CLIMATE X

Insights

2024 USA Election : Implications for Climate Risk in Banking, Real Estate and Insurance

2024

Executive Summary

The upcoming 2024 U.S. presidential election represents a crucial moment for the nation's approach to reviving the American economy both domestically and internationally, while addressing emerging challenges to its long-term prosperity, such as climate risk impacts and adaptation needs within key industries, particularly banking, real estate, and insurance. This paper offers relevant perspectives on how the U.S. political landscape could shape climate-related policies and strategies in these sectors, providing financial risk professionals with insights into potential regulatory changes and their implications. By focusing on the contrasting climate positions of leading candidates Kamala Harris and Donald Trump, the paper outlines the different approaches that may arise after the election, from stricter climate regulations under Harris to potential deregulation under Trump, and the resulting impacts on the U.S. financial system and wider economy.

Readers can expect to gain an understanding of how these political shifts may influence regulatory frameworks, resource distribution, and industry responses to climate risks. The paper examines the vulnerabilities of the U.S. property and insurance markets, the evolving landscape of sustainable lending practices, and the growing importance of innovative climate risk assessment tools such as Climate X's Spectra and Adapt. Additionally, it explores how businesses are turning climate risks into opportunities, even amid political uncertainty. By analysing the interplay between politics and market dynamics, this paper equips stakeholders with the knowledge needed to better anticipate and adapt to the evolving climate risk landscape.

This guide is particularly timely given the critical importance of climate risk, highlighted by recent devastations from Hurricane Helene, in shaping the financial stability of industries as the U.S. presidential election approaches. With billions of dollars in assets at stake, understanding the potential regulatory outcomes of the election is essential for professionals preparing for future challenges. The insights provided will assist financial institutions, real estate developers, and insurance firms in navigating the complexities of climate adaptation, regardless of which political party triumphs in the election.

Introduction 4

01 . Political Leadership and Climate Risk Adaptation in Banking perspectives 8

U.S. Stance in the Face of Climate Threats 9

02 . Political Impact on Key Industries 18

Banking 19

Real Estate 25

Insurance 33

03 . Embracing Climate Opportunity in Times of Change 38

From Climate Risk to Climate Opportunity 39

Climate Risk in U.S. business 42

Conclusion 44

About Climate X 48

Introduction

The 2024 U.S. presidential election presents a pivotal moment for the United States and for the world, marked by stark contrasts in leadership styles, opinions, and visions for the future. Amid a complex landscape of international challenges - including geopolitical tensions, economic uncertainty, social change, and cultural shifts - the risk industry is gearing up to navigate the potential outcomes. Climate change, one of the many pressing issues, poses significant financial risks that demand attention from the banking sector and other industries like real estate and insurance.

While the world has been shaken in the last decade by multiple political changes, economic difficulties, the banking, real estate and insurance industries are looking for key indicators to build a resilient strategy.

This white paper seeks to provide risk professionals and key stakeholders with clarity on the potential implications of the election outcome, focusing on climate risk and its impact on the risk industry. Recognising the sensitivity of the topic, this analysis strives for neutrality, exploring the interplay between political and market forces that will shape U.S. banking, real estate and insurance climate adaptation strategies in 2025.

Discussing US politics, particularly around climate change, often sparks strong opinions and deeply held beliefs, especially in light of recent statements from key candidates. But from the start, Climate X has never been about joining the fray in the climate change debate. Instead, its mission is clear: to equip risk professionals with the most transparent and reliable insights on how climate risks may shape the future of industries, focusing on potential losses as much as business opportunities. The company's commitment is to remain neutral, delivering high-performance, actionable intelligence.

With the 2024 elections looming, billions of dollars in assets and portfolios hang in the balance. Understanding how the political landscape could reshape climate risk is now more critical than ever.

This analysis focuses on the climate risk implications of the 2024 U.S. presidential election, prioritising the Democratic and Republican front-runners, Kamala Harris and Donald Trump. Given the historical dominance of these two parties, the paper concentrates on their platforms while incorporating relevant perspectives from other political contenders.

By examining the current climate risk landscape, potential political shifts, regulatory approaches, and industry reactions, this paper aims to equip risk professionals with the insights needed to prepare for the challenges ahead.

01

Political Leadership and Climate Risk Adaptation in Banking perspectives

U.S. Stance in the Face of Climate Threats

Political Position

As the 2024 U.S. presidential election approaches, climate change has emerged as a pivotal issue, with candidates presenting diverse visions for addressing this global challenge:

Democrats view climate change as a critical and urgent threat to the economy, national security, and children's health and futures. They believe the US should lead the world in clean energy and create millions of good-paying jobs in the process.

Democrats consider climate change a national emergency, requiring immediate action to protect Americans' lives and futures. They aim to build a thriving, equitable, and globally competitive clean energy economy, putting workers and communities first. Democrats prioritise environmental justice, recognising that climate change disproportionately affects communities of colour, low-income families, and Indigenous communities. They commit to achieving net-zero greenhouse gas emissions by 2050, with interim goals like eliminating carbon pollution from power plants by 2035.

A recent survey found that 82% of Democrats see climate change as a critical threat, compared to 16% of Republicans. This divide is also reflected in the level of concern, with 50% of Democrats considering climate change the most concerning threat to humanity, versus only 9% of Republicans.

Democrats recognise the devastating consequences of climate inaction, including catastrophic natural disasters, devastating public health impacts, and unprecedented economic disruption. They believe climate action presents significant economic opportunities, including creating millions of good-paying jobs in clean energy, improving public health, and enhancing America's global competitiveness.

About 78% of Democrats consider climate change a serious threat, with 50% viewing it as the most pressing threat to humanity. Democrats are more likely to support climate policy, believe in climate science, and prioritise environmental protection. Precisely, they favor climate policies like reducing greenhouse gas emissions and promoting renewable energy, accept the scientific consensus on climate change, and consider environmental protection essential to the country's stability.

Among other Democratic leaders, former presidential candidate Marianne Williamson treats the climate emergency holistically, addressing interconnected issues like water, air, food, and soil quality. Williamson views climate change as a holistic and existential crisis requiring immediate and effective action. As such, she advocates for a comprehensive systems overhaul, prioritising human and planetary well-being above economic interests, and requiring a unified, bipartisan effort to prevent devastating consequences and secure a sustainable future.

Kamala Harris, Democratic front-runner in the 2024 election, seeks to unite Americans to tackle the climate crisis, promoting environmental justice, public health, and clean energy. Harris recently emphasised that fighting the climate crisis is a patriotic action that promotes "the freedom to breathe clean air, and drink clean water and live free from the pollution that fuels the climate crisis". In her view, the climate crisis is not just an environmental issue, but a threat to American values and way of life.

Harris's climate agenda has garnered support from prominent Democratic leaders who recognise the urgent need for climate action. Key supporters include California representative Jared Huffman, claiming that Harris' top priority to solve the climate crisis is to “win the damn election”, and Oregon senator Jeff Merkley, who said “I have continuously preached the need for [declaring] a climate emergency; I tried to get Biden to do it on Day One, I‘d love for Kamala to do it on Day One”. Additionally, notable Democrats such as senators Tina Smith and Chris Van Hollen have introduced legislations, like the Homes Act and the Polluters Pay Climate Fund, which align with Harris's climate goals.

As vice president, Harris has supported significant investments in green infrastructure and renewable energy under the Biden administration. Her perspective on climate change is likely to shape her policy agenda if she becomes president, with a focus on implementing and expanding climate programs initiated under the Biden administration. Harris's stance on climate change is consistent with her broader political orientation, which is widely seen as pragmatic and moderate.

Harris's climate plan also includes measures to promote environmental justice, reduce greenhouse gas emissions, and increase energy efficiency. She aims to achieve net-zero emissions by 2045 and ensure that 100% of U.S. electricity is generated from renewable sources by 2030.

On the Republican side, views on climate change are quite diverse, but generally, many prioritise economic growth and energy independence over environmental concerns. For instance:

- → Florida governor Ron DeSantis focuses on adaptation rather than prevention, aiming to withdraw from Paris Climate Accords and eliminate ESG regulations.
- → Former presidential candidate Nikki Haley prioritises economic growth and cooperation with other countries. Ryan Binkley advocates for innovative climate technology and energy independence.
- → Former candidate Vivek Ramaswamy dismisses the climate agenda as a hoax, prioritising economic growth.

Republicans and Independents tend to be more concerned about the eminence of a nuclear war (36%) than climate change (29%). This difference in priorities is reflective of a broader trend in American attitudes towards climate change. For instance, 54% of American adults describe climate change as a priority threat to the country's stability, but only 23% of Republicans share this view.

There are several reasons why Republicans tend to be less concerned about climate change. Some Republicans - among which 123 members from the House of Representatives and the Senate - question the validity of climate science or its implications. Alternatively, promoting American energy independence is often seen as more important than addressing climate change.

However, it is worth noting that not all Republicans deny the existence or importance of climate change. A significant number, particularly younger and moderate Republicans, are concerned about climate change and support climate action.

Approximately 27% of Republicans, mostly younger and more moderate, are concerned about global warming, and back climate action and environmental preservation. A distinct group of Republicans, typically younger, female, and living in suburban areas, stands out for their concern about climate change. They champion policies to reduce greenhouse gas emissions and promote renewable energy, acknowledging the scientific consensus on climate change and prioritising environmental protection as vital to the nation's well-being.

As for former President Donald Trump, his stance on climate change is complex and multifaceted. Trump is sceptical of climate change, as he has downplayed its significance over the past years. While he has been vocal about his scepticism, his administration's actions also reveal a more nuanced approach. His previous administration rolled back numerous environmental regulations, arguing that they were burdensome to businesses. However, he has also recently expressed support for businesses leading the adaptation with electric cars, such as Tesla.

