UNITED ARAB EMIRATES
MINISTRY OF CLIMATE CHANGE
& ENVIRONMENT

UAE Adaptation Finance Capacity Assessment

January 2026

Executive Summary

The Adaptation Finance Capacity Assessment (AFCA) for the United Arab Emirates (UAE) assesses the nation's readiness to mobilize, allocate, and sustain funding for climate adaptation. The assessment comes at a time when intensifying climate shocks from extreme heat to rare floods are testing economic and fiscal resilience worldwide. In the UAE's context, climate impacts pose stress to its economic stability, underscoring the urgency of strengthening adaptation financing. The report confirms that the UAE's financial strength and institutional capacity provide a solid foundation to build on, while also highlighting areas where further institutionalization of adaptation finance is needed. In essence, the UAE has the vision, regulatory momentum, and capital depth required for a robust climate resilience agenda, but translating these strengths into fully bankable and budget-linked adaptation investments remains an ongoing effort.

The AFCA employs a hybrid methodology grounded in leading global frameworks. The methodology is tailored to the UAE's context. Evidence was gathered through comprehensive desk research and extensive stakeholder engagement, including structured questionnaires, a validation workshop, and key informant interviews across government, financial regulators, private sector, and civil society. Over 50 representatives attended the national stakeholder workshop in September 2025, ensuring that findings are both technically sound and cognizant of on-the-ground realities. This inclusive approach defines the scope of the assessment as it examines how adaptation is currently financed across public, private, and non-state actors and identifies opportunities for enhancing this ecosystem. The goal is to inform the forthcoming UAE National Adaptation Plan (NAP) development by exploring how climate adaptation priorities can be better translated into concrete, financed actions with growing private sector participation.

The core analysis is structured around six interlinked pillars of adaptation finance capacity: (1) Strategic Planning and Coordination (2) Policy and Regulatory Frameworks (3) Risk Transfer and Insurance (4) Public Financial Management (PFM) and Budgeting (5) Sustainable Finance and Capital Markets and (6) Private Sector Engagement. Each pillar was assessed through specific corresponding indicators (Annex 1) to identify institutional strengths and areas for enhancement. A Red-Amber-Green scoring system was used internally to gauge the level of capacity present in the UAE for each of the indicator topics that reflect the overall adaptation financing capacity. The assessment finds that the UAE has made significant progress in policy alignment and awareness of climate risks, yet further work is needed to fully embed adaptation into financial planning and practices, and scale-up private sector flows into domestic adaptation. The pillar-wise findings from the AFCA reveal the following:

Pillar 1 Strategic Planning and Coordination

The UAE's high-level commitment to climate resilience is evident. Adaptation is entrenched as a national priority alongside mitigation through policies and plans such as the National Climate Change Plan 2017–2050 and the Nationally Determined Contributions 3.0. The strong planning framework provides policy certainty and clear responsibilities. While there appears to be initiatives to undertake estimation of costs for adaptation initiatives or projects planning, a more institutionalized embedding of this cost estimation component may increase the robustness of this approach. Translating plans into financed actions has been initiated but a wider approach constituting sector-wise cost estimates or provision of adaptation-specific funding that may provide more predictability is yet to be institutionalized. Many sectoral or emirate-level adaptation plans exist without cost estimates or dedicated funding. As a result, climate adaptation in the UAE's public sector while embedded in strategy documents, remains to be consistently clarified and identified in budget guidelines, expenditure tracking, or project appraisals. Costing and budgeting are recognized as key opportunities for enhancement. It is also worth noting that UAE operates one of the region's most disciplined and transparent budgeting systems, guided by long-term national visions emphasizing sustainability, which provides a solid foundation to build on. By mainstreaming adaptation into its PFM systems, the country can improve visibility of adaptation expenditures that will further inform and facilitate evidence-based decision-making on resilience investments.

Pillar 2 Policy and Regulatory Frameworks

The UAE has long recognized the crucial role of integrating climate change considerations in achieving its targets under the sustainable development goals. The past decade has particularly witnessed UAE developed a blueprint and established an ambitious climate policy and regulatory architecture that creates an enabling environment for resilience investments. Financial regulators under the UAE Sustainable Finance Working Group have issued sustainability disclosure guidelines aligning with global standards (such as the Task Force on Climate-Related Financial Disclosures), which pushes banks and insurers to consider physical climate risks in their governance and reporting. The country is also considering a sustainable finance taxonomy that includes adaptation themes, aiming to clarify for investors what qualifies as a resilience project. In the real economy, mandatory green building codes including Dubai's Green Building Regulations and Abu Dhabi's Estidama Pearl ratings, and environmental impact assessment (EIA) rules ensure that new projects account for climate factors like heat, water stress, and flooding. This is effectively making climate resilience a condition for project approval and finance.

More importantly, the Federal Climate Change Law No. 11 of 2024 now provides a legal mandate for adaptation, requiring priority sectors (infrastructure, energy, environment, health, insurance) to assess climate risks, develop adaptation plans, implement adaptation measures, and report on losses and progress. Nonetheless, there are areas offering opportunities for enhancement. For instance, while it is laudable that most regulations currently focus on risk management and transparency, directly channelling capital toward adaptation projects will also be beneficial in accelerating adaptation implementation. Green bonds and sukuk regulations exist and include adaptation in principle. A published list of eligible adaptation investment pipelines or portfolios, or targeted fiscal and financial incentives to translate concepts into bankable projects however will further clarify and facilitate the uptake of adaptation initiatives. Likewise, the climate laws and regulations will benefit from exploring a dedicated funding or assigning sectoral and institutional responsibilities to prioritize adaptation investments. For instance, it requires a plan but does not mandate that budgets be earmarked for adaptation actions in environment, health, infrastructure, energy and insurance. On the private sector side, opportunities for enhancement include the preparation and adoption of a sustainable finance taxonomy to define clear criteria and metrics for adaptation projects, and introduce policy tools that encourage adaptation investment. The adoption of a sustainable finance taxonomy with clear adaptation metrics will further provide impetus to catalyse private sector finance into broader adaptation efforts.

Pillar 3 Risk Transfer and Insurance

A well-developed insurance sector is central to the UAE's adaptation finance landscape, given the country's exposure to extreme heat, urban flooding, and sea-level rise. The UAE boasts one of the largest, best-capitalized insurance markets in the Gulf, overseen by the Central Bank of UAE with modern risk-based solvency rules (aligned to Solvency II) and adoption of new initiatives, such as IFRS-17 for disclosures and reporting as well as risk-based capital (RBCs) requirements for capital adequacy and robustness. The insurance sector's role in climate resilience is acknowledged at the policy level. For instance, regulators and MOCCAE have engaged insurers in discussions on climate risks as far back as 2020, highlighting insurance as a "shock absorber" for climate impacts. In practice, most climate-related losses in the UAE are currently covered through general insurance policies (property and infrastructure insurance required by lenders and permits) rather than dedicated climate risk products. This may mean that adaptation or climate resilience is a secondary objective of such insurance, and thus risk identification and pricing is not fully integrating climate-specific considerations. There is evidence of innovation as parametric insurance for disasters launched by Al Wathba National Insurance Company (AWNIC) and Munich Re, and a special FloodGuard vehicle insurance to cover flood damage was introduced in September 2024 by Al Fujairah National Insurance Co. (AFNIC) after the floods affected the UAE.

However, risk transfer mechanisms remain underutilized for adaptation. The UAE does not yet have any sovereign disaster risk financing (DRF) strategy that provide guidance on DRF instruments to provide pre-arranged funding in case of major climate disasters, such as the Caribbean Catastrophe Risk Insurance Facility (CCRIF) which operates as a multi-country parametric risk pool, providing timely payouts to member governments based on pre-defined triggers tied to wind speed, rainfall, or other meteorological thresholds. The government's response has been swift and most notable in scale, and the feasibility can be attributed to the government's decisiveness and fiscal strength. The current approach to allocating and mobilizing disaster costs also offers an opportunity for enhancement so it shifts from a reactive mode to a more proactive one. Relying on emergency budget reallocations, may through time also strain public finances as climate risks grow and the rate of resource mobilization do not align. Additionally, climate insurance penetration is uneven; while corporate insurance uptake is high, often mandated in sectors such as construction and energy, segments like households, SMEs, and agriculture have very limited coverage for climate perils. Important enablers such as climate data for risk pricing are not yet fully in place currently. The UAE has advanced meteorological data and hazard maps but can benefit further from a unified open-access platform or national climate risk model to guide insurers and banks in pricing risk, which could reward resilience efforts. Going forward, a national disaster risk financing strategy that layers different tools (budget reserves, contingent credit, insurance, and capital market solutions) could be developed to ensure quick access to funds when disasters strike. Moreover, expanding the range of insurance products, including micro-insurance for vulnerable groups and climate-risk coverage for sectors like agriculture, and integrating climate data into underwriting would allow the insurance industry to more proactively support adaptation.

