénassy-Quéré, Deputy Governor, Banque de France

13:00 – 14:30 Light Buffet Lunch (End of Conference)

Scientific Committee: Olivier de Bandt (Banque de France), Fany Declerck (Toulouse School of Economics), Stéphane Déès (Banque de France), Lionel Fontagné (Paris School of Economics), Daniel Foos (Deutsche Bundesbank), Rémy Lecat (ACPR), Matthias Kaldorf (Deutsche Bundesbank), Elise Kremer (Banque de France), Christoph Meinerding (Deutsche Bundesbank), Carina Schlam (Deutsche Bundesbank)

Organizing Committee: Olivier de Bandt (Banque de France), Stéphane Déès (Banque de France), Daniel Foos (Deutsche Bundesbank), Elise Kremer (Banque de France), Carina Schlam (Deutsche Bundesbank), Alexander Schulz (Deutsche Bundesbank), Oriane Wegner (Banque de France)