Trump has claimed repeatedly that climate change is a “hoax” and he does not “think science knows” whether temperature rise will heighten climate threats. In fact, Trump believes that climate change is merely a political agenda from the radical Left and does not consider that a change in weather condition is unnatural or even linked to human interactions with nature. His view has gained support from Ohio senator and vice-presidential nominee J.D. Vance, claiming “I’m sceptical of the idea that climate change is caused purely by man”, and Texas governor Gregg Abbott who has pledged to prevent municipalities from banning the use of natural gas in new buildings and to remove renewable energy from state economic incentive initiatives.

Despite his scepticism, the United States achieved significant reductions in carbon emissions during Trump's presidency, with a 12% decrease in energy-related CO_2 emissions from 2005 to 2018. However, his policies may hinder progress toward the Paris Agreement's climate goals, potentially putting them "forever out of reach".

It is essential to recognise that Trump's stance on climate change is not entirely binary. While his rhetoric may suggest otherwise, his actions and support for adaptation leaders like Elon Musk with Tesla indicate a more complex approach, built on the “America First” rhetoric. This nuance is crucial in understanding the potential implications of his presidency on climate policies.

Resource Allocation

The allocation of resources towards climate risk adaptation in the banking sector varies significantly between Liberals and Conservatives. Under the current Administration, there has been a concerted effort to direct federal funds towards sustainable projects. The Inflation Reduction Act (IRA), for instance, allocates approximately $780 billion dollars for clean energy initiatives and aims to reduce carbon emissions by 40% by 2030. By investing heavily in clean energy, the Biden-Harris Administration does not only seek to reduce the country's carbon footprint but also creating new economic opportunities. While the IRA is the largest U.S. investment ever in reducing emissions and accelerating the clean energy economy. This move has the potential to create jobs, stimulate innovation, and drive growth in the renewable energy sector.

If Kamala Harris is elected, she is likely to continue and expand upon the Biden-Harris Administration's climate change policies, prioritising clean energy, environmental justice, and global cooperation. Her presidency would aim to reduce greenhouse gas emissions, achieve net-zero emissions by 2050, and promote climate resilience, building on the progress already made.

Republicans, on the other hand, have generally prioritised economic growth and deregulation. They argue that excessive regulation stifles innovation and economic progress. This perspective influences their approach to banking, where they often resist measures that they perceive as overly restrictive. In this context, Trump's 2024 agenda, outlined in his Agenda 47, promises to roll back again environmental regulations and prioritise fossil fuel extraction - seeking to uphold America's energy independence of over 80% on fossil fuel by drilling new sites -, echoing his previous stance on climate change and slogan "Drill, Baby, Drill". Trump's energy policy focuses on fossil fuel dominance, extensive green regulatory **Chapter 1** rollbacks, and scaling back renewable energy policies, in support of initiatives for cheap energy supply. He aims to increase domestic production, refill the strategic petroleum reserve, and remove red tape to speed up approval of natural gas pipelines. He also opposes most clean energy policies, criticising wind and solar energy as expensive and unreliable. Furthermore, he plans to divert from climate actions to rather emphasise other policies such as America First Industrial Policy, to promote trade barriers by imposing a 10% tariff on every imported goods, and therefore prioritise US economic interests.

Regulatory Uncertainty

The trajectory of present and future financial regulations on climate change is uncertain at this stage, but it also poses a challenge to climate risk adaptation in the financial industry, especially the U.S. banking sector as regulators still lack consensus around the extent to which climate risk should be managed by financial service firms. The Federal Reserve Board (Fed) and the Securities and Exchange Commission (SEC) have differing perspectives on how to address climate risks.

The Fed has been criticised for its recent pilot climate scenario analysis exercise, which some argue is not sufficiently robust, missing quality data and modelling, to address the complexities of climate risk. Additionally, the Fed's Governor Christopher J. Waller posits, "climate change is real, but I do not believe it poses a serious risk to the safety and soundness of large banks or the financial stability of the United States". Other risks such as the increasing uninsurability of property and the threat of a commercial real estate market bubble also tend to occupy the already busy supervisory agenda.

In contrast, the SEC has taken a more proactive stance, pushing for the adoption of mandatory climate disclosures. This move has faced resistance from 35 Republican lawmakers, but has received support from some Democrat lawmakers and a few states, such as California, New York, Washington and Illinois which have introduced their own stringent climate disclosure requirements aligning with the SEC rules.

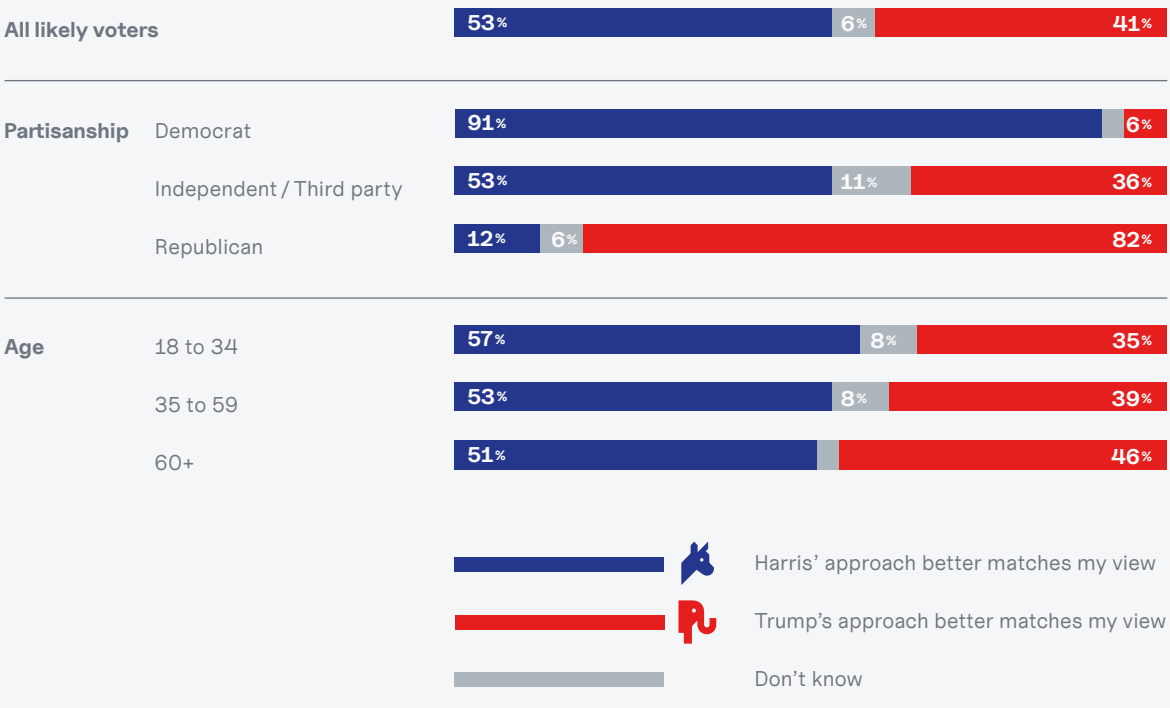
Political Leadership & Positions on Climate Risk Adaptation in Banking

Aspect	Harris Administration	Trump Administration
Climate Change View	Urgent existential threat	Sceptical, downplayed
Resource Allocation	Significant investment in green infrastructure	Deregulation, economic growth focus
Regulatory Approach	Support for stringent climate disclosures (SEC)	Rollback of climate and environmental regulations
Fed's Role	Support optimal climate-related financial risk management strategies	Less emphasis on climate risk in financial system. In favour of banking activities supporting fossil fuel extraction.
Legislative Support	Inflation Reduction Act, clean energy initiatives, Bipartisan Infrastructure Law	Rollback of Clean Power Plan among 74 environmental protection actions
Agenda for 2024 Presidency	→ **Carbon/Climate Pollution Fee:** Hold polluters accountable and increase government spending on climate action. (charging the a $900-$1500 per ton fee for methane polluter in oil and gas sector). → **Renewable Energy Expansion:** Invest in energy-efficient technologies and electric heat pumps.	→ **Roll Back (again) Environmental Regulations:** Slash climate funding and dismantle environmental protections. → **Withdraw (again) from Paris Agreement.** → **Promote Fossil Fuel Extraction:** Boost oil and gas production to to maintain over 80% of US energy independence. → **America First Industrial Policy:** Promote trade barriers with 10% tariff on import of goods.
Key Political Supporters	→ Minnesota governor advice-presidential nominee Tim Walz, → California representative Jared Huffman, → California representative Ro Khanna, → Oregon senator Jeff Merkley, → Hawaii senator. Brian Schatz, → New York representative Paul Tonko, → Minnesota senator Tina Smith, → New York representative Alexandria Ocasio-Cortez, → Maryland senator Chris Van Hollen.	→ Ohio senator and vice-presidential nominee J.D. Vance, → Texas governor Gregg Abbott, → Alaska governor Mike Dunleavy, → South Carolina governor Henry McMaster, → North Dakota senator John Hoeven, → North Carolina senator Ted Budd, → Tennessee senator Marsha Blackburn, → Alabama congressman Robert Aderholt, → Ohio congressman Troy Balderson.

SOURCES: BUSINESS INSIDER, DONALD J. TRUMP, E&E NEWS, CHATHAM HOUSE, CNBC, MINTZ

Future Political Leadership: Post-Presidential Election 2024

The outcome of the 2024 presidential race will have a degree of influence over the U.S. approach to climate risk adaptation in banking, real estate and insurance. Regardless of the new political leadership, the worsening climate threats and related damages will continue to fuel the need for pragmatic, science-based solutions to safeguard the American economy. Future leaders, whether Liberals or Conservatives, will need therefore to balance inherited and new policies to prioritise economic growth with sustainable practices, ensuring that these sectors are resilient to climate risks. As climate change continues to impact the economy, there will be increasing pressure for bipartisan cooperation to implement effective climate policies.



SOURCE: DATA FOR PROGRESS, WHICH APPROACH BETTER ALIGNS WITH YOUR ENERGY AND CLIMATE POLICY VIEW? (JULY 2024 SURVEY OF 1,216 LIKELY VOTERS).

