

UAE

Assessing Climate Risks as a Key Step toward Resilience in the UAE

The United Arab Emirates (UAE) has been achieving economic success, overcoming the challenges of a harsh desert environment with scarce water resources and less arable land. However, the increasing impacts of climate change may impede progress and thus require proactive approaches to enhance resilience while tapping potential opportunities.

In response to this challenge, the UAE developed the National Climate Change Plan through the support of the Global Green Growth Institute (GGGI). One of the plan's main pillars is an adaptation program that aims to conduct climate risks assessments in key sectors as the basis for implementing adaptation measures. To make this happen, the Ministry of

Climate Change and Environment (MOCCA) collaborated with GGGI to assess climate risks in four areas: health, energy, infrastructure, and environment. In the long term, there will be more sectors covered.

The risk assessment completed in 2018 revealed the priority risks for the UAE. Heat stress affects the productivity and safety of outdoor laborers, especially during the peak of summer when the temperature reaches as high as 50°C. Extreme heat also leads to the deterioration of power facilities, energy efficiency losses, and reduced power output. Climate change causes damage to coastal/offshore facilities, increased infrastructure maintenance costs, loss of business opportunities, and reduced reliability of the transport infrastructure. The UAE's natural environment also faces high risks, mainly related to coral bleaching and loss of wetlands.



GGGI in UAE: Strengthening climate resiliency in the UAE

Knowing the risks is the first step toward action, and the UAE is now beefing up efforts to address the risks through adaptation. *"We are already feeling the impacts of climate change in all aspects of our lives. Given the current projections, such impacts will continue to grow in intensity and frequency, and adaptation is the only viable response strategy,"* said Fahed Mohamed Al Hammadi, MOCCA's acting assistant undersecretary of the Green Development & Climate Change Sector.

The assessment involved a review of available and accessible references about the identified risks and climate trends. Stakeholders from multiple sectors and levels of government also participated in a series of consultation workshops

and bilateral meetings to discuss and prioritize the risks. Furthermore, the process engaged local and international experts to ensure technical rigor of the risk analysis. Tomoo Machiba, MOCCA's principal sustainability policy advisor, explained, *"The risk assessment process used an evidence-based, participatory, and expert-guided approach to adaptation planning, drawing from international best practices."*

The timely completion of the climate risk assessment marks the continued partnership of the UAE and GGGI. The UAE is one of the founding members of GGGI, and GGGI's UAE office has since served as a regional capacity building hub and provider of technical assistance to the government.



GGGI in UAE: Responding to climate change through the National Climate Change Plan

Since 2011, GGGI has helped mainstream the policy and institutional framework for green growth in the UAE by assisting with the development of the **National Green Growth Strategy**, **Green Agenda**, and the **Climate Plan**. GGGI has also delivered numerous knowledge-sharing and capacity development workshops for students and young professionals from the Middle East and Africa.

As part of the implementation of the **Climate Plan**, the UAE's climate risk assessment is another pioneering initiative in the Gulf region, setting an example for other hydrocarbon economies. Climate risk assessment is still a nascent exercise in the Gulf, where there is high exposure and vulnerability to rising temperature and extreme climate events. The UAE's experience can serve as a model to its neighbor countries in carrying out an anticipatory response to climate change.

Furthermore, Qais Bader Al Suwaidi, assistant expert from MOCCA, noted, *"While identifying the risks has already set the momentum toward action, the analysis also takes the next step forward by proposing potential adaptation measures that are tailored to the local context because climate change is a*

global problem with local solutions." The next phases of the adaptation program include the analysis, prioritization, and implementation of the proposed measures.

"The assessment builds the foundation for the development of adaptation road maps, which includes concrete activities, targets, and adaptation metrics that leverage public and private efforts," said Rusyan Jill Mamiit, GGGI green growth data analyst. It will determine the UAE's further commitment to the **Paris Agreement** and **2030 Agenda** in line with its long-term strategy to prepare for the post-oil era.

"By channeling its oil revenues toward green investments, such as renewable energy and climate-smart industries," said Chiden Balmes, GGGI senior policy officer, *"the UAE demonstrates how a hydrocarbon economy can gradually transition toward a sustainable climate-resilient growth model."*

Looking ahead, the UAE aims to integrate the risk assessment results in many areas of development policy. While the country faces a race against time, its green agenda is certainly in motion and could be an example of adoption by many.