Pillar 4 Public Finance Management and Budgeting

This pillar examines how well climate adaptation is integrated into government budgeting and expenditure processes. The UAE's public financial management system is highly proficient by regional and global standards; budgets are prudent and aligned to long-term strategic visions (UAE Vision 2031), procurement and audit controls are well-integrated, and there are established processes for performance monitoring. These strengths signify that the potential to integrate climate considerations is very high.

Nonetheless, opportunities abound to integrate climate adaptation in core PFM instruments as currently it is still partially reflected. There is no climate budget tagging practice yet, so adaptation-related expenditures are not labelled or aggregated in budget documents. Line ministries propose and fund adaptation measures on a project-by-project basis, but a unifying mechanism can make efforts to quantify total adaptation spending more efficiently or ensure it is commensurate with needs. As project appraisal guidelines seemingly do not formally require yet a climate risk assessment or climate-adjusted cost-benefit analysis, this may imply that resilience measures may be left uncosted or undervalued when funding decisions are made. Additionally, the reporting and audit stage have room to grow. While the UAE produces thorough financial reports, none seemingly yet break out adaptation spending or evaluate the outcomes of those expenditures in terms of resilience.

To address this, the assessment highlights some key opportunities such as introducing climate budget tagging to label and track adaptation investments across ministries, incorporating climate-risk screening and resilience metrics into the public project appraisal and selection process, and regularly reviewing adaptation-related expenditures over time to inform future budgets. Encouragingly, the UAE's Integrated Financial Management Information Systems and budget classification structures are already sophisticated enough to accommodate these modifications. With the proposed targeted reforms, the UAE can and is well positioned to institutionalize adaptation finance within its fiscal framework. Exploring the adoption of this initiative can make climate resilience a routine consideration in planning and spending and will enable the government to allocate resources where adaptation returns are highest. In doing so, the country can further enhance its ability to measure progress and to leverage public funds to attract additional private financing.

Pillar 5 Sustainable Finance and Capital Markets

The UAE has steadily and rapidly emerged as the region's leading hub for sustainable finance, which is a strong asset for adaptation finance. Regulatory coordination through the Sustainable Finance Working Group has yielded unified guidelines on climate risk and ESG disclosure, aligning UAE's financial market practices with global norms and boosting investor confidence. The results are visible in capital markets; A study by GLA & company conducted in 2025 reveals that the UAE now accounts for almost half of the MENA region's green and sustainable bond issuance, with roughly USD 10 to 11 billion in green bonds/sukuk issued by UAE entities in 2023 alone. These instruments are contributing to adaptation outcomes by channelling capital into renewable energy, sustainable transport, and even some resilience-related infrastructure e.g. water infrastructure was funded via a blue bond issued by the First Abu Dhabi Bank in 2025. The market infrastructure and appetite for climate finance in the UAE are therefore well established. Key stock exchanges and regulators have created listing frameworks for green bonds, even waiving fees to encourage issuance. Major banks have also made sustainable finance commitments including a notable AED 1 trillion pledge toward sustainable investments at the COP28.

Adaptation-focused finance is also gaining momentum across the UAE and Dubai's Tasreef is one example that demonstrate how to execute a classic or archetypal, large-scale adaptation finance project. Nonetheless, thereare opportunities to accelerate uptake of adaptation-focused finance. For instance, investors and issuers face uncertainty about what qualifies as an "adaptation" investment which can be supported through a sustainable finance taxonomy. Another opportunity pertains to robust data quality and availability, and a UAE-wide climate model with governance and data sharing protocols, that can fully enable banks and private sector entities to price climate risks into financial decisions. The Central Bank's efforts to include climate in stress tests (first through physical risk, and then through transition risk) and financial stability reports send a very good signal and is a guiding first step. Banks are beginning to apply the same principles and translating these risk insights into differentiated loan terms or investment requirements that favour resilient projects. Opportunities in this pillar include accelerating the completion and adoption of the UAE Sustainable Finance Taxonomy with explicit adaptation criteria, developing a visible pipeline of adaptation projects suitable for green/adaptation bond issuance, and employing blended finance tools to improve the risk-return profile of adaptation projects to encourage more participation from private investors. There is also scope for banks and regulators to move toward integrating physical and transition climate risk into lending standards through adjusting loan pricing or collateral requirements, which will especially be critical for built environment and real estate sector in the UAE. With these adjustments, the UAE further leverage its robust capital markets and strong investor interest to significantly scale up adaptation finance flows, and not just green capital in general.

Pillar 6 Private Sector Engagement

Mobilizing private capital is a central pillar of the UAE's climate strategy, and the assessment finds both strong potential and untapped opportunities on this front. The UAE's private sector has shown willingness to invest in sustainability, exemplified by over AED 1 trillion in sustainable investment commitments announced during the UNFCCC COP28 in Dubai and the proliferation of green finance products by major banks. Institutional platforms are in place; the Abu Dhabi Sustainable Finance Declaration has attracted 160 banks, investors, and companies pledging collaboration on sustainable finance, and the high-profile launch of the ALTÉRRA climate investment platform with USD 30 billion seed capital aiming to mobilize USD 250 billion signals serious public-private intent to fund climate solutions. Large UAE corporations are beginning to align investments with resilience goals; for instance, the First Abu Dhabi Bank issued the region's first blue bond to fund water and marine resilience, and Abu Dhabi National Oil Company (ADNOC) has committed to major ecosystem restoration projects as part of its climate strategy. Civil society and academia are also contributing, such as from the Emirates Nature-WWF's community projects to independent climate accelerators providing research and advocacy. These examples illustrate a broadening coalition for adaptation finance beyond government. Yet, the preliminary report finds that currently most private climate finance to date still skews toward mitigation projects, with relatively few instances of private investment explicitly directed to adaptation in the UAE. There are two key opportunities beingpresented here: (1) provision of evidence-basis as support for turning resilience benefits into revenue streams or measurable returns, and (2) preparation of structured pipelines and adoption of criteria that would allow investors to confidently invest in adaptation projects. The report suggests tapping into blended finance more significantly to support private sector participation in adaptation investments. Instruments like guarantees or co-investment facilities can reduce risk for private investors in resilience projects. Similarly, while banks offer green loans for SMEs and consumers, these are not yet framed as "climate adaptation" products i.e. adapting existing SME finance programs (e.g. for efficient water use or cooling technology), and toto label and track them as adaptation could stimulate a new market segment. There is also an opportunity to institutionalize private sector participation in public adaptation efforts. The new Climate Action Boards mandated by the Federal Climate Change Law of 2024 will include private sector representatives in monitoring national climate progress. Building on this, the government could establish formal channels for businesses and investors to co-develop adaptation project pipelines.

Conclusion and Way Forward

After examining the six pillars under the hybrid methodological framework to assess the current UAE capacity on adaptation finance, the report concludes that the UAE has laid down and built strong foundations for adaptation finance, including the provision of clear policy signals and strategies, supportive policies, dynamic capital markets, and engaged stakeholders. The analysis highlights that a pivot is underway: the UAE is moving from a project-by-project approach on adaptation toward a more programmatic and integrated approach, with multi-year investments and people-centric outcomes gaining traction. To accelerate this transition and fully institutionalize adaptation finance, the report identifies a set of priority actions (recommendations) that the UAE may consider through Include to:

1 Incorporate climate budget tagging and continue increased efforts towards institutionalization of adaptation as a process in budget formulation.

Making adaptation spending and results clearly visible in public finances involves introducing climate budget tagging across federal and emirate budgets to mark and track adaptation expenditures and integrate climate resilience criteria into the project appraisal and selection process. By doing so, each annual budget cycle can explicitly account for adaptation, and projects that reduce climate risks can be prioritized in public investment decisions. The UAE's existing budget system can accommodate these changes easily, for instance, by adding a few adaptation categories into budget circulars and requiring ministries to report on adaptation activities would institutionalize the practice without overhauling the framework. In parallel, defining financing targets for adaptation would reinforce accountability and ambition. These steps ensure that the country's strategic climate objectives translate into measurable commitments and resources on the ground.

2 Add climate weightages in project investment appraisal to prioritize climate adaptation investments

A practical way to strengthen adaptation finance in the UAE is to introduce climate-resilience weightages within project appraisal and investment decisions, ensuring that climate-robust designs are systematically favoured. The UAE's budget and procurement architecture already allows weighted evaluation criteria and transparent scoring, providing a ready platform for integrating such weightages. By embedding climate screening at the concept stage, assigning a dedicated resilience score within feasibility assessments, and linking it to measurable adaptation KPIs, ministries and emirate departmentscan ensure that projects reducing long-term risks or delivering resilience benefits are prioritized. Applying these proven approaches which underscore a more quantified and evidence-based approaches to inform, corroborate and complement qualified assessments that are already incorporated within existing UAE appraisal procedures would make climate resilience a formal criterion for public investment and would help mainstream adaptation into infrastructure and development planning.