KEY TAKEAWAY

- The 2024 U.S. presidential election highlights sharply contrasting climate views. Democrats, led by Kamala Harris, see climate change as an urgent existential threat, pushing for aggressive policies to reduce emissions and promote environmental justice. In contrast, Donald Trump and many Republicans downplay climate change, prioritising economic growth, deregulation, and energy independence.
- The allocation of resources and regulatory approaches differ starkly. Democrats aim to expand green infrastructure investments through initiatives like the Inflation Reduction Act and state-level disclosure laws, while Republicans favour deregulation and increased fossil fuel extraction. Regulatory uncertainty persists, with the Federal Reserve and SEC taking different approaches to managing climate risks in banking.
- The outcome of the upcoming election will certainly influence U.S. banking's approach to climate risk adaptation. Regardless of the political leadership, worsening climate threats will necessitate pragmatic, bipartisan solutions. Both economic growth and sustainability must be balanced to ensure the banking sector's resilience to climate-related risks.

02 Political Impact on Key Industries

Banking

Climate Risk in the U.S. Banking System

As a backbone to the U.S. property sector, the banking sector is also subjected to considerable risks from climate shocks, particularly in the wake of recent climate-related disasters. For example, Hurricane Idalia's impact on infrastructures and properties in the Southeastern U.S. in August 2023 resulted in estimated financial losses of over $20 billion, with banks facing substantial loan defaults and asset devaluation risks. Significant exposure to climate shocks include:

- **Credit Risk:** Climate-related economic disruptions can increase borrower credit risk through various channels. Climate-related events can lead to reduced economic activity and income stability, increased unemployment and business closures, supply chain disruptions and inventory losses, and higher operating costs. These disruptions can increase borrower credit risk by decreasing debt servicing capacity, reducing collateral values, and increasing probability of default. To mitigate credit risk, banks must conduct stress tests to assess climate-related credit risk exposure and reassess lending standards, considering climate-related factors in credit scoring models. Banks should also monitor borrower exposure to climate-related risks and collaborate with central banks and regulators to develop climate-resilient lending practices. Adjusting risk appetite and interest rates to account for climate-related risks is equally crucial because it enables banks to accurately price and manage climate-related credit risks, preventing potential loan defaults and maintaining financial stability.

- **Loan Defaults:** Climate-related disasters can lead to borrower default due to property damage and business interruption, loss of income and revenue, and increased operating costs. Banks may struggle to recover loans from affected businesses or individuals, resulting in significant financial losses, reduced asset values, and decreased profitability. To manage loan default risk, banks can offer climate-related loan forbearance and restructuring options, develop climate-resilient loan products, and enhance borrower education and outreach.

- **Asset Devaluation:** Climate risks can decrease property values, impacting bank collateral and reducing the value of secured loans due to sea-level rise and coastal erosion, increased flood risk, and wildfire and drought impacts. This can lead to decreased bank capital and potential regulatory action. To mitigate asset devaluation risk, banks can conduct climate-related property value assessments, consider climate-related factors in loan-to-value ratios, and develop climate-resilient investment strategies.

→ **Market Risk:** Climate-related events can lead to market volatility, affecting bank investments and asset values through changes in interest rates and monetary policy, shifts in investor sentiment and market demand, and increased credit spreads. Banks can manage market risk through diversification and hedging strategies, climate-sensitive investment approaches, and scenario analysis and stress testing.

→ **Operational Risk:** Climate-related events can disrupt bank operations, impacting revenue and customer service due to data center and infrastructure disruptions, employee safety and well-being concerns, and customer access and communication challenges. Banks can mitigate operational risk by investing in business continuity planning and disaster recovery systems, enhancing employee training and emergency preparedness, and developing climate-resilient supply chain management.

→ **Reputational Risk:** Banks' climate-related policies and actions can impact public perception, influencing customer loyalty and business relationships through climate-related disclosure and transparency, investment and lending practices, and community engagement and philanthropy. Negative publicity can lead to brand damage, decreased investor confidence, and regulatory scrutiny.

→ **Regulation Risk:** Evolving climate-related regulations can increase compliance costs and require significant investments in risk management through climate-related stress testing and scenario analysis, climate-risk disclosure requirements, and green financing and investment regulations. Non-compliance can result in fines and penalties, as seen in Europe, where the European Central Bank (ECB) mandated supervised banks to. In the U.S. context however, banking regulations have not been stringent, while in some U.S. states banks and other firms are facing more obligations such as climate disclosure laws introduced in California, New York, Washington and Illinois, as mentioned earlier. Furthermore, reputational damage, and loss of business and revenue could aslo feature as potential consequences for non-compliance; but this is not a holistic view as most U.S. states have not implemented hard climate regulations with sanctions as incentive to provoke a strong change in traditional banking practices. Rather, there has been a stronger emphasis on voluntary engagement, such as the Voluntary Carbon Market initiated by the Biden-Harris Administration to encourage firms including banks to participate in carbon offsetting and sustainable finance initiatives. Precisely, this voluntary initiative aims to incent financial institutions to adopt green financing, climate-risk disclosure, and sustainable investing, enhancing resilience, maintaining public trust, and supporting a low-carbon economy transition.

Sustainable Lending Practices

Sustainable lending practices play a crucial role to promote climate resilience in various sectors like real estate. These practices involve considering the environmental and social impact of lending decisions, in addition to financial returns. Some include:

→ **Enhanced Climate Risk Assessment:** The largest U.S. lenders' portfolios consist of Commercial Real Estate (CRE) and Residential Real Estate (RRE), which are quite vulnerable to climate-related risks. Enhanced climate risk assessment and real estate data can help lenders identify and mitigate these risks, ensuring more informed lending decisions and promoting climate resilience in the real estate sector. This can include data on flood zones, wildfire risk, and energy efficiency, enabling lenders to better assess the long-term viability of properties and support climate-resilient investments. In this sense, using Climate X's Spectra can support banks and financial institutions with actionable climate risk insights and data-driven analytics to anticipate potential losses and inform lending decisions.

PRACTICAL EXAMPLES

Citi - Climate Risk Data & Loss Identification

By evaluating the potential impact of severe hurricanes on its loan portfolio, Citigroup better understands and mitigates potential losses. For instance, Citi analyses that in the Northeast U.S., a severe hurricane could trigger a $63.5 million loss to a $49 billion loan portfolio in one year without insurance coverage. By incorporating climate risk data into lending decisions, Citigroup can reduce potential losses and promote climate resilience in its loan portfolio.

Wells Fargo - Climate Scenario Analysis for Credit Risk

Through its participation in the Federal Reserve's Climate Scenario Analysis (CSA) pilot exercise in 2023, Wells Fargo enhances its climate risk management for its real estate portfolio. As of 2024, the bank assesses potential impacts of acute physical events (hurricanes, wildfires, droughts) and long-term transition scenarios over 10-15 years. Analysing direct physical damages and indirect macroeconomic effects helps Wells Fargo identify more strategically potential credit-risk exposures for home lending and commercial real estate properties. For instance, the bank evaluates how extreme events like sea-level rise and wildfires could damage collateral, trigger borrower defaults, and result in credit losses. integrating climate risk data into lending decisions helps Wells Fargo strengthen its resilience and mitigates potential losses in its real estate portfolio.

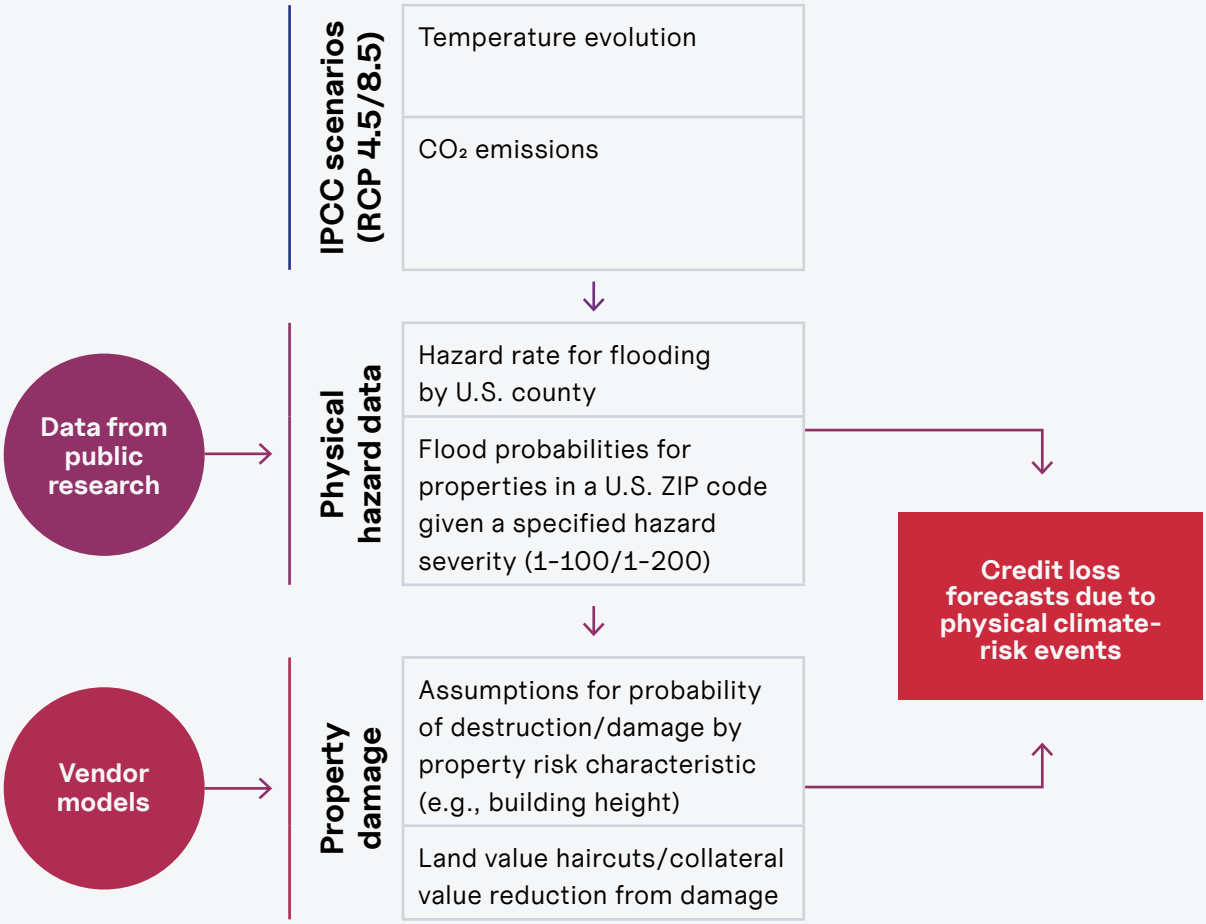


FIGURE: WELLS FARGO'S APPROACH FOR CREDIT-RISK PHYSICAL SCENARIO ANALYSIS
SOURCE: WELLS FARGO

→ **Green Financing Options:** Lenders can offer specialised loan products that encourage sustainable development, such as green mortgages or energy-efficient loans. These loans often have favourable terms, like lower interest rates or extended repayment periods, to encourage borrowers to invest in sustainable features.

