

Climate Risk Management —

Business Case for UAE and Saudi Companies

Insights Article with
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What is a Climate Risk Assessment?

A Climate Risk Assessment is an assessment that identifies, analyzes, and prioritizes climate risks affecting a defined boundary, which can be a project, company, city, or country. It provides insights into potential vulnerabilities and supports the development of climate adaptation and mitigation strategies to enhance resilience.

Climate Risk Assessments focus on two types of risks:

- **Physical Risks:** Risks resulting from climate hazards that directly impact assets, infrastructure, and operations. These include extreme heat, flooding, sandstorms, and rising sea levels.
- **Transitional Risks:** Risks that arise from the shift to a low-carbon economy, including regulatory changes, evolving market demands, technological advancements, and reputational considerations.

A comprehensive Climate Risk Assessment helps businesses understand how these risks could disrupt operations, allowing them to implement proactive solutions.

Why is a Climate Risk Assessment Important?

Conducting a Climate Risk Assessment provides businesses with critical insights that help safeguard operations, protect investments, and enhance long-term resilience. A Climate Risk Assessment can be used as a strategic tool for reducing risks and maximizing business opportunities in a changing climate.

Key benefits include the following:

- **Reducing financial losses** - identifying and mitigating risks in advance helps businesses avoid costly damages, operational downtime, and emergency expenditures caused by climate-related disruptions.
- **Protecting workers, visitors, and communities** - extreme climate events, such as heatwaves and sandstorms, can create health and safety risks for employees, customers, and visitors. An assessment enables businesses to implement protective measures.
- **Enhancing reputation and stakeholder confidence** - stakeholders, including investors and customers, are prioritizing businesses that integrate climate resilience into their strategies. A robust risk assessment demonstrates long-term sustainability and financial prudence. Addressing climate risks may also aid in accessing green financing opportunities.

- **Resilience and business continuity** - assessing risks in advance ensures businesses can adapt quickly and minimize downtime in their operations and services.
- **Ensuring regulatory compliance** - climate regulations are evolving, with frameworks such as the Task Force on Climate-related Financial Disclosures (TCFD) being widely adopted and national sustainability policies increasingly requiring businesses to disclose climate-related risks. Conducting an assessment ensures compliance with these requirements. In the Saudi context, One Planet Sovereign Wealth Funds (OPSWF), of which PIF is a founding member, also announced support for TCFD reporting of climate risks and opportunities.






How is a Climate Risk Assessment Conducted?

The following are the usual steps for conducting a climate risk assessment:

- 1 Define the Assessment Boundary:** Determine the scope of the assessment, such as an individual site or an entire company.
- 2 Gather Climate Data and Identify Hazards:** Collect historical climate data and future projections to assess exposure to climate hazards such as extreme heat, flooding, drought, and sandstorms.
- 3 Assess Likelihood and Impact:** Evaluate the probability of climate risks occurring and their potential impact on operations, infrastructure, and financial performance.
- 4 Define and Prioritize Risks:** Rank climate risks based on their likelihood and impact, and focus on highest ranking risks.
- 5 Develop Mitigation and Adaptation Strategies:** Identify and implement design, construction, and operational measures to reduce risks and improve long-term resilience. Incorporate these strategies into Enterprise Risk Management (ERM) plans.
- 6 Monitor and Update Regularly:** Climate risks evolve over time, so assessments should be regularly reviewed and updated to reflect the latest climate data and projections, as well as business priorities.

What are the Main Climate Risks Clients in Saudi Arabia and UAE may Face?

Businesses operating in the UAE and Saudi Arabia face unique climate challenges due to the region's extreme weather conditions. They can vary slightly based on geographical location within the country; however, in general, the most significant risks include:

-  **Extreme heat**
-  **Sandstorms**
-  **Precipitation changes**
-  **Urban and coastal flooding**
-  **Drought and water scarcity**



How can a Climate Risk Assessment Help Businesses Operate More Effectively?