3 Adopt a disaster risk financing strategy that will institutionalize platforms that adhere to effective disaster response and sustainability of resources.

The UAE's disaster response system is already advanced, but formalizing a Disaster Risk Financing (DRF) strategy would protect and safeguard public finances and enable faster response. International best practice suggests a risk-layered approach such as that of using budget reserves for frequent mild climate-related events, contingent credit lines for moderate shocks, and insurance or catastrophe bonds for rare, severe events. A UAE-specific DRF strategy would clarify roles and instruments, effectively creating a financial safety net before disasters occur. This initiative would shift the government's stance from reactive to proactive, providing greater fiscal stability as climate risks increase.

4 Establish a blended finance facility to expedite execution of adaptation portfolios through diversification, risk transfer, and innovation.

Building on the UAE's experience in climate finance platforms, this option can be operationalized by launching a blended finance facility dedicated to domestic adaptation projects. The UAE has demonstrated it can design large-scale climate funds (e.g. the global ALTÉRRA platform and Abu Dhabi Fund for Development). However, these funds appear to have supported mitigation-oriented initiatives, particularly in the energy sector, as their allocation toward adaptation-specific projects is not clearly disclosed. A home-grown adaptation finance facility would pool public, private, and possibly philanthropic capital to co-fund the UAE's own priority resilience projects, such as urban drainage systems, coastal protection, resilient health infrastructure, or nature-based solutions. By aggregating projects into portfolios and providing credit enhancement through guarantees or first-loss capital, such a facility would attract private investors to adaptation initiatives that might be less familiar or inherently lower-return. It would also allow the government to standardize project preparation and create repeatable financing structures under one umbrella.

5 Encourage systematic community MRV, institutionalize post-event learning, and publish gender-disaggregated data across five priority adaptation sectors.

Another set of opportunities centres on enhancing knowledge and inclusive practices in the adaptation finance ecosystem. The report recommends institutionalizing community-based monitoring and post-event learning and improving data disaggregation to ensure that adaptation benefits reach all segments of society. The UAE's civil society and communities are already involved in climate action. For instance, citizen science programs are tracking mangrove restoration and other local initiatives. Scaling up these efforts into a formal community MRV system would integrate grassroots into national adaptation tracking. Likewise, making post-disaster reviews a routine practice in the form of consolidated reports would create feedback loops to inform future investments.

Worth noting is that the UAE has enshrined climate inclusivity at the very heart of its climate agenda and the UAE Global Climate Resilience Framework has embedded this. One potential opportunity to have this principle operationalized in adaptation finance is by regularly publishing gender-disaggregated and vulnerability-focused data. Aligning this with national gender and social inclusion strategies will ensure that resilience-building is equitable and socially informed.

The report suggests enhancing adaptation financing capacity which is approached and viewed as a well-rounded ecosystem of plans and policies. The common thread is integration and mainstreaming: embedding climate resilience into regular government planning and budgeting, into financial market norms, and into community-level action. Altogether, these initiatives would enable the UAE to mainstream adaptation finance across public, private, and civil society, ensuring that every actor plays a coordinated role in funding and delivering climate resilience. In doing so, the UAE is poised to become the first country in the MENA region to comprehensively integrate adaptation into its financial systems and solidify its position as a regional and global leader in climate resilience.

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List of Abbreviations

Acronym	Full Form
ADB	Asian Development Bank
ADAA	Abu Dhabi Accountability Authority
ADAFSA	Abu Dhabi Agriculture and Food Safety Authority
ADGM	Abu Dhabi Global Market
ADIA	Abu Dhabi Investment Authority
ADNOC	Abu Dhabi National Oil Company
AFCA	Adaptation Finance Capacity Assessment
AFNIC	Al Fujairah National Insurance Company
AWNIC	Al Wathba National Insurance Company
BTR	Biennial Transparency Report
CAIF	Climate Adaptation Investment Framework
CBA	Cost-Benefit Analysis
CBUAE	Central Bank of the United Arab Emirates
CDRFI	Climate and Disaster Risk Finance and Insurance
CBT	Climate Budget Tagging
CoA	Chart of Accounts
CPEIR	Climate Public Expenditure and Institutional Review
CPIMA	Climate Public Investment Management Assessment (IMF)
CSO	Civil Society Organisation
CTF	Catalytic Transition Fund
DFM	Dubai Financial Market
DFSA	Dubai Financial Services Authority
DECCA	Dubai Environment and Climate Change Authority
DHA	Dubai Health Authority
DRF	Disaster Risk Financing
DSCE	Dubai Supreme Council of Energy
EAD	Environment Agency – Abu Dhabi
ECI	Etihad Credit Insurance
EIA	Environmental Impact Assessment
EGBC	Emirates Green Building Council
ESG	Environmental, Social and Governance
FAB	First Abu Dhabi Bank
FCSC	Federal Competitiveness and Statistics Centre
FGCR	Framework for Global Climate Resilience
FSRA	Financial Services Regulatory Authority (of ADGM)
FEA	Fujairah Environment Authority
GCFC	Global Climate Finance Centre
GWU	General Women's Union
IFMIS	Integrated Financial Management Information System

List of Abbreviations

Acronym	Full Form
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
ISSB	International Sustainability Standards Board
LTS	Long-Term Strategy
MoEI	Ministry of Energy and Infrastructure (UAE)
MOCCAE	Ministry of Climate Change and Environment (UAE)
MOF	Ministry of Finance (UAE)
MOHAP	Ministry of Health and Prevention (UAE)
MRV	Monitoring, Reporting, and Verification
MTEF	Medium-Term Expenditure Framework
NAP	National Adaptation Plan
NCM	National Centre of Meteorology (UAE)
NCEMA	National Emergency Crisis and Disaster Management Authority (UAE)
NDC	Nationally Determined Contribution
NGFS	Network for Greening the Financial System
OECD	Organisation for Economic Co-operation and Development
PFM	Public Financial Management
PIM	Public Investment Management
PPP	Public–Private Partnership
REIT	Real Estate Investment Trust
RBC	Risk-Based Capital
RBS	Risk-Based Supervision
SCA	Securities and Commodities Authority
SFWG	Sustainable Finance Working Group
SME	Small and Medium Enterprises
SQ	Survey Questionnaire
TCFD	Task Force on Climate-related Financial Disclosures
UAE	United Arab Emirates
UAEAA	UAE Accountability Authority
UICCA	UAE Independent Climate Change Accelerators
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
WWF	World Wildlife Fund

Introduction

Global Context

Extreme climate events are increasingly disrupting infrastructure, commerce, and livelihoods across the world. With a warming climate projected to amplify the frequency and intensity of such events, climate shocks are now functioning as real-time financial, fiscal, and economic stress tests and can reveal how quickly unplanned costs and lost income can accumulate in the absence of structured adaptation systems. In this environment, adaptation finance has become a cornerstone of resilience-building that ensures that societies can anticipate, absorb, and recover from climate impacts while sustaining economic growth and social stability.[1,2],

According to the United Nations Framework Convention on Climate Change (UNFCCC), adaptation finance seeks to reduce the vulnerability of people, places, and livelihoods to climate impacts by investing in systems that limit damages, strengthen adaptive capacity, and promote long-term sustainability.[3] For resource-rich economies such as the United Arab Emirates (UAE), adaptation finance is a strategic opportunity to future-proof development gains.

Public Sector Leadership

The UAE has taken significant steps to institutionalize climate resilience within its public sector frameworks. A major milestone is the Federal Decree-Law No. 11 of 2024 on the Reduction of Climate Change Effects, which embeds adaptation planning as a statutory obligation for priority sectors.[4]

Under Article (7) of the Decree-Law, all relevant entities working in coordination with the Ministry of Climate Change and Environment (MOCCAE) are required to develop and implement sector-specific adaptation plans. Priority sectors include infrastructure, energy, environment, health, and insurance, with flexibility for expansion to other climate-sensitive areas[5]. Each plan must:

1. Assess key climate risks affecting the sector.
2. Define response measures and early warning systems; and
3. Outline implementation mechanisms suited to each sector's operational mandate.

Article (7) also establishes a national system for loss and damage reporting. Competent authorities must submit to MOCCAE data on both economic and non-economic losses associated with climate impacts, along with updates on the implementation of adaptation plans. This information will feed into national inventories and international submissions to the UNFCCC Secretariat that strengthens data-driven policymaking and compliance with transparency requirements.

Beyond planning, the Decree introduces a new level of multi-sectoral governance. Under Article 9, it mandates the creation of Climate Action Boards or Committees, bringing together public and private actors to monitor progress, evaluate climate policy effectiveness, and propose solutions to enhance adaptation outcomes.