PRACTICAL EXAMPLES

Capital One - ESG Risk Management Framework and Physical Climate Risk

In its 2023 ESG report, Capital One has revealed a plan to enhance its climate risk management framework to address physical climate risks to its portfolio including RRE and CRE.
The bank has integrated ESG-related risk management across its enterprise-wide risk framework, identifying physical climate risks from acute events (hurricanes, wildfires) and chronic shifts (rising sea levels, higher temperatures).
The Bank has also developed climate-specific scenario analysis capabilities to assess long-term portfolio impacts. This includes leveraging industry-standard scenarios to explore physical risk increases, such as changing flood and wind zones, and transition risk, including policies to reduce greenhouse gas emissions.
The bank's focus on commercial banking segments, including commercial real estate lending and high-emissions intensity sectors, enables informed decision-making. By periodically assessing and monitoring climate-related risks, Capital One updates its risk inventory, examines portfolio resiliency, and identifies potential future mitigation strategies.

Fannie Mae's Green Financing Programme

Fannie Mae's Green Financing Programme is a great example of sustainable lending in action. This program offers favourable loan terms to borrowers who invest in energy-efficient upgrades or build sustainable properties. For instance, a developer building a new apartment complex with energy-efficient appliances and insulation might qualify for a lower interest rate or higher loan amount through Fannie Mae's programme. This encourages the developer to prioritise sustainability, reducing the property's carbon footprint and energy costs for future occupants.

Policy Implementation

In recent years, the Biden-Harris administration has encouraged lenders to incorporate climate resilience into their lending decisions, such as offering green mortgages and energy-efficient financing options. However, this action did not generate a fast-paced response from the sector, as U.S. financial regulators, including the Fed, cautioned against placing a novel risk like climate change above other systemic risks. Thus, the Federal Reserve's approach on climate risk management for banks may be strengthened or weakened depending on the degree of pressure from administration.

As for political implications, if Harris is elected, we can expect her administration to continue Biden's efforts towards climate-conscious policies in the banking sector. could result in strengthened climate risk management requirements for banks, increased focus on sustainable finance and green lending, and continued efforts to address financial stability and climate change.

On the other hand, if Donald Trump wins, his presidency could show a different approach to financial regulation. Trump's financial regulation approach has historically focused on deregulation, aiming to reduce regulatory burdens on banks. During his presidency, he rolled back some Dodd-Frank Act requirements for mid-size banks and raised the threshold for systemically important financial institutions. In this context, the operability of climate rules may not be disrupted as Trump could potentially aim to reverse them, including the Securities and Exchange Commission's (SEC) Climate Disclosure rules. Thus, a Trump victory could lead to a weakening of climate-related financial regulations, reduced emphasis on environmental risk considerations in lending.

Real Estate

Vulnerabilities of the Property Market

The market dynamics of the U.S. real estate industry is changing rapidly, influenced mainly by factors such as fluctuating interest rates, debt market volatility, rising service charges, and shifting investor preferences towards environmentally sustainable practices. Amid these trends, climate change poses significant risks to real estate values, particularly in high-risk areas.

→ **Fluctuating Interest Rates:** The fluctuation in interest rates significantly impacts real estate investment and financing. Rising interest rates increase borrowing costs, reducing demand for properties and potentially leading to decreased values.

Climate-related risks can exacerbate interest rate volatility, as lenders factor in climate resilience and vulnerability assessments, such as those provided by Spectra, which can help mitigate this risk by identifying climate-vulnerable assets, informing resilient investment strategies, and optimising portfolio performance.

→ **Debt Market Volatility:** This affects real estate financing, as lenders adjust terms and pricing in response to changing market conditions. Climate-related risks can increase debt costs, reduce loan tenors, and tighten lending standards.

Market Investors must consider climate resilience when evaluating debt financing options. Conveniently, Spectra can enables market investors to assess climate-related risks, while Adapt's resilience solutions inform debt financing decisions, ensuring alignment with risk tolerance and investment strategy.

→ **Rising Service Charges:** This dynamics strain property owners' finances, reducing profitability and potentially impacting property values. Climate change necessitates additional maintenance and upgrade expenses, further increasing service charges.

Effective cost management and climate-resilient design can mitigate these increases, maintaining property attractiveness and investor appeal. In this case, **Adapt** can help property owners enhance maintenance costs, identify climate-resilient design opportunities, and develop cost-effective upgrade strategies.

→ **Shifting Investor Preferences:** Investor shift towards environmentally sustainable practices drive demand for green buildings and climate-resilient properties. Investors prioritise environmental, social, and governance (ESG) considerations, recognising the long-term benefits of climate-resilient investments.

Real estate companies must adapt to these changing preferences, incorporating climate risk management and sustainability strategies into their operations. **Adapt** can facilitate this transition, providing data-driven insights to inform resilient property development, retrofitting, and portfolio optimisation. By embracing climate resilience, companies can enhance their ESG profile, attract environmentally conscious investors, and ensure long-term viability.

→ **Asset Risks:** Climate-related events can lead to permanent loss of asset value, reducing property portfolios and impacting investment returns. For instance, sea-level rise can render coastal properties uninhabitable, causing irreversible devaluation. Effective risk management strategies, such as Spectra, can help identify and assess climate-related asset risks.

Moreover, climate resilience can also impact interest rates, as lenders factor in climate-related risks, influencing borrowing costs and property affordability. Rising interest rates can exacerbate climate-related asset risks by increasing debt servicing costs and reducing investor demand.

→ **Devaluation:** Climate change can decrease property values due to increased flood risk, heat stress, or wildfire exposure, leading to reduced market demand and lower sale prices. This can result in significant financial losses for property owners and investors, exacerbating debt burdens and increasing the likelihood of defaults.

Integrating climate resilience into property valuations is crucial to maintaining market stability. Debt markets may also reflect climate-related risks, with lenders requiring higher collateral or shorter loan terms for climate-vulnerable properties. To stay ahead of these risks, Spectra is fitted to support property valuations and mitigate potential financial losses, and **Adapt**'s resilience solutions inform property development and retrofitting.

→ **Physical Impact:** Rising temperatures, intense storms, and flooding can damage or destroy properties, requiring costly repairs or reconstruction. This physical damage can also disrupt business operations, leading to lost revenue and increased service charges. To mitigate these risks, Spectra identifies vulnerable assets, prioritises resilience investments, and assesses exposure to physical risks, projecting potential financial losses under best- and worst-case climate scenarios (RCP 2.5 and RCP 2.8). Spectra enables lenders to evaluate borrowers' creditworthiness, calculate Loss Given Default (LGD) and Probability of Default (PD), and determine mortgage loan repayment ability in the face of climate-related disasters.

Proactive adaptation measures, such as utilising **Adapt**, can further mitigate physical impacts by identifying assets worth adapting, assessing capital expenditures (CapEx) required for adaptation measures, and analysing potential return on investment (ROI) from reduced insurance premiums, lower maintenance costs, and increased property values. **Adapt** informs lenders' investment strategies, prioritises high-risk assets, enhances creditworthiness assessments, and optimises portfolio management.

→ **Insurance Increase:** Climate-related risks lead to higher insurance premiums, increasing operational costs for property owners and potentially rendering some properties uninsurable. This can make properties less attractive to investors and buyers, exacerbating market volatility and reducing demand. Insurance costs may also rise due to increased service charges, further straining property owners' finances.

With **Adapt** solutions, property owners can navigate these risks, optimise insurance strategies, and develop cost-effective risk mitigation measures.

→ **Cost of Maintenance:** Climate change necessitates additional maintenance and upgrade expenses to protect properties from climate-related damage, straining property owners' finances. This includes installing flood-resistant materials, upgrading roofing, or implementing cooling systems, further increasing service charges.

Regular maintenance can help mitigate climate-related risks, but increased costs may be passed on to tenants through higher service charges.

→ **Reputation Risk:** Companies and investors associated with climate-vulnerable properties may face reputational damage, impacting their brand value and ability to attract investors or customers. This can lead to decreased property values, reduced business opportunities, and increased borrowing costs due to perceived climate-related risks.

Conversely, demonstrating climate resilience can enhance reputation and attract environmentally conscious investors.

These vulnerabilities underscore the critical need for real estate investors, owners, and stakeholders to assess and mitigate climate-related risks to protect their assets and maintain value. The 2023 climate-related disasters resulted in estimated financial losses of over $50 billion in the U.S. real estate sector. Moreover, CoreLogic's 2023 Hurricane Risk Report revealed that over 32 million single-family residences and around 1 million multifamily residences were already at risk of hurricane damage, with a combined reconstruction cost value of $11.6 trillion. More recently, Hurricane Helene (category 4) is estimated to have caused between $30.5 billion and $47.5 billion in economic losses for property owners across 16 states. This amplifies to alarming devastation potential that could bring category-5 hurricane Milton and future catastrophic events.

