

Asset Management Use Case



Jupiter Enables Asset Managers to Take a Proactive Stance to Quantify and Drive Mitigation of Physical Climate Risk Within Their Portfolio Companies

Understanding Potential Impacts of Extreme Weather to Vulnerable Assets Has Become a Critical Component of Managing Investment Risk and Overall Systemic Risk

Even in the midst of the global COVID pandemic, prominent asset managers continued to issue clear guidance in 2021 to warn boards and senior executives within their portfolio holdings that transition and physical climate risk assessment, disclosure, and mitigation are essential to maintaining investor confidence.

Wrote BlackRock CEO Laurence Fink in January: "I believe that the pandemic has presented such an existential crisis—such a stark reminder of our fragility—that it has driven us to confront the global threat of climate change more forcefully and to consider how, like the pandemic, it will alter our lives ... No issue ranks higher than climate change on our clients' lists of priorities. They ask us about it nearly every day."

In March, London's Deloitte Centre for Regulatory Strategy (EMEA), anticipating new requirements demanding quantification and reporting of climate risk, advised: "... Boards of asset managers will want to examine in depth their firms' climate risk exposure (at the portfolio/fund level), and ensure that ongoing processes for capturing climate risk are granular enough to take account of the specific characteristics and risk profiles of the sectors and geographies they are exposed to."

In the spring and summer, pressures for action on climate risk increased: from President Biden's Executive Order on Climate-Related Financial Risk, the successful rebellion initiated by Engine No. 1 (supported by BlackRock and other leading investors) at ExxonMobil's shareholder meeting, the Bank of England's pilot stress testing program, the August release of the IPCC AR6 Working Group 1 study of climate change impacts, and the run-up to autumn's COP26.

Climate Risk Review, in the wake of the AR6's physical science assessment of the climate crisis, noted:

"[The assessment's] projections underline how important it is that financial institutions adjust their own risk-of-loss models to account for these worsening acute physical risks. Choosing to rely on normal distributions ... would lead firms to undercount, and underestimate the severity of, climate-related physical hazards. Miscalculating the impact of these hazards would in turn skew their understanding of asset vulnerabilities."

Importantly, analytics solutions to project and quantify the physical impacts of climate change are now within the reach of asset managers. Jupiter's analytics are used across the private and public sectors, including by one of the five largest asset management firms in the world.

Jupiter Physical Climate Risk Analytics Solutions for Asset Management

With the world's only global- to street-level resolution analytics solutions based on forward-focused climate models and data, Jupiter Intelligence offers asset managers both portfolio-wide and asset-specific risk projections, for all major perils, worldwide, based on their chosen time horizons and emissions scenarios. Jupiter's solutions are used across key processes, including:

Asset risk assessment

- Quantifying and optimizing both real asset and financial asset value exposure to physical climate risk
- Understanding emerging supply chain risk to companies

Portfolio risk assessment

- Constructing portfolios and assessing their exposure to physical climate risk using standard identifiers such as CUSIP and FIGI
- Providing a key input to create and manage sustainable and green funds

Corporate guidance

- Facilitating more detailed risk disclosures, and understanding when to require a more comprehensive assessment and disclosure of climate risk from portfolio holdings
- Persuading corporations, senior executives, and boards to take action

Three Key Factors Drive Adoption of Jupiter Climate Analytics Tools

Breadth of data, and depth of expertise

Embedding physical climate risk analysis into risk management and disclosure processes, though an urgent need, is in its early days. Required metrics and scenarios are evolving, and assets differ by geographies, critical time frames, and risk thresholds. Jupiter projections are global, forward-focused, scenario-based, and presented over flexible time horizons. This makes it easier to match Jupiter's metrics with the varied requirements from regulators, for stress testing, and for assets.

Wind, rain, and storm surge from tropical cyclones are key drivers of climate risk for portfolio companies and their supply chains. Because climate models poorly represent tropical cyclones on their own, Jupiter separately models these perils and offers a superior understanding of future events. The model uniquely combines the background conditions of climate models with datasets describing tens of thousands of tropical cyclones, blanketing the world's coastlines and providing risk estimates of infrequent but extreme impacts caused by these events.

Scalable data delivery

Firms are moving beyond simple episodic scoring exercises for regulatory or shareholder response to an ongoing incorporation of physical climate impact analysis into risk modeling. They require access to data on millions of assets on a quarterly and daily basis. Jupiter satisfies this need with its high-performance APIs; its scalable infrastructure, capable of handling intense computation and storage demands; and enterprise-grade security. Its advanced technology foundation is tuned to the rigors of the most demanding firms.

Transparency, flexibility and collaboration

Optimal decision-useful data demands complete model transparency and detailed model validation. Government regulators and organizations such as the TCFD and PRA increasingly reject proprietary, “black-box” approaches to climate modeling. The transparency of Jupiter’s underlying model and data enables both companies and their regulators to assess and verify the objectivity and quality of physical risk projections.

Jupiter’s enterprise-grade solutions, and its methodologies and collaborative relationships with customer teams, are based on transparency. Jupiter understands the needs of financial services firms to provide rigorous modeling evaluation and validation documentation. Jupiter employs dozens of the scientific community’s most respected physical models of the atmosphere and hydrosphere, coupled with machine learning, land use, elevation data, and extensive observations of the systems it models. It also builds robust verification and validation into every step of the model chain, natively accounting for the changing frequencies and characteristics of extreme events through time. In addition, Jupiter’s technical and scientific personnel team up with their peers within firms to scale their capabilities and accelerate their preparedness.

About Jupiter and Jupiter Solutions

[Jupiter Intelligence™](#) is the global market, science, and technology leader in physical climate analytics for risk management and resiliency planning.

Jupiter’s analytics are used across the private and public sectors. In addition to asset management Jupiter customers include at least one of the world’s five largest firms in banking, chemicals, insurance, minerals and mining, oil and gas, pharmaceuticals, power, and reinsurance—as well as critical departments and agencies within both the United States government and climate-change-vulnerable geographies around the world.

Jupiter’s best-in-science solutions—ClimateScore™ Global, and the ClimateScore Planning suite—together form the world’s only global-to-street resolution climate analytics offering. ClimateScore Global quantifies climate risk at portfolio scale, for all points on the planet’s land surface, for all perils (flood, heat, wind, wildfire, drought, hail, and extreme precipitation), and over flexible time horizons and emissions scenarios. ClimateScore Planning delivers very-high-resolution projections of peril-specific climate impacts on individual assets, facilities, neighborhoods, and communities.

For more information, please visit <https://jupiterintel.com> or email us at info@jupiterintel.com.