

Case Study

MARRIOTT INFRASTRUCTURE RESILIENCE & ADAPTATION (MIRA) PROGRAM

Project Overview

In 2019, Marriott International (Marriott) launched the Marriott Infrastructure Resilience and Adaptation (MIRA) program to evaluate climate-related risks across its global portfolio of nearly 8,600 properties spanning 139 countries and territories. Through this comprehensive program, Marriott identified current and future climate risks to its portfolio and has a strategy in place to manage potential impacts, improve resiliency and mitigate losses to stakeholders.



The Challenge

Weather related disasters continue to increase over the years and the hospitality industry globally faces a dual challenge of having to withstand extreme weather situations while continuing to stay open to support the community and recovery efforts. Certain sites may possess increased vulnerability to extreme weather, including flooding and drought, due to their geographic location, which can potentially lead to property damage and financial loss. Also, with the U.S. Security and Exchange Commission's (SEC's) proposed climate reporting requirements, corporate leadership may need to report their climate risk data as early as 2024. Insurers and investors are also requesting such data to anticipate their portfolio risks. Hence, Marriott needed a way to assess and act on mitigating climate risk at its properties. Disparate resources and tools exist to measure climate resilience at a property level, which were deemed insufficient for Marriott's specific needs. Marriott thus launched the MIRA program internally in 2019.

The Solution

MIRA will be implemented through a four-step strategy (Figure 1). The action-oriented process is intended to be ongoing, with responses aimed at progressively improving overall resiliency.

The first step of the MIRA strategy is Evaluate + Educate. MIRA evaluates each hotel's exposure to natural hazards measured in three periods: near-term 2030, mid-term 2050, and longterm 2080. The results help create a climate scorecard for each Marriott property. This "MIRA Scorecard" will show an aggregated score based on the climate and seismic hazard "exposure" of each of our assets as well as each asset's "adaptive capacity" to respond to weather, seismic, and climaterelated hazards. The MIRA Scorecards also provide a pathway to educate asset owners about the climate-related hazards their facility faces and to encourage consideration of measures to reduce future losses from damage and business interruption.







A MIRA Climate Dashboard has been established using the ESRI ArcGIS tool, which will allow Marriott to see patterns and help focus on sites with the highest risk or opportunity. The data and patterns also will help advise deeper risk assessments and prioritize energy efficiency and resilience projects in those sites using dedicated funding from Marriott's CapEx budget.

During the second step of the Mira strategy, Plan & Design, MIRA encourages properties to begin climate resilience planning and set goals for site & infrastructure improvements, stakeholder alignment, scenario planning, and gap mitigation. Additionally, MIRA also recommends engaging with surrounding communities to promote the benefits of sustainability and help build resilience beyond the hotel grounds.

The third step of the MIRA strategy, Build & Perform, focuses on implementation and execution of the plans in place, creating the necessary partnerships, and investing in the proper tools and technology to significantly improve resiliency efforts.

Monitor, Critique & Revise is the final step of the strategy and is intended to monitor the efforts completed and identify gaps, which will direct the properties to get back into evaluation mode. To attain climate resilience, the process is always ongoing. This step also includes reviewing the changing needs of disclosures and reporting and aligning the strategy accordingly.

The MIRA program is undergoing continuous improvement, with Marriott piloting a survey in 2024 to measure adaptive capacity in phases along with their Net Zero and Science Based Target goals. Nonetheless, MIRA has already proven to be an innovative approach to integrate climate risk management across the Marriott portfolio with expected positive results.

Results Achieved

Hotels evaluated

6,500 U.S. and 3,200 international open and pre-open hotels were evaluated through MIRA.

Strategic planning integration

MIRA is now a topic in Marriott's Engineering leadership conferences. New trainings for associates have been launched to ensure local staff can improve property resilience and identify opportunities for improvement.

Keys to Success

- **Comprehensive analysis** using the latest data, aligning with Intergovernmental Panel on Climate Change (IPCC) recommendations in identifying current and future risks
- ► Identifying specific risks exclusive to the property and communicating potential impacts to help with stakeholder engagement
- Staying informed about recommended disclosures such as SEC's proposed climate reporting requirements, Corporate Sustainability Reporting Directive, and other ESG regulations and requirements.