In response to Helene's impact, the Federal Emergency Management Agency (FEMA) has has mobilised significant resources to support affected states, providing over $137 million in aid, deploying 7,000 personnel, and distributing essential supplies. However, former president Trump claimed that Vice President Harris and President Biden are doing a "bad job" at handling the aftermath, while the Republican candidate addressed his support to affected areas, urging Starlink owner Elon Musk to provide necessary resources to restore communications systems, already initiated by FEMA. The contrasting narratives between the Biden-Harris administration's efforts (through FEMA) and Trump's criticisms could influence public perception of disaster management effectiveness. If the administration's response is viewed as inadequate despite the aid provided, it may lead to decreased approval ratings and strengthen the opposition's messaging leading up to election. However, this could also affect the real estate sector's resilience and adaptation capacity by creating uncertainty about future disaster management. If party leaders are perceived as more focused on political quarrels than effective solutions, it may hinder the sector's ability to plan for and respond to climate-related challenges, ultimately affecting investment and development decisions.

Sustainable Building Practices

Sustainable building practices are crucial for reducing the environmental impact of real estate development and enhancing resilience against climate risks. These practices include using renewable materials, energy-efficient systems, and waste reduction techniques throughout a building's lifecycle. For example, incorporating solar panels, green roofs, and advanced insulation can significantly lower a building's carbon footprint and operational costs.

In the U.S., many real estate projects are adopting these practices to improve resilience against climate risks, particularly in hurricane-prone areas such as Florida, where buildings are being constructed with reinforced materials and elevated designs to withstand flooding and high winds. However, recent Climate X research reveals a concerning gap in preparedness among top global banks, with 88% unprepared for climate-related shocks, with U.S. banks ranking among the least prepared. This lack of preparedness poses significant risks to the U.S. property market, exposing both both banks and property owners to interconnected damages and financial losses, which also underscores the urgent need for industry adaptation.

Climate X's Adapt provides a critical solution, enabling lenders and developers to assess climate-related risks, identify resilient investment opportunities, and prioritise adaptation measures. By leveraging Adapt's data-driven insights, stakeholders can optimise building designs, enhance energy efficiency, and implement effective climate resilience strategies. This not only mitigates climate risks but also unlocks economic benefits, such as reduced operational costs, increased property values, and improved creditworthiness.

Embracing sustainable building practices and climate resilience solutions like Adapt is vital for ensuring long-term viability and minimising climate-related disruptions. By incorporating climate risk management into their strategies, U.S. lenders, developers, and investors can proactively address the challenges posed by climate change and capitalise on the opportunities presented by a more resilient and sustainable built environment.

PRACTICAL EXAMPLES

The Bullitt Center, Seattle

Completed in 2013, this six-story office building is one of the most sustainable buildings worldwide. Its innovative design and features have established a new benchmark for environmentally friendly construction. The building's solar panel roof generates 100% of its electricity requirements, diminishing its carbon footprint and dependence on non-renewable energy sources, and also reduces the building's energy consumption and mitigating the effects of extreme temperatures.

The Bullitt Center's dedication to sustainability extends beyond energy efficiency. Its rainwater harvesting system collects and reuses rainwater, decreasing water consumption by over 90% and helps conserve water during droughts, while its sustainable materials and construction methods contribute to its overall resilience against natural disasters.The building's materials are sustainably sourced, with FSC-certified wood used throughout the structure. Additionally, its green roof provides insulation, reduces stormwater runoff, and creates a habitat for local wildlife.

With the U.S. property market facing the growing risks of climate shocks on physical assets, sustainable building practices, exemplified by Seattle's Bullitt Center, can mitigate such risks, enhance asset value, and minimise environmental impact. This benefits property owners, investors, and communities, supporting a low-carbon economy and resilient future.

Policy Implementation

There is a degree of political influence when it comes to the development of climate risk disclosure requirements and zoning regulations, particularly at states level, of which liberal states – and their local governments – demonstrate stronger support to implement pro-climate policies to match community and business needs. For example, California Governor Gavin Newsom has implemented policies aimed at increasing transparency and accountability in the real estate sector, such as:

- Signing the California emissions reporting law, targeting Firms doing business in California with over $1 billion revenue, to disclose relevant climate-related data like emission scopes 1, 2, and 3.
- Supporting legislation like Senate Bill 1, which aims to enhance flood protection and climate resilient infrastructure in vulnerable communities.

From another angle, some notable policies and initiatives in Florida include government-backed infrastructure resilience and adaptation programmes like:

- Florida's Resilient Coastline Program: Protecting coastal communities and homes from sea-level rise and flooding through coastal restoration, flood control, and adaptive planning. The program supports vulnerable coastal ecosystems and economies with $100 million allocated for coastal resilience projects.
- Florida's Clean Energy Plan: Promoting solar and wind power, reducing greenhouse gas emissions from energy production. By incentivising clean energy development, Florida aims to gradually increase its electricity consumption from renewable sources to reach 100% by 2050. This was supported by controversial bills signed in 2022 by Governor DeSantis
- Florida's Flood Protection Program: Enhancing flood protection and climate-resilient infrastructure in vulnerable communities. Through targeted investments and policy reforms, the program updates flood maps, strengthens building codes, and supports flood mitigation projects to safeguard homes, businesses, and livelihoods from flooding and sea-level rise.

Insurance

Climate Risk and U.S. Insurance Crisis

The U.S. insurance sector faces unprecedented climate-related risks, with 2024 already experiencing serious financial losses. The California wildfires in July 2024 resulted in estimated insurance losses of over $15 billion, while Hurricane Idalia's impact on the Southeastern U.S. in August the same year added another $10 billion in insurance losses. As a result of growing impacts, insurance premiums hiked by at least 20% in high-risk areas. Additionally, many key insurers such as Allstate, Progressive Insurance, State Farms among others are abandoning home premiums in impacted states like California, Texas, Florida among others.

From another angle, a significant portion of Hurricane Helene's damage, estimated at $20-30 billion, is unlikely to be covered by insurance, creating insurance gaps that leave homeowners with substantial out-of-pocket expenses. Furthermore, many homeowners lack flood insurance, as it is typically not included in standard homeowners' policies and is only mandatory for homes with federally backed mortgages in high-risk flood zones.

Climate-related risks are identified in the insurance sector through key vulnerabilities, including:

→ **Increased Claim Frequency and Severity:** Climate-related disasters lead to more frequent and severe claims, straining insurer resources and profitability. This can result in significant financial losses, as seen in the 2024 California wildfires and Hurricanes Idalia and Helene. Insurers must account for climate-driven changes in claim patterns to maintain solvency. As a key solution, Climate X's Adapt enables insurers to assess and understand climate-related risks they are exposed to, optimise policy pricing, and prioritise risk mitigation measures to anticipate these risks. By doing so, insurers can enhance their risk modeling capabilities, reducing the likelihood of underestimation and ensuring adequate reserves. This proactive approach helps maintain policyholder trust, mitigates financial losses, and supports regulatory compliance.

→ **Rising Reinsurance Costs:** Reinsurance premiums can increase due to growing climate-related risks, impacting insurers' bottom lines. This can in turn lead to reduced profitability and increased costs for policyholders. Insurers must therefore navigate complexities in reinsurance markets, while balancing risk transfer with cost management. To support this, Spectra informs reinsurance decisions by identifying vulnerable assets, prioritising resilience investments, and optimising risk transfer strategies.

By leveraging Spectra's climate risk analytics, insurers can negotiate more effective reinsurance contracts, minimise costs, and maintain profitability. This enables insurers to offer competitive policy pricing while ensuring adequate coverage for climate-related risks.

→ **Decreased Insurability:** Climate-related risks make certain areas uninsurable, leading to market withdrawal by key insurers. This leaves policyholders vulnerable and without adequate coverage. Insurers must adapt their underwriting strategies to account for climate-related risks. Adapt empowers insurers' response by identifying areas of high climate risk, therefore informing targeted underwriting decisions and risk mitigation measures.

Integrating Adapt's climate risk insights can help insurers optimise policy issuance, reduce exposure to high-risk areas, and maintain regulatory compliance. This proactive approach supports policyholder protection, market stability, and insurer solvency.

→ **Regulatory Challenges:** U.S. Insurers face evolving climate-related regulations and reporting requirements, such as the National Association of Insurance Commissioners' (NAIC) Climate Risk Disclosure Survey to develop an industry standard promoting transparency and strategic management of climate-related risks in the insurance, and aligning with international standards like the TCFD (now absorbed in the ISSB) standards. In some cases, failure to adapt can result in fines (especially if the requirements are legally binding), reputational damage, and operational disruptions.

As insurers face a delicate regulatory landscape that demands simultaneous risk mitigation and compliance, Spectra can inform regulatory reporting by providing accurate climate risk assessments. This also means that insurers can ensure regulatory compliance, mitigate reputational risks, and maintain operational efficiency. Additionally, it enables insurers to focus on core business activities, supporting policyholder needs and market stability.

→ **Investment Impacts:** Climate-related risks affect insurers' investment portfolios, potentially leading to decreased returns and increased volatility. This can compromise insurers' ability to pay claims. Insurers must integrate climate risk considerations into investment decisions.

Leveraging Adapt can help inform investment strategies by identifying climate-resilient assets. Through Adapt's climate risk insights, insurers can optimise investment portfolios, minimise climate-related risks, and ensure adequate returns. This also supports policyholder protection, insurer solvency, and regulatory compliance.

→ **Operational Risk:** Climate-related events disrupt insurer operations cause other operational overheads, impacting customer service and claims processing. This can lead to reputational damage and regulatory scrutiny. While this is a potential challenge, Adapt can inform business continuity planning by identifying climate-related risk the insurance operations. With this solution, insurers can optimise operational strategies, minimise disruption risks, and maintain customer trust. This equally benefits regulatory compliance, policyholder protection, and insurer reputation.

