

EY Climate Stress Testing solution

Bottom-up transition risk stress testing for financial institutions

Business drivers

The increasing importance of climate risk highlights the need for financial institutions (FIs) to develop climate stress testing capabilities and drive informed business decisions:

- ▶ Climate-related disclosures have gained significant adoption across jurisdictions such as US, EU, Canada.
- ▶ Financial regulators are increasingly urging banks to incorporate climate risk into their existing risk management frameworks.
- ▶ Internally, banks need to quantify how various transition scenarios and climate targets will impact their business.
- ▶ In addition, there is significant pressure for the FI sector to adopt a range of influencing norms and expectations around climate risk management and reporting.

Solution overview

Unleash the decarbonization potential of your portfolio

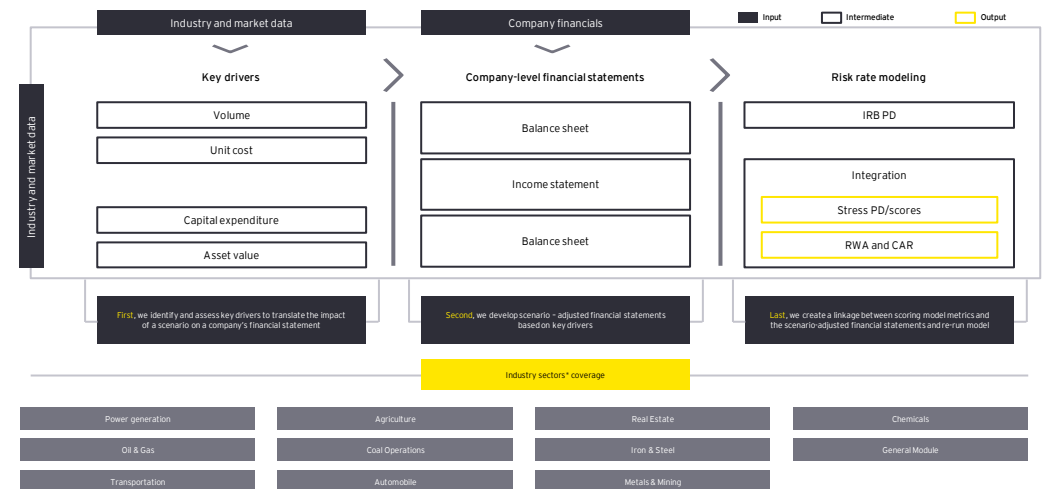
- ▶ As global reporting norms and regulations emphasize the importance of climate risk for FIs, there is an urgent need for FIs to adopt a best-in-class climate stress testing framework.
- ▶ The EY Climate Stress Testing solution is designed to help FIs elevate their stress testing capabilities by quantifying potential losses associated with the transition to a net-zero economy.
- ▶ With this solution, FIs can enhance their capabilities, processes and governance to integrate climate risk into their decision-making process and comply with growing disclosure requirements. They will be able to analyze transition risk across portfolios and prioritize action plans based on the scenario results.
- ▶ The solution is facilitated by Microsoft Azure cloud computing services, Microsoft PowerBI visualization and Microsoft Cloud for Sustainability to support interoperability and integration with the Microsoft ecosystem.
- ▶ By collaborating with EY teams, clients can leverage a global network of climate risk professionals, industry and regulatory insights, and experience in ESG data operating models to unlock value and gain a competitive advantage.

Solution benefits

- ▶ Enhance capabilities, processes, and governance at speed and scale to integrate climate risk into the decision-making and portfolio management process and respond to growing disclosure requirements.
- ▶ Identify market opportunities while reducing downside risk from carbon-intensive sectors, considering government policies and other local factors.
- ▶ Respond to growing external pressure from regulators, shareholders and stakeholders to meet and exceed climate risk management regulations and standards.
- ▶ Facilitate decarbonization of FI clients, supporting transition plan and increasing enterprise resilience to climate-related risks.



Bottom-up transition risk approach of EY



Joint value proposition

The EY Climate Stress Testing solution leverages Microsoft technology, along with the climate risk and technology expertise of EY to provide joint value for clients:

- ▶ The solution is designed to be embedded within the Microsoft ecosystem, featuring multiple Microsoft Azure components such as Azure Data Lake, Azure Databricks and Azure DevOps including, dashboards to be hosted on PowerBI.
- ▶ Leveraging Microsoft cloud-based infrastructure supports integration with the Microsoft ecosystem and potential cost savings compared with alternatives.
- ▶ Project implementation led by EY climate risk experts and tech consultants delivers collaborative, technology-enabled solutions and recommendations.

Solution differentiators

- ▶ The solution includes sector-specific considerations and provides flexibility around assumptions to better reflect the client's unique circumstances.
- ▶ It is based on a globally recognized methodology adopted by leading financial institutions and central banks.
- ▶ The financial modeling adopts audit best practices to maintain accuracy and reliability.
- ▶ Additionally, the solution calculates key risk indicators (KRIs) to support sustainability reporting requirements, further adding value to the client's ESG efforts.

Case study

The client, a global investment bank wanted assistance in setting up the Fed Pilot Climate Scenario Analysis (CSA) Exercise.

Client challenge	Engagement summary	Value delivered
<p>The client engaged EY teams to provide support in establishing a climate risk program. The engagement was driven by several factors, including:</p> <ul style="list-style-type: none"> ▶ The need to complete a regulatory climate-related exercise for the first time in the US, where failure to deliver could negatively impact the client's ability to help manage climate risk and result in future regulatory scrutiny. ▶ The client also faced a significant surge in workload, which added to the complexity of the task. ▶ Additionally, overlapping requirements at the same time further compounded the challenge. 	<p>As part of this engagement, EY teams performed the following:</p> <ul style="list-style-type: none"> ▶ Utilizing our extensive knowledge of scenario design and generation, wholesale credit, retail credit stress testing, and related CCAR processes and methodologies, we supported the execution of regulatory climate stress tests for the European Central Bank (ECB) and Monetary Authority of Singapore (MAS), as well as an enterprise-wide dry run. ▶ Through our experience, we helped the client achieve the desired outcomes and maintain financial resilience in challenging economic conditions. ▶ EY teams' ability to work effectively in high-pressure environments helped provide high-quality results within tight deadlines. We maintained open communication and collaboration with team members, stakeholders, and regulatory bodies, facilitating compliance and transparency throughout the process. ▶ Additionally, we identified opportunities to improve efficiency and effectiveness, contributing to the continuous improvement of stress-testing processes and methodologies. 	<ul style="list-style-type: none"> ▶ Provided industry leading practices from European banks regarding physical risk modeling and target setting. ▶ Assigned 16 full-time professionals to engage on the project during its peak to work across five workstreams. ▶ Helped maintain a focus on the central climate risk program and overall governance workstream to identify the governance framework for the entire program. ▶ Applied framework to develop industry-leading scenario design and generation that identifies potential climate scenarios and assesses their impact on financial institutions. ▶ Identified methodology for assessing climate risk in wholesale markets. ▶ Helped in implementing wholesale and retail execution and governance processes to support consistent and effective execution of the program.

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