1 OECD / G20 Sustainable Finance Working Group (2025) Scaling Finance and Investment for Climate Adaptation. [online] Available at: (URL) [Accessed Day Month Year].
2 UNFCCC (2019) Resilience and Adaptation: Climate Action Pathway. Bonn: UNFCCC.
3 UNFCCC (2022) Submission of the United States of America: Climate Finance Definitions. Available at: https://unfccc.int/sites/default/files/resource/06-22_Climate%20Finance%20Definitions_USA.pdf
4 United Arab Emirates. Federal Decree-Law No. (11) of 2024 on the Reduction of Climate Change Effects. 2024. UAE Legislation, https://uaelegislation.gov.ae/en/legislations/2558/download
5 United Arab Emirates. Federal Decree-Law No. (11) of 2024 on the Reduction of Climate Change Effects. 2024. UAE Legislation, https://uaelegislation.gov.ae/en/legislations/2558/download

Private Sector Mobilization

The UAE has also prioritized private capital mobilization as a central pillar of its climate strategy. As host and convener of the UNFCCC COP28, the country launched ALTÉRRA, a USD 30 billion catalytic climate investment vehicle designed to mobilize USD 250 billion by 2030. ALTÉRRA's design reflects a deliberate focus on scaling bankable projects to create demonstration pipelines that can attract blended and institutional capital.[6]

Regulatory action has complemented these investment initiatives. The UAE Sustainable Finance Working Group (SFWG) has endorsed the Principles for Sustainability-Related Disclosures[7], establishing a cross-market baseline for transparent and comparable sustainability reporting across banks, insurers, and capital-market participants. In parallel, the Central Bank of the UAE (CBUAE) has begun integrating climate considerations into supervisory practice through climate stress-testing exercises, initially focused on physical climate risks and now expanding to include transition risks.

The exercise aims to estimate loss severity under different climate scenarios, quantify the potential impact of floods, heat stress, and sea-levelrise on loan and investment portfolios, and assess the broader implications for credit quality and capital adequacy. Results from the pilot phase are expected to inform the CBUAE's Principles for the Effective Management of Climate-related Financial Risks[8], guiding how financial institutions integrate climate risk into credit assessment, portfolio management, and disclosure practices. Over time, these stress tests will strengthen the UAE's financial system resilience by helping banks and insurers price climate risks more accurately, reallocate capital toward low-risk, adaptive assets, and support investment in climate-resilient infrastructure.

Complementing this, the UAE Net Zero 2050 Strategy[9] and the sustainable finance taxonomy, which SFWG has prioritized to be developed, provide the conceptual and regulatory infrastructure to scale adaptation investments. However, realizing this potential will depend on ensuring that projects are properly costed, pipelines clearly defined, and budgetary processes and market rules harmonized so that adaptation is mainstreamed into national development and fiscal frameworks.

Civil Society and Community Systems

Civil society organizations (CSOs), local institutions, and community groups play a critical role. The UAE's evolving adaptation landscape increasingly recognizes their value in community monitoring, reporting, and verification (MRV) and in capturing gender-disaggregated, vulnerability-based data across priority sectors. Embedding systematic community MRV and post-event learning processes especially in areas such as water management, urban resilience, and health will enhance feedback loops and ensure that national investment decisions remain grounded in real human and local contexts.

6 Brookfield Opens Fundraising for Catalytic Transition Fund with Anchor Commitment from Alterra." Alterra Capital Holdings, 2024 https://www.alterra.ae/news/brookfield-opens-fundraising-for-catalytic-transition-fund-with-anchor-commitment-from-alterra-targeted-to-raise-up-to-5-billion-to-scale-up-climate-finance-in-emerging-markets

7 Central Bank of the UAE. "Principles for Sustainability-Related Disclosures. https://rulebook.centralbank.ae/en/rulebook/principles-sustainability-related-disclosures

8 Central Bank of the UAE (2023) Principles for the Effective Management of Climate-related Financial Risk. Available at: https://rulebook.centralbank.ae/sites/default/files/en_net_file_store/CBUAE_EN_5114_VER1.pdf

9 UAE Government (2024) UAE's Net Zero 2050 Strategy. Available at: https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/environment-and-energy/the-uae-net-zero-2050-strategy

Why an Adaptation Financing Capacity Assessment (AFCA)?

While the UAE's adaptation policy and institutional architecture are maturing, a central opportunity arises translating adaptation priorities into bankable, budget-linked investment portfolios. This is a common challenge faced by many countries, as highlighted by comparative analyses from the NAP Global Network[10], the OECD's 2024 Climate Adaptation Investment Framework (CAIF)[11], and the ADB's Climate Adaptation Investment Planning Forum[12]. These analyses consistently show that despite high benefit-cost ratios for adaptation measures, incomplete financial systems, and limited project pipelines delay implementation and financing flows.

The AFCA has been initiated to inform precisely of this opportunity. It is a preliminary attempt to assess how adaptation is currently financed across public, private, and civil society actors and to identify opportunities and reforms that can accelerate capital flows toward resilience investments. The AFCA is therefore an integral component of the UAE's NAP development, which will anchor the financing dimension of adaptation in evidence and institutional reality.

Objectives and Assessment Outlay

The AFCA has three interlinked objectives:

Diagnostic Assessment

Diagnostic Assessment: To map how adaptation is currently financed across public, private, and civil society actors, and to understand institutional mandates, fiscal linkages, and investment readiness at both federal and emirate levels.

1

Opportunity Identification

Opportunity Identification: To pinpoint opportunities for enhancing systemic resilience and financing instruments that can unlock additional adaptation capital, strengthen the enabling environment, and enhance private-sector participation in climate-resilient investment.

2

Strategic Alignment

Strategic Alignment: To generate evidence-based insights that will inform the development of a National Adaptation Financing Strategy to ensure that NAP priorities are linked to concrete, costed, and fundable pathways.

3

Figure 1. Objectives of AFCA

This report consolidates AFCA findings. It is structured around the hybrid methodology which assesses adaptation on six interlinked pillars for assessing and enhancing adaptation finance systems:

1. Strategic Planning and Coordination
2. Policy and Regulatory Alignment
3. Risk Transfer and Insurance
4. Public Finance Management and Budgeting
5. Sustainable Finance and Capital Markets
6. Private Sector Engagement and Investment

10 NAP Global Network (n.d.) About the NAP Global Network. Available at: https://napglobalnetwork.org/about/
11 OECD. Climate Adaptation Investment Framework. OECD Publishing, 2024. DOI:10.1787/8686fc27-enhttps://www.oecd.org/content/dam/oecd/en/publications/reports/2024/11/climate-adaptation-investment-framework_30362f60/8686fc27-en.pdf
12 ADB (2024) Climate Adaptation Investment Planning: Program Overview (Brochure). Available at: https://www.adb.org/publications/climate-adaptation-investment-planning-brochure

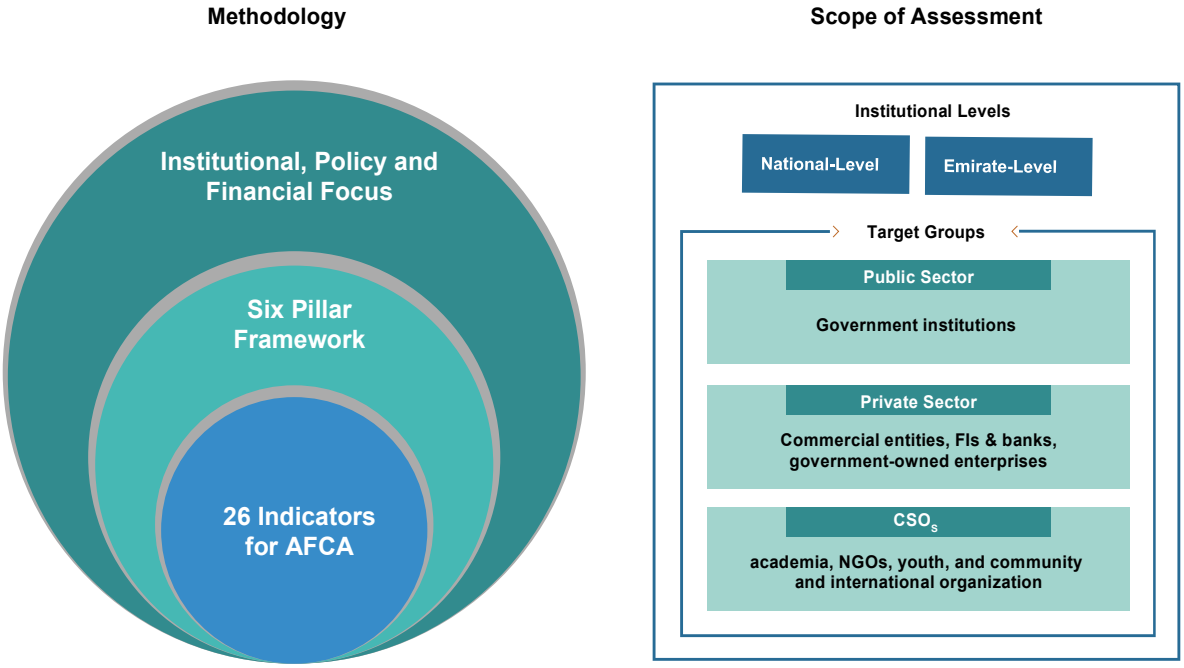

Figure 2. Methodology components and scope of the AFCA

This report examines each one of these pillars and summarizes current progress, identifies institutional and financial opportunities and suggests indicative pathways to scale adaptation finance in the UAE. The final synthesis brings these strands together into a coherent investment narrative to inform the next phase of NAP development and implementation.