→ **Risk Modelling Limitations:** Insurers' risk models struggle to accurately account for climate-related risks, leading to potential underestimation of exposures. This can result in inadequate reserves and capital allocation. Insurers must enhance risk modeling capabilities to account for climate-related uncertainties.

By utilising Spectra's climate risk analytics, insurers can upgrade the quality of their risk models, ensure adequate reserves, and maintain regulatory compliance. As a result, this approach promotes policyholder protection, insurer solvency, and market stability.

Sustainable Business Practices and Political Leadership

The US insurance industry, with the support of local state governments, is adopting sustainable business practices to address climate-related risks. For example, California Insurance Commissioner Ricardo Lara has launched the California Sustainable Insurance Strategy to address climate-related risks and enhance the state's market condition. Key elements include:

- Transitioning policyholders from the FAIR Plan to regular insurance.
- Prioritising wildfire safety measures.
- Enhancing commercial coverage.

Governor Gavin Newsom supports the strategy, aiming for a balanced approach to maintain fair prices and protections.

In this time of climate-related insurance crisis, political leadership stand as a strong mediator between insurers and consumers to assure a favourable, sustainable market condition. However, placing an ideologically motivated decision-making above pragmatic political steps could cloud leadership judgement and further harm the insurance sector and consumers alike. In this sense, the future state of the insurance market is uncertain, but could still depend on the level of state support for climate resilience and sustainable strategies.

Overall, climate resilience demands a multifaceted approach that transcends regulatory frameworks and political ideologies. Looking ahead, it becomes increasingly evident that data-driven decision-making, proactive adaptation strategies, and collaborative leadership will be essential for fostering resilience across key industries.

PRACTICAL EXAMPLES

Partnership between the City of Miami and private insurers.

In response to rising flood insurance costs, the city collaborates with insurers to develop a comprehensive flood resilience plan. This plan includes:
→ Investing in flood mitigation infrastructure, such as seawalls and levees.
→ Implementing flood-resilient building codes.
→ Offering incentives for policyholders to adopt flood-resilient measures.

This partnership also delivered reduced Insurance premiums for policyholders in high-risk areas, while the city's flood resilience improved. This collaborative effort demonstrates the potential for data-driven decision-making, proactive adaptation strategies, and collaborative leadership to drive sustainable growth and climate resilience in the insurance sector.strategies, and collaborative leadership to drive sustainable growth and climate resilience in the insurance sector.

KEY TAKEAWAY

→ The political landscape significantly impacts the regulatory environment for climate-related risks across these sectors. Ongoing initiatives by the Biden-Harris administration may lead to stricter climate risk management requirements and promote sustainable finance. Conversely, a shift towards deregulation under a Trump administration could weaken existing compliance measures and diminish the emphasis on integrating climate resilience into financial and investment decisions.

→ The interconnectedness of banking, real estate, and insurance necessitates a holistic approach to climate risk management. Financial institutions must enhance their assessments of climate-related risks to properties, influencing lending practices and insurance underwriting. By incorporating climate resilience into their operations, banks can better protect their loan portfolios, while real estate firms can enhance property values and attract environmentally conscious investors.

→ The demand for sustainable practices is reshaping the real estate market, with investors favouring climate-resilient properties. Financial institutions can capitalise on this trend by offering innovative financing options, like green mortgages and specialised insurance products. By aligning their offerings with sustainability goals, these sectors.

03

Embracing Climate Opportunity in Times of Change

From Climate Risk to Climate Opportunity

Changing the Software: Rebranding the American Economy

Climate risk presents an opportunity for U.S. businesses to drive innovation, create new markets, and encourage sustainable growth, enhancing global competitiveness in resilience solutions. Addressing climate risk enables the U.S. economy to better withstand climate-related disasters and economic disruptions, emerging stronger and more adaptable.

Effective management relies on data-driven decision-making and proactive adaptation strategies, regardless of regulatory environments or political landscapes. Unlike Europe's regulatory focus, the U.S. business culture prioritises profit-driven solutions, which will require businesses to integrate climate risk assessment and management into their core operations, leveraging tools like climate materiality mapping and scenario analysis to assure economic prosperity and remain competitive.

As the United States navigates climate risk, a fundamental opportunity emerges to redefine its economic trajectory. This pivotal election season presents a chance for America's business community to leverage its innovative spirit. U.S. businesses have thrived by embracing disruption, pioneering new industries. The transition from horse-drawn carriages to automobiles in the early 20th century and Silicon Valley's tech boom demonstrate America's ability to revolutionise traditional practices. Climate risk presents a similar inflection point.

By integrating climate risk assessment and management, American businesses can drive sustainable growth, creating novel markets and bolstering global competitiveness. Data-driven decision-making, proactive adaptation strategies, and cutting-edge tools will fuel this profit-driven approach, cementing America's position at the forefront of innovation.

To fully harness this potential, American businesses and stakeholders must collaborate with Climate X, a hub of climate expertise and innovation, to nurture science-business relationships, assure economic prosperity, and stay ahead of the climate curve, economic prosperity, and stay ahead.

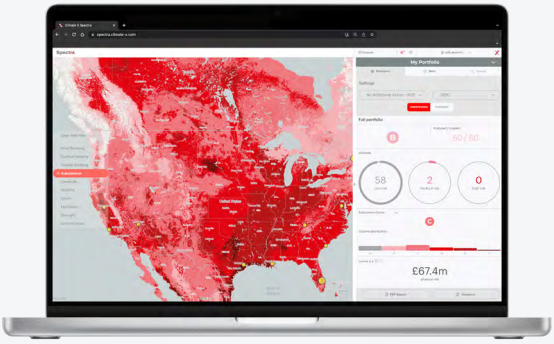
Enhancing Industry's Climate-Resilience Capacity

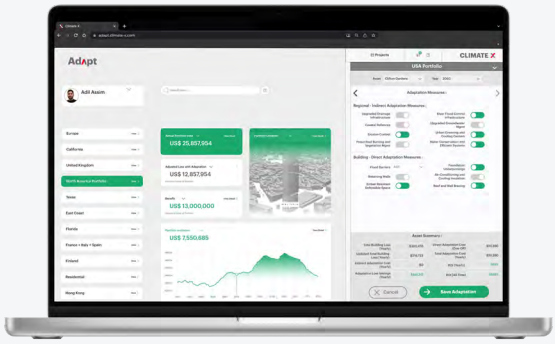
Focusing on data-driven climate resilience offers a more effective and sustainable approach than emphasising political dynamics. By prioritising data analytics and predictive modeling, industries can make informed decisions, mitigate climate risks, and capitalise on opportunities regardless of political shifts. This approach fosters resilience, adaptability, and long-term prosperity, whereas political dynamics can be unpredictable, polarising, and short-sighted. Moreover, data-driven strategies transcend partisan divides, enabling collaborative solutions and actionable insights that benefit businesses, communities, and the environment alike. By anchoring climate resilience in data and expertise, industries can navigate the complexities of climate change with confidence and precision.

Recent undertakings form U.S. banks demonstrate the potential for data-driven decision making to mitigate climate risks. Some examples include:

→ **Citigroup's climate risk assessment model:** By leveraging advanced analytics and climate modeling, Citigroup can anticipate potential losses in loan portfolios and inform proactive lending decisions. This proactive approach enables the bank to reduce exposure to climate-related risks, optimise portfolio performance, and support sustainable economic growth. By integrating climate risk assessment into its core operations, Citigroup demonstrates a forward-thinking strategy that enhances resilience, manages risk, and promotes long-term prosperity.

However, as the industry struggles to grasp the severity and plausibility of climate risk impacts on physical assets, over 70% of U.S. banks, according to a survey by Oliver Wyman, heavily rely on sophisticated of climate data and analytics platforms. This includes tools such as **Spectra** and **Adapt**, developed by Climate X:





Spectra

Spectra complements banks' climate risk models by providing granular, forward-looking insights into potential climate-related losses across various loan types. By analysing physical risk exposure and projecting financial losses under different scenarios (best-case and worst-case scenarios), **Spectra** enables banks to refine lending decisions, optimise credit risk management, enhance loan pricing strategies.

Adapt

Adapt helps banks identify assets worthy of adaptation investments, analysing capital expenditures (CapEx) and return on investment (ROI) from reduced climate-related risks. Using **Adapt**'s insights empowers banks to prioritise effect climate-resilient lending, optimise investment strategies, enhance portfolio performance.

Spectra and **Adapt** provide reliable, data-driven information, transcending political ambiguity and enabling banks to make informed lending decisions. Integrating these tools can help U.S. banks mitigate climate-related risks, drive sustainable growth, enhance profitability, build resilience in the face of climate uncertainty.

Climate Risk in U.S. business

Climate-related Economic Meltdown or Awakening?

Recent facts demonstrate that the U.S. economy and key industries are in crisis and are already waking up to the devastations of climate-related events on the U.S. economy. These include among other things:

- Billion-dollar damages from weather events on U.S. properties and mortgage market.
- Home insurance premiums hikes of over 20% across states, fuelled by impacts of extreme weather events on physical assets.
- U.S. regulators and Wall Street's pressure from U.S. investors to address climate risk as a systemic risk.

Business Opportunities in Climate Risks

There three major ways to capitalise on climate risks, not limited to:

- **Climate-resilient infrastructure development:** Investing in resilient infrastructure can create new opportunities for growth and job creation.
- **Green financing options:** Green bonds and loans can attract new investors (including international investors) to finance mitigation and adaptation against climate-related risks.
- **Climate risk management services:** Companies like Climate X offer expertise in climate risk management helping industries, including banking and real estate, to navigate complex risks.

