

Quant Foundry: Addressing the Need for Climate Change Risk Management

An Introduction for Asset Managers

A solution to address some of the most challenging risks, build robust client offerings and meet regulatory needs

GOVERNANCE

Organizations will need to align accountability and incentivization with the proposed client solutions and have a clear framework of leadership to effect and manage the change.

STRATEGY

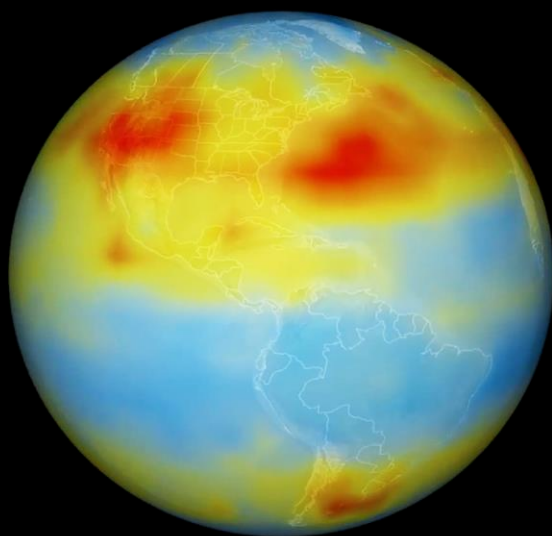
Decisions on the objectives of the firm, meeting the needs for disclosure, risk assessment, product innovation and portfolio solutions. Then defining how to go about building solutions.

MEASUREMENT

Defining the systems and processes to meet the needs, from low cost top down approaches to bottom integrated solutions to identify and enhance investment solutions that can provide a clear insight to clients.

DISCLOSURE

Meeting the needs for voluntary and regulatory disclosure. Demonstrating the capabilities of your governance and strategy and capabilities to



Climate change poses an existential threat to millions of lives and is currently not reflected in pricing of financial instruments. Understanding the financial impact of these losses requires a new level of modelling to comprehend the implications of these long horizon risks that will affect both current and future investments over a time scale of of the next 30 to 50 years.

Ensuring your organization has the right framework in place to measure, report and manage these risks and opportunities is moving from a voluntary to a regulatory requirement not just for banks and insurers but for asset managers. This presents a clear challenge for everyone to build an understanding of these risks and embed them within their current process.

The Quant Foundry team has research and developed a suite of solutions to help address these challenges. This includes insight of governance, strategy and significantly a risk engine that can incorporate transition and physical impacts.

Physical Risks – Natural Disasters

The planet is facing a set of natural catastrophes that have not been seen since prehistory.

We are anticipating unprecedented shocks driven through increasingly more frequent and powerful storms, droughts, and erratic weather patterns.

Transition Risks – A Disaster to be Averted

Adapting to climate change will require individual, companies and governments to change behaviors at an unprecedented pace. The ability of companies to adapt to improve the sustainability of their products will require both clear management strategies and considerable capital investment. Those companies with large emissions or damaging products could well face huge reductions in cash flows and limited access to capital.

The suite of solutions provides you with a means to leverage our expertise and insight into climate risks on a consultative basis to enable your organization to build and train your capabilities.

We provide the ability to accelerate and enhance your risk and portfolio selection and management process leveraging our coherent quantitative risk engine.

Integrates physical risks at the individual company asset level (eg office building) and can model and evolve regional revenue lines of these companies that are subject to upheaval from transition such as utilities and oil & gas companies.

Provide critical and transparent insight into your portfolio.



The Quant Foundry Climate Change Model Suite

An Opportunity for Asset Managers

INTEGRATED CLIMATE MODELLING

Solution uses an integrated climate and transition model, capturing the impact of technology change, land use for a whole earth system

MULTIPLE SCENARIO MODELLING CAPABILITY

Our detailed sector level modelling allows us to define detailed technology costs and commodity usage for each major market. Define trade, CO₂ taxes and limits.

CORPORATION LEVEL EVOLUTION OVER TIME

Ability to capture the diversity of revenue generation units around the world. Possible to customize and define current and future investments model and capital structure constraints

FINANCIAL MARKETS

Model can provide detailed financial instrument pricing, credit ratings, credit spread estimates, commodity, and equity prices. Market volatilities.



The goal of the Quant Foundry Climate solution is to provide a transparent bottom up scenario engine that can be applied to generate multiple scenarios from changes in greenhouse gas emission targets. The solution simulates the climate and industry sector outcomes and integrates this at a company level. The solution provides a clear causal link for each outcome providing a clear motivation for any investment / divestment choice.

Users can engage Quant Foundry on a consultative basis, for example, to assist in disclosure or we can help you integrate our world class solution into your current risk framework. Quant Foundry is committed to continued research and investment in this space and will continue to enhance functionality addressing the myriad of risk relating to climate change. This functionality includes the impact to Sovereign bonds, real estate, mortgages.

The Quant Foundry team has decades of experience in building risk systems with teams of modelling specialists, researchers and developers combined with business analysts and project managers to help assist or run projects of any scale to accelerate the opportunities in integrating our climate risk solution.

This is complemented with a senior leadership team that have held senior roles and won awards in sustainable solutions.

Quant Foundry Technology

- Modern application design that can be deployed on premises or cloud-based .NET architecture.
- Detailed granular data model allowing detailed company level assessments.
- Rich data analysis framework that can be accessed simply from Python as standard or your favorite data analysis tool if you need customization.
- Simple programmable dashboards for standardization using open standards to minimize cost of ownership.
- Modular and expandable architecture allowing users to select the functionality they need but to expand when required.

SERVICES AVAILABLE

Strategic Advisory
Climate Scenario Construction
Regulatory Advisory
Quantitative Model Construction
Risk Integration Services
Project Management
Business Analysis
Model Validation

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