Approach and Methodology

The AFCA adopted a hybrid method characterized by best global and regional practices. This approach draws on international frameworks such as the OECD Climate Adaptation Investment Framework (CAIF 2024)[13] and the UNFCCC Guidance Note on Financing National Adaptation Plan (NAP) Processes.[14]It also incorporates best practices in climate budget tagging, including insights from the UNDP Climate Public Expenditure and Institutional Review (CPEIR)[15] and the ADB's Governance Framework for Climate-Relevant Public Investment Management.[16] Regionally, the methodology is informed by lessons from the NAP Global Network's report on Finance for NAP Processes[17]and the UNFCCC NAP Technical Guidelines (2025)[18], supporting a context-sensitive foundation for adaptation planning and investment.

A hybrid approach was thus chosen for the UAE's assessment to capture the full investment value chain, from planning and costing, through public-budget processes to private-sector mobilization and civil-society participation. The six-pillar framework used in the report adapts the enabling-environment lens of CAIF to UAE conditions, integrating UNDP's emphasis on institutional capacity, expenditure tracking and resource mobilization.[19] To support climate informed decision making and evaluate the strength of fiscal systems, the approach integrates key indicators such as climate risk screening, appraisal of public investments, and climate budget tagging. These tools help assess whether governments are identifying climate risks, embedding resilience into investment planning and tracking climate-related expenditures across budgets.

13 OECD. Climate Adaptation Investment Framework. OECD Publishing, 2024. DOI:10.1787/8686fc27-enhttps://www.oecd.org/content/dam/oecd/en/publications/reports/2024/11/climate-adaptation-investment-framework_30362f60/8686fc27-en.pdf
14 United Nations Framework Convention on Climate Change. Financing National Adaptation Plan (NAP) Processes. Supplement, 2017.https://www4.unfccc.int/sites/NAPC/Documents/Supplements/napgn-en-2017-financing-nap-processes.pdf
15 Asian Development Bank / UNDP Regional Bureau for Asia and the Pacific. CPEIR Methodological Note. 2013 https://files.acquia.undp.org/public/migration/asia_pacific_rbap/APRC-DG-2013-CPEIR-Methodological-Note.pdf
16 Asian Development Bank. Climate-Relevant Public Investment Management. (n.d.; accessed from ADB) https://www.adb.org/sites/default/files/publication/950461/climate-relevant-public-investment-management.pdf
17 NAP Global Network. Finance for NAP Processes. July 2025 https://napglobalnetwork.org/wp-content/uploads/2025/07/napgn-en-2025-finance-for-nap-processes.pdf
18 UNFCCC / LEG. Updated Technical Guidelines. August 2025 https://napcentral.org/sites/default/files/2025-08/250812%20UNFCCC%20LEG%20UPDATED%20TECHNICAL%20GUIDELINES.pdf
19 United Nations Development Programme. Global Climate Public Finance Review 2022 https://www.undp.org/sites/g/files/zskgke326/files/2022-09/UNDP-Global-Climate-Public-Finance-Review-2022.pdf

Six-Pillar Framework, Indicators and Scoring Approach

The AFCA is structured around a six-pillar framework designed to capture the ecosystem required to mobilize and deploy resources for climate resilience.

Pillar 1

Strategic Planning and Coordination

examines whether climate risks are assessed, translated into priority actions, and linked to costed sectoral plans. Indicators assess the presence of federal and emirate-level adaptation strategies, mechanisms for coordination, costing methodologies and the integration of adaptation targets into development planning. This pillar is foundational because without costed and coordinated plans, budgets and financing instruments cannot be aligned to deliver resilience outcomes

Pillar 2

Policy and Regulatory Frameworks

consider the presence of legal and regulatory mandates that create a supportive environment for adaptation investment. Indicators include climate legislation, environmental impact assessments that integrate climate risk, sectoral regulations (such as building codes and water-use rules) that reflect future climate scenarios, and financial-sector guidance on physical risk management and disclosure. The UAE's Climate Law (2024)[20] and Principles for Sustainability-Related Disclosures[21] are central components of this enabling environment.

Pillar 3

Risk Transfer and Insurance

focuses on transfer of climate risk across public and private sectors. Indicators assess coverage and penetration of catastrophe and property insurance, availability of parametric products, development of a sovereign disaster risk financing (DRF) strategy, and links to fiscal contingency planning. This pillar acknowledges that residual risk cannot be eliminated through investments alone. There is a need for pre-arranged finance to avoid fiscal shocks and preserve development budgets.

Pillar 4

Public Finance Management and Budgeting

diagnose the degree to which adaptation priorities are reflected in public finance systems. Indicators include the presence (or piloting) of climate budget tagging, reporting of adaptation expenditures, climate-risk-informed appraisal in public investment management (PIM), multi-year expenditure frameworks, ministry execution capacity and equity in allocation. This pillar is essential for mainstreaming adaptation into the budget cycle and generating expenditure data for tracking progress.

Figure 3. The six pillars of the hybrid methodology adapted for UAE's AFCA

Pillar 5

Sustainable Finance and Capital Markets

assesses whether financial markets and institutions are mobilizing capital for adaptation. Indicators include adaptation-labelled financial instruments (resilience bonds, sukuk), enabling taxonomies, incentives for resilience-aligned lending and investment, and the integration of climate risk into credit and investment decisions. For the UAE, which has positioned itself as a leading ESG sukuk hub, this pillar is particularly important for leveraging private capital.

Pillar 6

Private Sector Engagement and Investment

participation explores the depth of engagement of businesses, investors, and CSOs. Indicators assess whether platforms exist for private-sector participation in planning and co-financing, whether blended finance mechanisms are accessible, SME-focused tools are available, and CSOs and communities have channels to influence budgeting and monitor results. This pillar underlines that effective adaptation requires a whole-of-society approach to be legitimate and equitable.

Across the six pillars, a total of 26 indicators (Annex 1) were developed and assessed. To provide consistency and comparability, a Red-Amber-Green (RAG) framework was applied. Green indicates institutional arrangements and market mechanisms are well-established and functional, supported by legal mandates, institutionalization and implementation.

20 United Arab Emirates. Federal Decree-Law No. (11) of 2024 on the Reduction of Climate Change Effects. 2024. UAE Legislation, https://uaelegislation.gov.ae/en/legislations/2558/download
21 Central Bank of the United Arab Emirates. CBUAE Rulebook (EN_5791 VER1). Central Bank of UAE https://rulebook.centralbank.ae/sites/default/files/en_net_file_store/CBUAE_EN_5791_VER1.pdf

Amber denotes areas where frameworks exist but are emerging or only partially operational, such as pilots or early-stage rollouts. Red highlights areas where no formal mandate exists, instruments are absent, or implementation is ad-hoc.

The six-pillar, 26-indicator RAG framework offers several advantages. It provides policymakers with a clear visualization of strengths and opportunities, helps distinguish areas that are ready to implement from those requiring further design, and creates a baseline for tracking progress over time as reforms advance. It also aligns UAE's approach with international benchmarks used by multilateral funds and investors and increasing credibility when seeking co-financing.

Figure 4. RAG rubric deployed for assessing capacity level of the 26 indicators under the six-pillar framework

Score	RAG Rating	Interpretation
3	Green	Capacity is established and fully institutionalized
2	Amber	Capacity exists partially or is emerging
1	Red	Not Evident

Evidence Triangulation and Participatory Process

The AFCA employed a mixed-methods approach combining desk research, stakeholder validation to ensure that findings are both evidence-based and grounded in institutional realities and primary data collection through survey questionnaires and Key Informant Interviews (KIIs). The desk review examined a wide range of materials, including federal and emirate-level policy documents, budget circulars, sectoral and adaptation strategies, financial-sector regulations, market assessments, and international benchmark studies. Together, these sources provided a comprehensive baseline for each AFCA indicator under the six building blocks.