Business Needs vs Regulations

While regulations are essential, they may not always satisfy business needs. By embedding climate risk expertise into business operations, companies can stay ahead of the curve. Unlike regulatory and policy responses that could fail or delay in addressing fundamental business risks, collaborating with experts like Climate X can help industries develop effective climate risk management strategies that will provide immediate and long-term solutions.

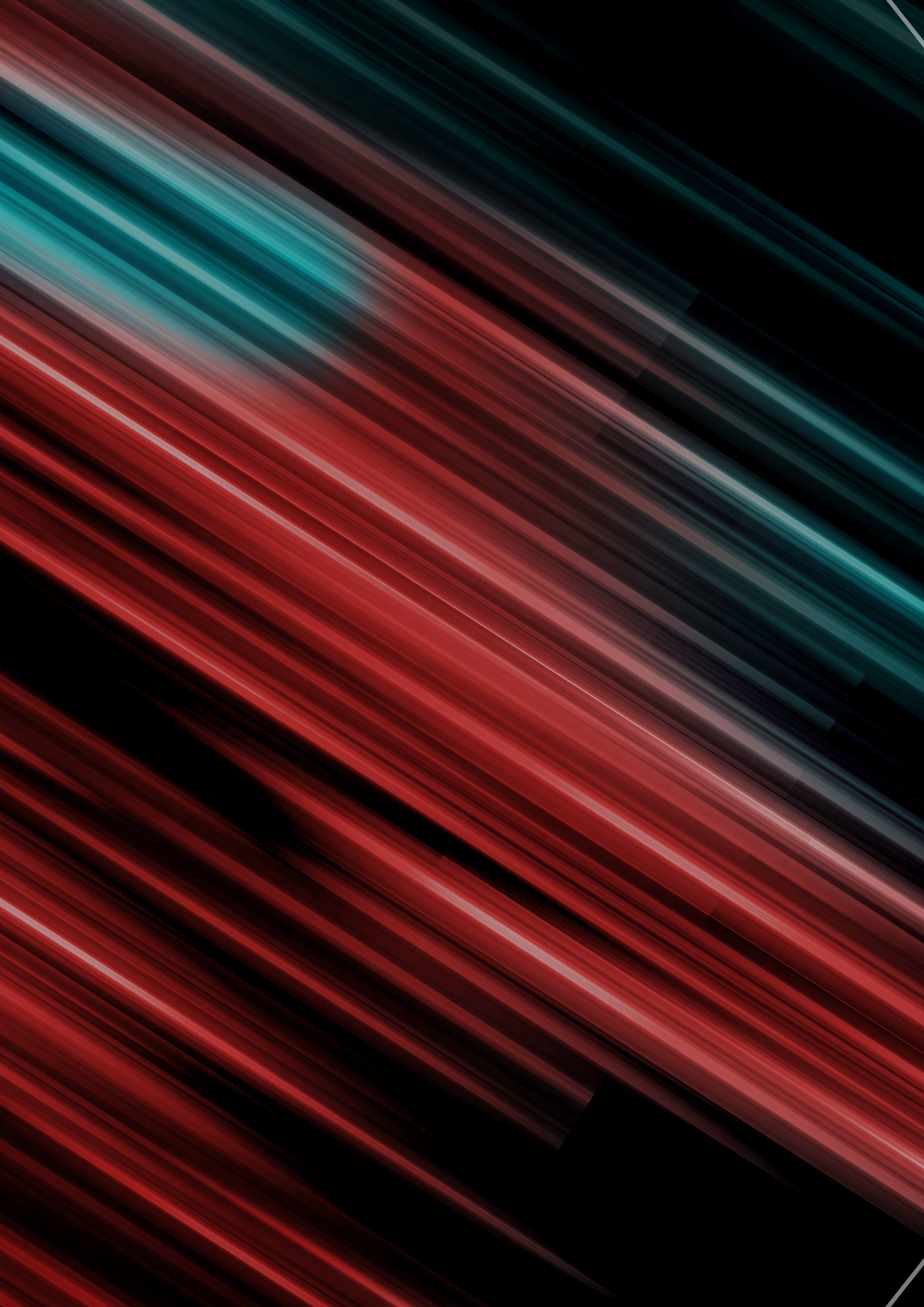
KEY TAKEAWAY

- U.S. businesses can harness climate risks to drive innovation, create new markets, and enhance global competitiveness by integrating climate risk management into their operations.
- Leveraging data and predictive tools like Spectra and Adapt helps industries make smarter decisions, mitigating climate risks and improving resilience, regardless of political changes.
- While regulations are key, companies can address climate uncertainties and stay ahead of competitions by partnering with experts like Climate X to embed climate risk strategies that meet both immediate and long-term business goals.

Conclusion

U.S. politics plays a pivotal role in shaping the approach to climate risk adaptation within the banking and associated sectors, despite contrasting views from the major political parties. A Harris administration may continue pushing for stricter climate regulations and sustainable lending practices, while a Trump leadership will likely prioritise deregulation and economic growth. However, despite political differences, the growing and observable risks posed by climate-related impacts on assets will continue to infect the U.S. financial market and entire economy, pressuring the banking, real estate and insurance sector to double-down on addressing these challenges.

Regardless of the state of political leadership, U.S. banks, real estate and insurance firms are increasingly focusing on data-driven, science-based strategies to assess and mitigate climate risks. As observed through the example of Citi, innovative risk management solutions, including climate risk data and analytics tools like Climate X's Spectra and Adapt – are essential to effectively support decision making in resilience strategies. Ultimately, while politics may mainly impact regulatory frameworks for better or worse, the financial imperatives of managing climate risk will remain a growing concern that ensure the risk industry stays focused on adapting to a changing climate.



CLIMATE X

The World's Only Fully Integrated Physical **Climate Financial Risk Platform**

www.climate-x.com

About Climate X

Climate X is the world's only fully integrated climate risk platform, helping financial institutions to price, manage and build resilience to climate change impacts on the built environment. We provide climate financial risk data to global banks and asset managers, defending global economic stability against the impacts of climate change.

Climate X is redefining resilience against climate change. Our innovative solutions have transformed the approach of businesses towards climate challenges, enabling them to build and retrofit structures for a sustainable future.

By translating carbon emissions pathways into financial impacts, we help drive a significant shift in the financial sector. Banks and asset managers are now using their insights to drive positive societal change, transforming investment strategies, risk assessments, and preparation for the financial effects of extreme weather.

"Collaborating with Climate X, we will equip our clients with vital data which will inform their Net Zero strategies and accelerate their response to climate-related risks."

Louise Brett
Head of FinTech and Financial Services Innovation, Deloitte North and South Europe,

Deloitte.

Awarded and seen in media by :

Bloomberg · sky news · Deloitte. · ESGFINTECH100 · FT ADVISER · sifted · Chartis

Contact us: enquiries@climate-x.com

CLIMATE X

This is bigger than us

We're driven by a purpose that's much bigger than any of us. There are few challenges more significant than climate change, but the cutting-edge technology developed by us can help organizations to become more resilient. Understanding that quantifying and understanding risk is the key to building climate resilience, we have the right tools for financial institutions to assess climate risks and opportunities and effective management and support the transition towards a lower-carbon economy. To do this, we provide global coverage of climate risk data by combining science & econometrics to deliver climate risk analytics.

"I have been really impressed with their thoughtfulness and innovation in developing climate risk solutions. Climate X's commitment to addressing climate challenges resonates strongly with my own vision for driving positive change on a global scale."

David Carlin
Head of Risk at United Nations Environment Programme Finance Initiative (UNEP FI)

UN environment programme | finance initiative

Regulatory Compliance & Climate Disclosures:

Climate X projects physical risks 80 years into the future, designed with the new regulatory landscape in mind - including ISSB, ICAAP and stress testing/scenario analysis requirements.

Advanced Analytics:
Understand data more efficiently, including identifying drivers and isolating significant risks.

Physical Risks Worldwide for 1.6bn Assets:
Identify exposure to significant risk types and quantify real-world costs including asset valuation impacts upside and downside.

Business Decisioning:
Reflect climate-related risks into pricing, acquisition strategy and more.

Contact us: enquiries@climate-x.com

STRESS TESTING AND SCENARIO ANALYSIS

Where is my risk today, how does it evolve over time, mitigation strategy

ORIGINATIONS, PRODUCT/PRICING, CLIENT ENGAGEMENT

Integrating climate risk into decision making/due diligence, pricing and value-add client engagement

CLIMATE RISK DISCLOSURES AND REGS

Annual reports, ISSB, ECB, SFDR, EU Taxonomy and other statements

Tools

Decision-Useful Tools: Allow senior leadership to act on the outputs produced by the assessment tool to sculpture climate strategy, invigorate new policies and improve client engagement.

Disclosure-Useful Tools: To meet regulatory or other external disclosure requirements, they can be utilized for TCFD reporting, climate stress/scenario testing or other disclosures.

Commitment-Useful Tools: These tools enable target-setting for financial institutes and help organizations to monitor the progress of reaching specific targets.

"When any new wave of technology comes to market, there's always one company that looks like the clear winner, and I believe Climate X is leading the pack. Spectra is the most comprehensive, easily accessible risk management solution available on the market - there's nothing like it."

Bob Wigley
Chairman of UK Finance

UK FINANCE

Contact us: enquiries@climate-x.com

CLIMATE X

The Team

A team that can talk your language - our extraordinary and diverse team boasts decades of experience covering various specialisms, including scientists, data engineers, finance experts, and creatives. Our team is passionate about making real change globally with an understanding of what regulatory and policy requirements you need to meet to contribute to the long-term success of your business by preparing for climate risks.