Proactively addressing climate risks helps businesses avoid unexpected repair costs, infrastructure damage, and emergency expenses due to extreme weather events. Implementing energy-efficient systems and water-saving technologies reduces operational costs over time. Climate risks can disrupt supply chains, increase maintenance costs, and lead to lost revenue. Identifying risks in advance allows businesses to implement strategies that protect critical infrastructure, ensure employee safety, and maintain smooth operations. Companies that integrate climate risk assessments into their strategies are seen as industry leaders in resilience and sustainability, and investors increasingly prioritize businesses that have a clear climate risk management plan in place as it reduces their financial risks.

Future Outlook

Although climate risks and opportunities reporting is not mandated in any countries in the Middle East region, there is a trend globally with governments increasingly introducing stricter climate risk disclosure requirements. With sustainability and climate regulations evolving rapidly, this means that it could become a regulatory requirement in the future. Conducting a climate risk assessment and reporting the results ensures compliance with potential climate reporting regulations and future-proofs businesses.



Case Studies of Best Practices in the Region

Majid Al Futtaim

Climate Risk Assessments Driving Decision-Making

Majid Al Futtaim (MAF) has taken a proactive approach to assessing and managing climate-related risks across its extensive portfolio. By conducting detailed climate risk assessments using Intergovernmental Panel on Climate Change (IPCC) scenarios RCP 4.5 and RCP 8.5, the company evaluates risks such as flooding, heat stress, and drought at short-, medium-, and long-term horizons. This quantitative modeling enables MAF to integrate climate risk considerations into its business strategy and financial planning. A key outcome of this approach is the Climate Resilience Strategy and Roadmap, a five-year action plan that prioritizes adaptation measures, assigns risk management responsibilities, and establishes monitoring frameworks. The company has also embedded climate risk into policies such as the Sustainable Pre-Acquisition Policy, ensuring that all new developments undergo climate risk assessments using its proprietary Climate Risk Assessment Tool before acquisition.

To drive resilience, MAF has extended its focus beyond climate risks to nature-related dependencies and impacts, aligning with the Taskforce on Nature-related Financial Disclosures (TNFD). Through its first TNFD-aligned Locate, Evaluate, Assess, Prepare (LEAP) Assessment, MAF evaluates its interaction with natural ecosystems across its portfolio, identifying material risks and opportunities. These insights inform strategic initiatives such as integrating nature-based solutions (NbS) into urban development - evident in the introduction of green roofs, beehives, and urban farms in key projects. Climate and nature-related risks are integrated into MAF's risk governance processes, ensuring oversight at the highest governance levels.

Emirates Steel Arkan

Integration of Climate Risks into ERM

Emirates Steel Arkan (ESA), the UAE's largest steel and building materials manufacturer, has taken a structured approach to understanding and addressing climate-related risks. In alignment with the Task Force on Climate-related Financial Disclosures (TCFD) framework, ESA conducted a comprehensive risk assessment of its operations across multiple time horizons (short, medium, and long term) and a 1.5°C global warming pathway scenario. The company identified key physical risks - such as heatwaves and flooding - as well as transition risks including carbon pricing and changing market demands.

By establishing a dedicated Climate Risk Register and integrating climate-related risks into its Enterprise Risk Management (ERM) system, ESA ensures that sustainability is embedded within its governance and strategic planning. Climate-related risks and opportunities are reviewed regularly by the Risk Management Committee and escalated to the Board of Directors where necessary. Additionally, as part of the UAE's Climate-Responsible Companies Pledge, ESA has committed to disclosing its climate actions through a combined TCFD and TNFD report, which includes KPIs, scenario analysis, and a climate financial model to assess future risks and opportunities.



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Our operations in the Middle East are underpinned by key strategic acquisitions and a deep understanding of local market conditions. Egis' long and distinguished history, providing a comprehensive suite of engineering, consulting, and project management services makes us a trusted partner for the region's governments, investors, and developers alike.

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