- **Mapping of** policies, regulatory frameworks, institutional mandates, and budget allocations
- **Review of existing** adaptation strategies, sectoral plans, and financing instruments
- **Establishes the baseline** and identifies gaps in documentation

- **Diagnostic questions** related to each indicator. Enables structured, comparable input from a broad stakeholder base
- Executed as **Likert scale** survey

- **Validation Workshop:** Verify preliminary findings with public sector, private sector and CSOs
- **12 Key Informant Interviews (KIIs):** In-depth discussions with government agencies, regulators, and financial institutions
- **Captures institutional knowledge, opportunities, and implementation realities**

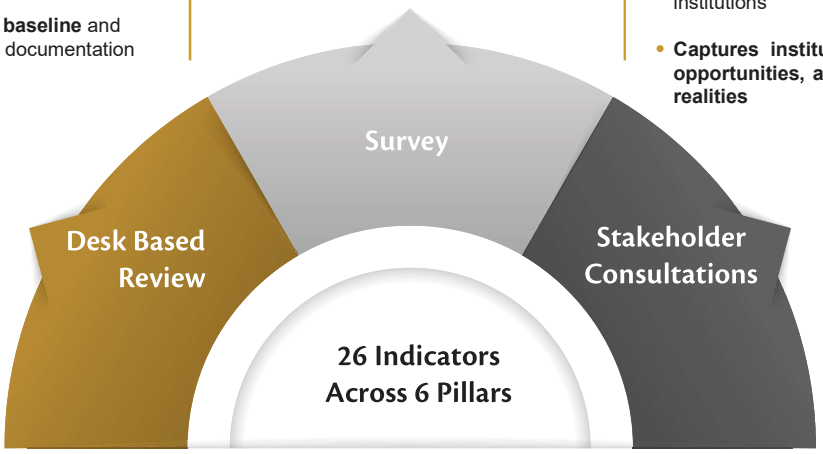

Figure. 5 Triangulation and participatory process

A repository of documents was prepared, and each resource was systematically reviewed across the public, private, and civil society sectors. Each piece of evidence was catalogued and recorded to extract insights on governance structures, financing mechanisms, fiscal linkages, and investment incentives related to adaptation. The review also drew on recent UAE initiatives, such as Federal Decree-Law No. 11 of 2024, the ALTÉRRA fund, SFWG disclosure principles, and CBUAE climate-risk stress tests as well as private sector financial and sustainability disclosures to ensure contextual relevance and alignment with the UAE's evolving policy landscape.

To deepen the analysis and validate preliminary findings, a stakeholder validation workshop was convened on 25 September 2025 in Dubai led by the MOCCAE. The session brought together 52 participants representing 28 entities from federal and emirate-level government organizations, financial regulators, private financial institutions, development partners, civil society organizations, and academia. The workshop was designed as a participatory platform to test the robustness of the AFCA's analytical framework and ensure institutional ownership of its emerging insights.

Using interactive breakout group discussions, participants reviewed the findings for each of three sectors (public, private and CSOs), assessed the relevance and accuracy of the key preliminary findings, and provided feedback on contextual nuances across those findings. The discussions focused on validating the preliminary RAG classifications assigned during the desk-based assessment to ensure that ratings reflected both documentary evidence and on-the-ground institutional practice.

In parallel, a set of Survey Questionnaires (SQs) was distributed to the public sector, private sector, and CSOs and knowledge partners. The list of respondent-entities to the survey is presented in Annex 2. Through the survey, standardized, quantifiable data from a wide and representative range of stakeholders was collected. The SQ systematically measured the degree of institutionalization, effectiveness, and alignment of all indicators among key stakeholders. Structured around the six AFCA assessment pillars, the SQ enabled the collection of consistent information on the degree of institutionalization, operational capacities, and alignment of adaptation-finance indicators across six pillars. Respondents provided self-assessments and supporting evidence on aspects such as policy integration, budgeting practices, financial-instrument readiness, private-sector engagement, and community-level participation along with their views on adaptation financing readiness and way forward. The resulting dataset provided a quantitative layer of validation to the desk research and allowed the team to triangulate findings and calibrate pillar ratings more precisely. Finally, key informant interviews (KIIs) were conducted with the public sector, private sector, and CSOs and knowledge partners. The list of KIIs conducted is attached in Annex 3. The KIIs provided deeper insights into decision-making processes, regulatory implementation challenges, budgetary coherence, and coordination mechanisms that influence adaptation finance flows in practice. Discussions also explored how adaptation priorities are reflected in planning and resource allocation cycles, the incentives and disincentives shaping private-sector participation, and the operational realities faced by CSOs in monitoring and reporting resilience outcomes.

Together, this formed the analytical backbone of the AFCA. The combination of a comprehensive desk review, structured survey questionnaires, stakeholder validation workshop (participant list attached to Annex 4), and key informant interviews ensured that the assessment captured both the formal architecture of adaptation financing and its practical application across public, private, and CSOs. This triangulated approach strengthened the robustness of findings. The outcome thus is an empirically grounded diagnostic that shows how adaptation finance currently flows within the UAE's institutional landscape. The next chapter presents these results in detail and summarizes the pillar-wise ratings, highlighting sectoral strengths and areas of improvement, while outlining priority pathways for scaling adaptation finance across the federation.

Assessing the Six Pillars of Adaptation Finance Readiness

Based on the data collected through desk research, validation workshop, stakeholder surveys, and KIIs[22], a comprehensive analysis was undertaken to consolidate findings across all indicators. Drawing on the available evidence and justifications, each indicator was assessed and scored using a RAG (Red–Amber–Green) scale to reflect the current level of adaptation financing capacity in the UAE. This section presents the results of the analysis, organized by pillar and indicator, and outlines the key strengths and opportunities for enhancement under each pillar.

01 Pillar | Strategic Planning and Institutional Coordination

Effective strategic planning and coordination are the foundation of successful climate adaptation. They ensure that national priorities are clearly articulated, responsibilities are well defined, and actions are implemented coherently across institutions and sectors. In the context of adaptation, this coordination is essential to align climate objectives with broader economic, social, and environmental goals, enabling a whole-of-government and whole-of-society approach. Strong planning frameworks also provide the policy certainty and institutional structure needed to mobilize finance, guide investment toward resilience priorities, and monitor progress over time. For the UAE, strengthening these linkages between strategy, coordination, and financing is key to translating its long-term climate vision into measurable and sustained adaptation outcomes.

22 As of 15th October, the KIIs are on-going.

1 National architecture for finance linked adaptation

The UAE's adaptation agenda sits within national architecture that has expanded in scope since 2017. The National Climate Change Plan 2017–2050[23] established adaptation as a core pillar alongside mitigation and economic diversification, which anchors a government-wide commitment to "protect the economy, infrastructure, people and ecosystems" from climate risks. It also mandated risk assessment as the basis for planning, a requirement later operationalized through a National Climate Adaptation Program[24] focused initially on five priority sectors as named under the Climate Risk Assessment of 2019: public health, energy, infrastructure, environment and the insurance. Since COP28 (Dubai, December 2023), the UAE has framed its domestic efforts within the global UAE Framework for Global Climate Resilience (FGCR),[25] the first international declaration centred primarily on adaptation, while concurrently updating national strategy instruments. In January 2024, the UAE submitted its first long-term strategy (LTS) to the UNFCCC to operationalize Net Zero by 2050[26]; the LTS complements the updated Nationally Determined Contribution (NDC 3.0) and reinforces the expectation that adaptation planning and finance be mainstreamed across federal and emirate levels.

2 Joint planning and financing coordination

Earlier capacity-building and validation activities[27] (e.g. workshops under the National Adaptation Program) helped establish common methods and a shared evidence base across ministries and emirate authorities. Domestically, coordination on climate policy has been strengthened through the UAE Council for Climate Action (established in 2022) and MOCCAE's expanded mandate to steward both international and domestic climate affairs.[28]These are principal conveners for aligning federal ministries, emirate-level authorities and regulators around adaptation priorities, and they review progress on an annual program of work.