Lukky Ahmed,
CEO & Co-Founder

Kamil Kluza,
COO & Co-Founder

"As risk experts, finding climate risk data was easy.
To trust it and understand it was another story.
Climate X is bringing the best of data science to finance experts"

Our World Class Talent Team come from:

University of Oxford · Harvard University · Bank of England · University of Cambridge · MIT · HSBC · Crédit Agricole · LSE The London School of Economics and Political Science · Imperial College London · Lloyds Banking Group · monzo · University of Exeter · United Nations · Barclays · Meta

Contact us: enquiries@climate-x.com

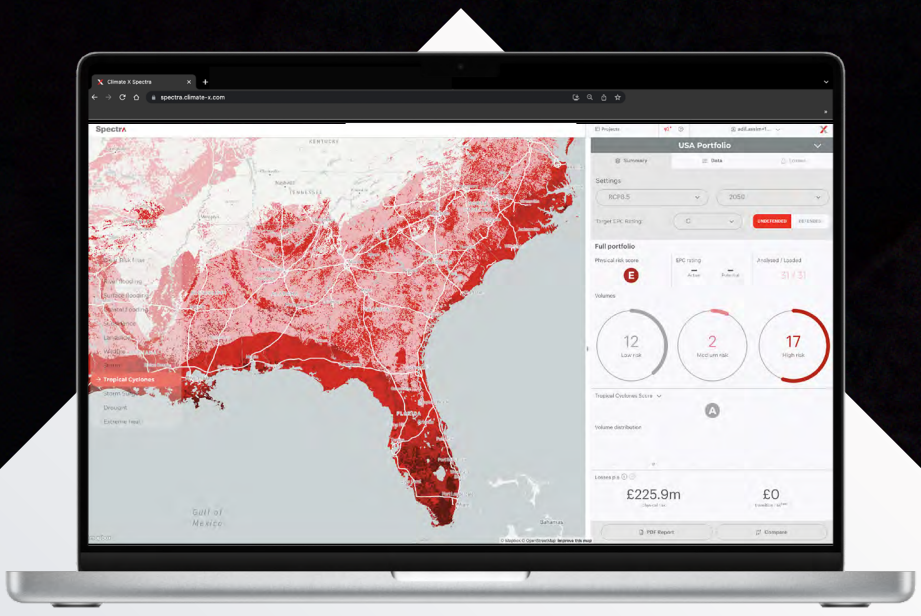
Spectra

Our solution Spectra maps addresses directly to the probability and severity of all hazards linked to over 1.5bn properties worldwide, and translates physical risks from major hazards into Asset Valuation impact and Corporate Site level Business Disruption Revenue Impacts

Physical Risks & Losses

Climate X's Spectra is an award-winning on-demand revolutionary climate risk data analytics platform, delivering location-specific risk ratings and climate-adjusted loss estimates between now and 2100 worldwide under multiple climate emission pathways.

The platform enables financial institutes to meet regulatory compliance and build resiliency by incorporating climate-related risks into investment strategies, risk management frameworks and business decision-making processes, turning future risks into opportunities.



Contact us: enquiries@climate-x.com

CLIMATE X

Industry leaders trust Climate X

DTZ INVESTORS · EQUANS · Foundation Home Loans · JLL · Legal & General

Melton Building Society · Paratus AMC · Recognise BANK · Standard Chartered · SUSTAINABLE ADVANTAGE

Triodos Bank · TriplePoint · VIACON · Virgin MONEY · Deloitte.

Our multi award-winning SaaS platform Spectra™ drives value for globally leading financial service institutions

---

As awarded and seen in media by

Bloomberg · sky news · Deloitte. · ESGFINTECH100

FT ADVISER · sifted · Chartis

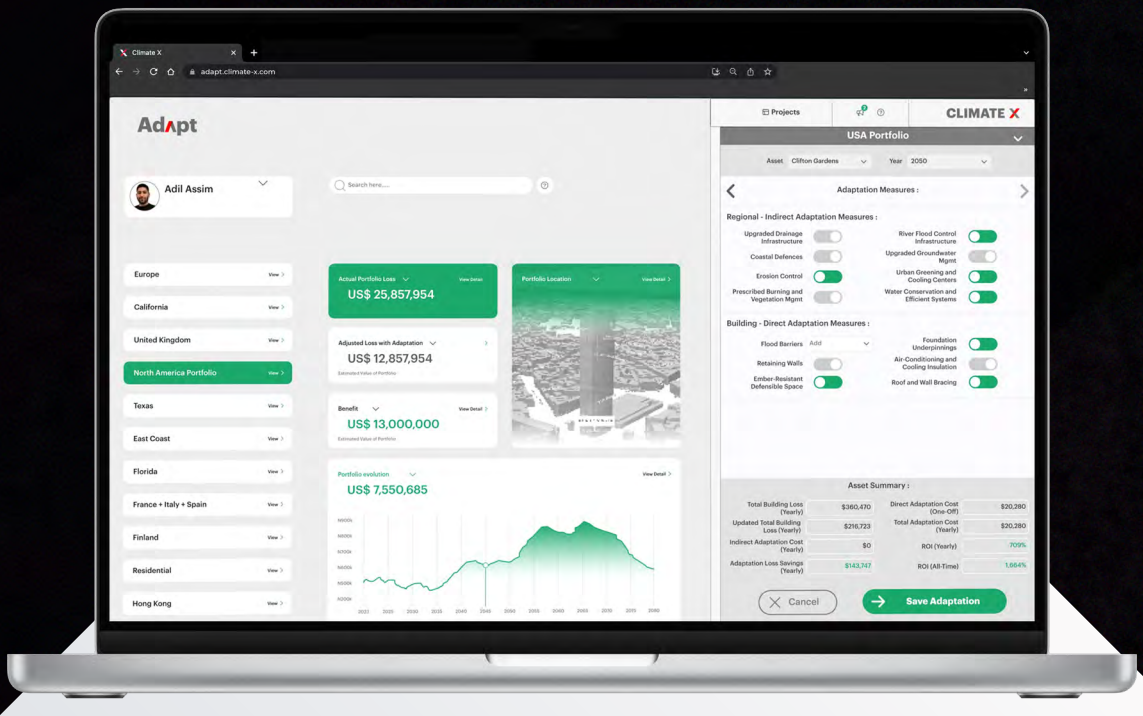
Contact us: enquiries@climate-x.com

Adapt

Adapt provides instant access to asset-level climate risk data and forecasts return on investment (ROI) for planning and implementing adaptation solutions.

Identify climate adaptation opportunities x3000 faster without third-party dependencies

Become hyper-reactive by speeding up transaction closures, building asset resilience and outpacing your competition confidently.



3000× faster

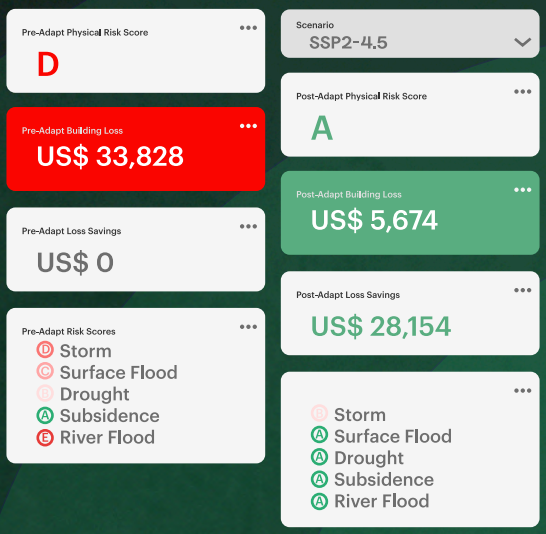
10× cheaper

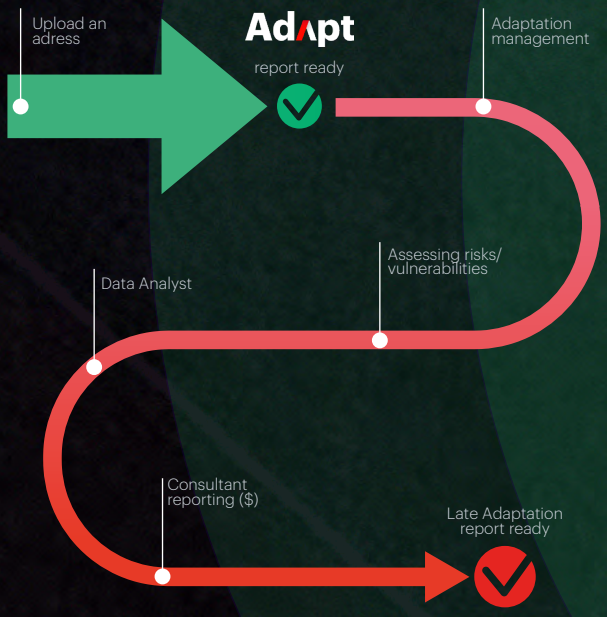
De-risk Assets' Physical Risk through Climate Adaptation

Integrate Climate Adaptation to your Investment Cycle with Climate X Adapt and the convenience of on-demand data.

In few clicks, you can run a full risk assessment, explore adaptation options and download the data, no need for costly consultants which can slow down deals.

Quickly progress through your Acquisition or Due Diligence process with Adapt, saving time and resources. Simply log in and access the data you need to make decisions - fast.





Don't wait to know your adaptation capacities

The outdated approach to assessing climate adaptation measures involves leveraging a team of consultants. Projects can take weeks to mobilise, resulting in deal slowdowns or loss of deals altogether.

Generate a climate adaptation report in as little as 60 seconds with our easy-to-use tool, Adapt.

You can access the web application on demand, upload your asset and download the data you need for an Adaptation report – in a minute or so.

Built on international guidances

Our platform was built with rigourous compliance in mind - based on ISO 14090/14091, as well as UNFCCC, EU Taxonomy and Technical Guidance.

Our recommendations are aligned with the above regulations, so you can ensure compliance and drive resilience in your portfolio.

ISO **14090** -2019
ISO **14091** -2021

EU Taxonomy

CLIMATE X

Contact us:
enquiries@climate-x.com

UNITED KINGDOM

166 Borough High Street,
SE1 1LB London England

UNITED STATES

Rockefeller Center
1270 Ave of the Americas,
7th Fl New York, NY 10020

www.climate-x.com