

Session 6: What Have We Learned Here and What Should We Do Moving Forward

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Global scenario and other science issues and opportunities for climate-related finance, investment,
and transition risk assessment, Snowmass, CO

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White paper plan

- **Plan:** Write a white paper from this meeting
- **Objectives**
 - Summarize and advance relevant science, identifying opportunities, limitations, and research priorities
 - Communicate learnings to advance dialogue and scientific research

White paper plan – New and improved draft outline

- **Introduction** – lay of the land, overview of different decision-makers, research community input to date
- **Communities of practice and scientific needs**
 - Typology of practitioner communities (Session 1)
 - Needs (Session 2)
 - Decision-making needs
 - Technical needs
 - Approaches – past and present (Session 2)
 - Challenges and ideas for improvement (Session 2)
- **Current scientific capability, understanding, and use (Session 3)**
 - Current scientific information being used and available
 - Proper interpretation
 - Scientific issues
- **Opportunities going forward (Sessions 2, 3, and 4)**
 - Communications
 - Coordination – community coordination
 - Science – identify and discuss priorities for supporting better decision-making
 - Improving use of existing science and scientific resources
 - Developing improved science and scientific resources
- **Conclusion**

Draft Title: Scientific issues and opportunities for climate-related finance, investment, and transition risk assessment

Communities of practice and scientific needs

- Typology of practitioner communities (scientific questions, issues, and informational needs)
- Straw dimensions defining community roles
 - Interest
 - Climate-relevant science question
 - Timeframe of interest
 - Notable initiatives
 - Key publications

Example initial draft: National Central Banks

- Interest: ensuring a well-functioning financial system.
- Climate-relevant science question: what are the potential ways in which climate change might cause risks to the functioning of financial systems, and how should these risks be managed?
- Timeframe of interest: Timeframe relevant to risk management decisions. Typically on the order of a decade or less.
- Notable initiatives: FSB, TCFD
- Key publications: TCFD report

Example initial draft: Development Bank

- Interest: provide finance for sustainable development.
- Climate-relevant science question: how should finance enable multiple priorities including climate?
- Timeframe of interest: Timeframe for development (years to decades).
- Notable initiatives: WB and other regional banks
- Key publications: SDGs

Example initial draft: Investment Firms

- Climate-relevant objective: Choosing investments (e.g. stocks) including consideration of all relevant risks and opportunities including those posed by climate change.
- Climate-relevant science question: what is the current value of climate risks and opportunities (both physical and mitigation-related – e.g. policy) for a given investment?
- Timeframe of interest: Timeframe relevant to current investment value. Typically on the order of a decade or less.
- Notable initiatives:
- Key publications: Firm climate reports (e.g., JPMC, Citi)

Example initial draft: Project investment & management

- Interest: determine project risk and include in project investment and management.
- Climate-relevant science question: what is the current value of climate risks and opportunities (both physical and mitigation-related – e.g. policy) for a given project, and risk management options/execution?
- Timeframe of interest: Timeframe relevant to current project value/pay-back. Typically on the order of a decade or less.
- Notable initiatives:
- Key publications:

Example initial draft: Energy (and Industry) Firms

- Interest: meeting energy (product, service) demand while reducing risks.
- Climate-relevant science question: how should energy firms manage the risks (policy and physical) of climate change and communicate with their investors and other stakeholders?
- Timeframe of interest: Timeframe relevant to risk management decisions for the firm's business (typically on the order of a decade or less), and role in societal risk management (the full range of timescales, but may not be particular to specific firms).
- Notable initiatives: TCFD and other disclosure practices
- Key publications: Firm disclosures

Science Roundtable – top science questions related to climate-related finance, investment, and transition risk assessment

- Question: What are your top 1-2 science questions?
 - Valentina
 - Jae
 - Keywan
 - Elmar
 - Irene
 - Steve
 - Chris

No more
than 2!!

Extras

Example initial draft: International Climate Negotiations

- Interest: role of finance in international agreements.
- Climate-relevant science question: what are useful ways for international finance to enable climate agreements, and how is it defined and measured?
- Timeframe of interest: Timeframe for the negotiations and objective (years to decades).
- Notable initiatives: UNFCCC, IPCC
- Key publications: Paris Agreement and associated UNFCCC documents, IPCC assessments (e.g. finance chapter)