In parallel, financial-sector regulators are building the enabling environment to support adaptation investment. The UAE Sustainable Finance Working Group (SFWG), which brings together CBUAE, SCA, DFSA and ADGM's FSRA, issued the Principles for the Effective Management of Climate-Related Financial Risks (2023),[29] setting expectations for governance, risk management, and disclosure across banks and other financial institutions; CBUAE has also piloted climate risk stress tests on both transition and physical risks, including exposures in corporate lending and real estate.[30] These measures primarily target risk governance, but they are a necessary precondition for scaling adaptation finance (e.g. resilient infrastructure lending, insurance solutions).[31]

23 UAE, ministry of climate change and environment (2017). National climate change plan of the united arab emirates 2017–2050., https://u.ae/-/media/documents-2024/national-climate-change-plan.pdf.
24 UAE ministry of climate change and environment,. (2019). UAE climate risk assessment & adaptation measures in key sectors. uae_climate_risk_assessement_and_adaptation_measures_compressed.pdf
25 UAE framework for global climate resilience." un foundation, united nations foundation, 2023, unfoundation.org/what-we-do/issues/climate-and-energy/uae-framework-for-global-climate-resilience https://unfoundation.org/what-we-do/issues/climate-and-energy/uae-framework-for-global-climate-resilience/
26 COP28 UAE presidency and the incoming cop29 presidency. The uae framework for global climate resilience & adaptation initiatives at cop28 uae. 24 apr. 2024. Nap central, https://expo.napcentral.org/2024/wp-content/uploads/2022/08/nap_expo_cop28-uae-framework-24april.pdf
27 Capacity building and validation workshop held in the uae to assess adaptation to climate change in the health sector." global green growth institute (gggi) https://gggi.org/capacity-building-and-validation-workshop-held-in-the-uae-to-assess-adaptation-to-climate-change-in-the-health-sector
28 Enhancing the role of the community in shaping legislation and government policies." the official portal of the uae government, u.ae, 2024, https://u.ae/en/participate/consultations/consultation?id=3410
29 Central bank of the UAE . The uae sustainable finance working group launches the uae principles for the effective management of climate-related financial risks. Central bank of the uae, 25 july 2022, https://www.centralbank.ae/media/t3ipeg0u/uae-sustainable-finance-working-group-launches-the-uae-principles-for-the-effective-management-of-climate-related-financial-risks-en.pdf.
30 Central bank of the uae. Principles for the effective management of climate-related financial risks. Uae sustainable finance working group, https://rulebook.centralbank.ae/sites/default/files/en_net_file_store/cbuae_en_5114_ver1.pdf.
31 Central Bank of the United Arab Emirates. Annual report 2024. Central bank of the united arab emirates, 7 apr. 2025, cbuae-annual-report_2024_english.pdf

3 Costed sectoral adaptation plans

At the federal–emirate interface, sectoral and local planning is advancing but remains uneven in terms of costing and integration with finance. The NAP and associated workstreams have catalysed sectoral risk assessments and planning (e.g. health adaptation plan led by MOHAP with MOCCAE[32]), while emirates are developing more granular adaptation plans, e.g. Abu Dhabi's Climate Change Adaptation Plan is setting sector objectives and measures.[33] These initiatives demonstrate growing vertical coordination and technical readiness across institutions, but there is a need to translate these sectoral priorities into costed plans that are integrated into federal budgeting and investment frameworks.

4 Integration into budget frameworks

While adaptation is embedded in national strategies, explicit, quantified financing pathways are still emerging. The federal budget process is mature and transparent, and the Ministry of Finance (MOF) has recently emphasized "sustainability" as a guiding principle for the next budget cycle[34]. The MOF is engaged with the IMF for collecting data from the emirate finance departments to facilitate budget tracking and monitoring, however there is currently no formal climate budget tagging system at the federal or emirate level that would identify and track adaptation outlays across entities.

Indicator Level Findings

Table 1. Indicator-Level Findings for Pillar 1 on Strategic Planning and Institutional Coordination

Pillar 1: Strategic Planning and Institutional Coordination				
Indicator	**Guiding question**	**Evidence**	**Capacity level**	**Justification**
Financing linked national adaptation strategy	Does the national adaptation strategy (or other strategic documents) include defined financing objectives, instruments, or targets?	NDCs 3.0 and the LTS highlight adaptation priorities and resource needs but do not set explicit financing targets.	 Amber – Partial or emerging	Financing is acknowledged conceptually, but the absence of quantified targets or instruments limits operationalization.

32 Climate Change and Health in the UAE." atach community of practice, n.d., https://www.atachcommunity.com/our-impact/case-studies/climate-change-and-health-in-the-uae/
33 Central bank of the united arab emirates. Abu dhabi climate change adaptation plan - environment sector 2025–2050. Environment agency - abu dhabi, 2025, https://www.ead.gov.ae/-/media/project/ead/ead/documents/en_abu-dhabi-climate-change-adaptation-plan-for-the-environment-v4.pdf
34 Central bank of the united arab emirates. Principles for the effective management of climate-related financial risks. Central bank of the united arab emirates, https://rulebook.centralbank.ae/en/rulebook/principles-effective-management-climate-related-financial-risks

Joint planning and financing coordination	To what extent do institutional coordination mechanisms link adaptation planning with financing?	UAE Sustainable Finance Principles identify coordination as a need, but integration between climate planning (MOCCAE) and fiscal planning (MOF, CBUAE) is still evolving.	 Amber – Partial or emerging	Coordination forums exist but require deeper integration into financing systems. There is no annual, cross-government planning mechanism that directly informs the budgeting of priority adaptation activities or tracks spending against adaptation outcomes. Line ministries and emirate-level entities prepare budgets independently, and adaptation priorities are incorporated on a project-by-project basis, rather than through a consolidated adaptation plan.
Costed sectoral adaptation plans	Do sectoral and emirate-level adaptation plans include cost estimates and financing requirements?	Sectoral NAPs and sustainability strategies and emirate-level plans (e.g. Abu Dhabi) outline measures but generally lack costed investment plans.	 Red - Not evident	Sectoral adaptation priorities are identified, but without financial costing they cannot be easily integrated into budgets or investment plans Overall, climate risks are well characterized, and sectoral actions are articulated, but the absence of financial costing, sequencing, and defined funding sources limits the ability of ministries and local authorities to integrate adaptation priorities into annual budget submissions or medium-term expenditure frameworks.

Integration into budget frameworks	Are adaptation policy goals explicitly integrated into federal budgeting and expenditure processes?	The Federal General Budget (2024) and Fiscal Strategy Framework do not currently tag or allocate resources specifically for adaptation.	Red - Not evident	Budget frameworks do not currently include categorization and monitoring of expenditures based on adaptation, though UAE Vision 2031 provides a direction for integration of climate themes for fiscal integration. There is no established mechanism for climate budget tagging (CBT) at either federal or emirate level (covered more under Pillar 4).

Strengths and Opportunities

Strengths in Adaptation Planning and Coordination

1. The UAE demonstrates a strong and sustained commitment to climate resilience through high-level strategies (such as the UAE Vision 2031 [35] , the National Climate Change Plan[36], and the Federal Decree-Law No. 11 of 2024 on the Reduction of Climate Change Effects[37]) which provide a durable mandate for adaptation action.

2. The UAE is progressively embedding climate considerations into financial governance, with initiatives such as CBUAE's initiatives around climate-risk stress testing and supervisory guidance by financial regulators for systemic resilience building.

Opportunities for Strengthening Policy and Coordination

1. The forthcoming NAP presents an opportunity to include explicit and quantifiable financing targets to translate strategic ambitions into measurable commitments. There is an opportunity to incorporate financial estimates, funding sources, and implementation timelines within the NAP to enable adaptation priorities to be operationalized through budget-linked programs and improve accountability for resource mobilization. Like how ALTÉRRA targets USD 250 billion mobilization by 2030, the NAP could assign indicative investment envelopes for sectors such as health, environment, energy or infrastructure.

2. Developing adaptation investment metrics and sector-specific indicators could support consistent monitoring and reporting. Integrating metrics such as "percentage of infrastructure meeting flood-resilience standards" or "reduction in heat-related health costs" would improve M&E framework.

3. Strengthening coordination between line ministries, especially MOF and MOCCAE, could provide a structured pathway for integrating adaptation into fiscal planning and tracking resource allocation over time. A joint climate-budget working group, like the SFWG model could develop adaptation-budget prioritization guidance for future budgeting exercises.

35 UAE Government (2023). We the UAE 2031 Vision. Available at: https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/innovation-and-future-shaping/we-the-uae-2031-vision
36 Ministry of Climate Change & Environment (UAE) (2017). National Climate Change Plan 2017-2050. Available at: https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/environment-and-energy/national-climate-change-plan-of-the-uae
37 UAE Federal Legislation (2024) Federal Decree-Law No. 11 of 2024 on the Reduction of Climate Change Effects. Available at: https://uaelegislation.gov.ae/en/legislations/2558/download

02 Pillar | Policy and Regulatory Frameworks

Over the past decade, the UAE has built a policy and regulatory architecture that embeds climate and sustainability considerations in public decision-making, financial supervision and the built environment. While most instruments were not designed as 'adaptation-only' tools, several of them create enabling conditions for resilience investment. The result is a policy base that is supportive but still evolving toward requirements that link public capital allocation to climate-resilience outcomes.

