

*Responsible Alpha is a minority-owned EU-North American based B corp “public benefit corporation” whose team has over 200 years' direct global sustainability consulting experience in their careers deploying billions in sustainable capital. Responsible Alpha is proudly owned by its staff, advisors, and board members.*

## CLIMATE RISK MODELING

Protect your organization from climate-related risks. Responsible Alpha demonstrates using technical scientific methods the potential physical and transitions risks from climate change for organizations using quantitative scientific figures and models. These models can analyze factors like temperature change, extreme weather events, sea-level rise, and their impacts on infrastructures, industries, ecosystems, and communities.

## SUCCESES

- **Infrastructure Municipal Bond Climate Risk Assessment:** Conducted annual comprehensive climate physical and transition risk analysis on a \$393 million 30-year infrastructure municipal bond forecasting 22% loss of principal. This demonstrated the critical importance of integrating climate analytics into financial decision-making.
- **ESG, SDG, & Climate Risk Integration:** Enhanced a large global NGO's performance through comprehensive ESG, SDG, and climate risk modeling and financial restructuring strategies, utilizing surveys and in-depth analysis to map internal policies against ESG, SDG, and climate risk metrics. Our data-driven framework linked organizational policies and its \$250 million annual budget to quantifiable financial and sustainability outcomes.
- **U.S. Chemical Coast Climate Risk Analysis:** Analyzed climate vulnerabilities across 84% of U.S. plastics production facilities concentrated along the Gulf Coast, assessing physical risks from extreme weather events, sea-level rise, and temperature changes. Our modeling identified critical infrastructure vulnerabilities and supply chain disruption scenarios, providing petrochemical companies with quantitative risk assessments for strategic planning and resilience investments.
- **Port of Houston Financial & Climate Risk Assessment:** Conducted comprehensive climate risk modeling for Port of Houston operations, analyzing physical and transition risks from sea-level rise, extreme weather events, and regulatory changes. Our assessment quantified potential financial impacts on port infrastructure, cargo operations, and supply chain continuity, providing actionable recommendations for climate adaptation and risk mitigation strategies.
- **U.S. Utility Environmental Justice Climate Risk Analysis:** Assessed climate-related environmental justice risks for a large U.S. utility, analyzing how physical climate impacts disproportionately affect vulnerable communities within the utility's service territory.

## TRUSTED BY



**Net Zero  
Financial Service  
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Responsible Alpha partners with all  
organizations on their transition to a net  
positive economy by 2050

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