Climate MAPS

Organization
Ortec Finance

Partner organizations
Cambridge Econometrics

Summary

Climate MAPS is a stochastic financial modeling tool that enables institutional investors to assess the impact of climate change on investment portfolios' expected risk and return. Climate MAPS offers quantified, climate risk–aware economic outlooks for a 40-year horizon, broken down by asset class, country/sector, global warming pathway, and year. Climate MAPS quantifies the systemic impacts of climate change on the real economy and financial markets. These impacts include transition risks stemming from implemented climate policies and physical risks from climate change itself in the form of both gradual physical risk and climate-related extreme weather. The tool also covers market risks from markets pricing in both transition and physical risks, as well as potential financial shocks arising from sudden pricing-in events.

The tool quantifies climate risks and opportunities associated with different global warming pathways by producing forward-looking, climate-informed stochastic scenarios. The model translates climate impacts into a wide range of financial and economic metrics including growth, inflation, and financial risk and return metrics.

Climate Focus

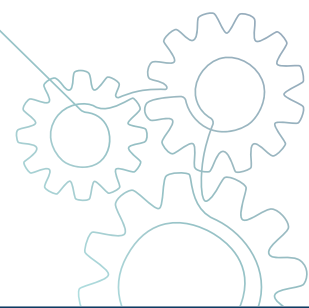| Alignment	Impact	Risk

Resource Type

Data & Metrics	Pathways & Scenarios	Assessment Tools	Methodology	Target Setting Guidelines & Verification	Reporting Frameworks & Guidelines	Collaborative Initiatives

Intended Users

Banks	Investors	Insurers	Central Banks	Regulators

Backward-looking   Current Snapshot   **Forward-looking**

RMI Center for Climate Aligned Finance

Climate MAPS

WHO	Users interested in understanding the impact of climate change on investment portfolios' expected risk and return
WHAT	• Inform a climate-aware strategic asset allocation and risk management framework for investment strategies • Analyze and stress-test portfolios under climate scenarios • Quantify systemic climate risks and opportunities associated with different global warming pathways • Break down insights with regional differentiation per asset class, sub-asset class, region, sector, and time horizon • Enable the development of custom climate scenarios and stress tests
WHEN	• Conducting asset liability management or strategic asset allocation exercises • Shaping climate-related investment beliefs • Integrating climate into risk management frameworks • Preparing for regulatory disclosures, e.g. Task Force on Climate-Related Financial Disclosures (TCFD) reporting • Preparing to inform stakeholders on climate-related financial risks and opportunities
WHERE	• MAPs can be used to analyze both all asset classes individually and the interactions between them • The tool covers the following sectors: consumer staples, forestry, coal and manufactured fuels, oil and gas, materials, consumer discretionary, and health • The tool covers the following states: Belgium, Denmark, Germany, Spain, France, Italy, Netherlands, Finland, Sweden, UK, Norway, Switzerland, Turkey, United States, Japan, Canada, Australia, New Zealand, Russian Federation, China, India, Mexico, Brazil, South Korea, Taiwan, Indonesia, Rest of ASEAN, and Malaysia
WHY	To inform portfolio management, stakeholder communication, risk management, regulatory requirements, TCFD reporting, or completing the Solvency II Own Risk Solvency Assessment (ORSA)
HOW	Interested users can find out more on **Ortec's website**