1 Finance Enabling Regulatory Frameworks

In November 2023, the UAE Sustainable Finance Working Group (SFWG) launched the Principles for the Effective Management of Climate-Related Financial Risks.[38] The Principles set a baseline for governance, risk management, scenario analysis and disclosure across all financial entities operating in the UAE. They do not mandate products, but they signal regulatory expectations that climate risks be integrated into strategy, risk appetite, and supervisory dialogue. DFSA formally adopted the principles and announced supervisory guidance to its regulated firms.[39]

Similarly, CBUAE has begun to operationalize climate risk oversight and reported that UAE banks conducted transition-risk stress tests using Network for Greening the Financial System (NGFS) scenarios and that the supervisory program now covers physical risks (e.g. heat and flood exposure) in sectoral portfolios such as corporate lending and real estate.[40]The Central Bank's 2024 Annual/Financial Stability reporting confirms continued expansion of climate-risk assessment in regulation and supervision.[41] For instance, recognizing the growing importance of climate risk, the CBUAE conducted climate physical risk scenario analysis. It examined the UAE banks' real estate lending exposure to two physical hazards, rainfall flood, and storm surge[42,] using two scenarios (Middle-of-the-road scenario and Fossil Fuel Development scenario) developed by the United Nations Intergovernmental Panel on Climate Change (IPCC) at 100-year and 250-year return periods. The results show that losses from physical hazards would affect banks' provision amounts because of decreased collateral values. Nonetheless, it demonstrated that the UAE banking sector possesses adequate capital and liquidity buffers to withstand the impact of hypothesized adverse scenarios.[43]

2 ESG/Sustainable Finance Support for Adaptation

In parallel, the SFWG issued Principles for Sustainability-Related Disclosures for Reporting Entities, designed to improve the transparency and quality of ESG reporting to identify resilience-aligned assets.[44] At the product level, the Securities and Commodities Authority (SCA) has adopted regulations for green and sustainability-related bonds and sukuk, which reference international disclosure standards and provide adaptation-aligned instruments as the market develops.[45]

The UAE is developing a sustainable finance taxonomy to improve market clarity and channel capital to priority activities; the most recent NDC notes the taxonomy's design work and references adaptation among its themes. Authorities are also assessing the regulatory laws and incentives to facilitate public private collaboration for green projects. Further, a Gulf-wide dialogue on taxonomies is also advancing.[46]

38 UAE Sustainable Finance Working Group launches the Principles for the Effective Management of Climate-related Financial Risks. Securities and Commodities Authority, 13 Nov.
2023https://www.sca.gov.ae/en/media-center/news/13/11/2023/uae-sustainable-finance-working-group-launches-the-principles-for-the-effective-management-of-climat.aspx
39 DFSA adopts UAE Principles for the Effective Management of Climate-Related Financial Risks. DFSA, 16 Nov. 2023,
https://dfsaen.thomsonreuters.com/rulebook/16-november-2023-dfsa-adopts-uae-principles-effective-management-climate-related-financial
40 Sustainable Finance in the UAE. Central Bank of the UAE, https://www.centralbank.ae/en/our-operations/sustainable-finance/
41 Central Bank of the UAE. Annual Report 2024.https://centralbank.ae/media/3anneaj4/cbuae-annual-report_2024_english.pdf
42 MEIR to launch Sustainable Finance Awards. Middle East Insurance Review, June 2024,
https://www.meinsurancereview.com/News/View-NewsLetter-Article?id=92662&Type=MiddleEast
43 This is substantiated through several layers of analysis in the CBUAE's Financial Stability Report 2024; under the Fossil Fuel Development scenario, which assumes higher physical risk exposure, the estimated erosion in Common Equity Tier 1 (CET1) capital was only 0.33%, this impact was manageable, since it didn't factor in changes to Probability of Default (PD). UAE banks maintain high capital ratios, Liquidity Coverage Ratios (LCR) and Net Stable Funding Ratios (NSFR), indicating stable short- and long-term liquidity positions. So, while the climate stress tests revealed potential losses due to decreased collateral values, the strong pre-existing buffers strengthens CBUAE's confidence in the sector's resilience.
44 Central Bank of the UAE. "Principles for Sustainability-Related Disclosures. https://rulebook.centralbank.ae/en/rulebook/principles-sustainability-related-disclosures
45 Securities and Commodities Authority. Principles for Sustainability-Related Disclosures for Reporting Entities. Securities and Commodities Authority,
https://www.sca.gov.ae/assets/dff1f3c6/principles-for-sustainability-related-disclosures-for-reporting-entities.aspx
46 Allegra, Tiziana, et al. Strengthening Financial Stability: The Role of Sustainability-Related Disclosures. IMF Working Papers, 2023,
https://www.elibrary.imf.org/view/journals/002/2023/224/article-A004-en.xml

3 Environmental Permitting, Environmental Impact Assessment (EIA) and the Built Environment

Emirate-level EIA requirements are administered by development permitting authorities (e.g. EAD Abu Dhabi[47], Dubai Municipality[48]). For large infrastructure, EIA often requires flood, heat, and water-stress assessment in project design. Because permitting is a precondition for finance, these rules carry financial implications even when climate criteria are not explicitly labelled as "adaptation."[49] The updated Public-Private Partnership (PPP) Framework (2023–2024) facilitates private investment in infrastructure sectors by integrating environmental and social risk assessments at both feasibility and analysis stages[50].

In the built environment, where resilience standards translate directly into project bankability, the UAE has well established mandatory green . building regulations. Dubai's Green Building Regulations and Specifications (initially for public buildings in 2011, extended to all new buildings in 2014) require measures that reduce energy and water demand and improve building performance; in 2016 Dubai introduced Al Sa'fat to grade or build on these requirements.[51] In Abu Dhabi, the Estidama Pearl Rating System is mandatory (minimum One Pearl for private buildings; Two Pearls for government) and is embedded in the Development Code and Plan 2030.[52] [53]These systems are not labelled explicitly as "adaptation" regimes, but their requirements (envelope performance, water efficiency, urban heat mitigation, etc.) have resilience implications and affect project feasibility and finance. Other emirates (e.g. Ras Al Khaimah's Barjeel) have adopted similar standards.

4 Legal Mandates and Sectoral Responsibilities

In 2024, the UAE enacted Federal Decree-Law No. 11 of 2024 on the Reduction of Climate Change Effects[54]. The law creates a legal umbrella for mitigation and resilience policy across all emirates and economic zones. The Federal Decree Law No.11 mandates each competent authority, in coordination with the MOCCAE, to develop and implement sector-specific adaptation plans covering areas such as infrastructure, energy, health, environment, and insurance. These plans must assess key climate risks, identify response measures, and include early warning systems. Furthermore, authorities are required to report losses, damages, and implementation progress to the Ministry for inclusion in national and UNFCCC reports. Currently, sector-specific financing mandates (e.g. adaptation obligations for water, agriculture or housing) are not evident or mandated, though sectoral regulations do set technical standards such as for water efficiency in buildings[55].

47 El-Khorazaty, Tarek, and Michael J. Bednar. Exploring an Integrated Approach to Implementing Green Building Regulations in the UAE. Local Environment: The International Journal of Justice and Sustainability, vol. 19, no. 6, 2014, pp. 666–681, https://www.tandfonline.com/doi/pdf/10.1080/14615517.2014.908004
48 Dubai Municipality. Guidance on the EC Requirements for Development and Infrastructure Projects in the Emirate of Dubai. Dec. 2020, https://www.dm.gov.ae/wp-content/uploads/2020/12/Guidance-on-the-EC-Requirements-for-Development-and-Infrastructure-Projects-in-the-Emirate-of-Dubai_December-2020-1.pdf
49 Al-Ani, Sami. Environmental Impact Assessments and Constitutional Law in the UAE. Generis, 27 May 2024, https://generisonline.com/environmental-impact-assessments-and-constitutional-law-in-the-uae/
50 Ministry of Finance, UAE (2025) PPP Manual (Public-Private Partnership Framework). Available at: https://mof.gov.ae/wp-content/uploads/2024/07/UAE-MOF-PPP-Manual-ENG.pdf
51 Dubai Municipality. Green Building Regulations and Specifications. 2011, https://www.dm.gov.ae/wp-content/uploads/2018/01/05_ENG_DCL_LawsLegislation_EngineeringSection_GreenBuildingRegulation.pdf
52 Department of Municipalities and Transport. Provisional Review and Revision Standards (PRRS), Version 10. 2021, https://www.dmt.gov.ae/-/media/Project/DMT/DMT/E-Library/0001-Manuals/PRRS/PRRS-Version-10.pdf
53 Al Madfai, Mohammed. Estidama Rating System: 5-Minute Guide.https://ongreening.com/estidama-rating-system-5-minute-guide/
54 UAE Federal Legislation (2024) Federal Decree-Law No. 11 of 2024 on the Reduction of Climate Change Effects. Available at: https://uaelegislation.gov.ae/en/legislations/2558/download
55 Dubai Municipality (2011) Green Building Regulations & Specifications [pdf]. Dubai: Dubai Municipality. Available at: https://www.dm.gov.ae/wpcontent/uploads/2018/01/05_ENG_DCL_LawsLegislation_EngineeringSection_GreenBuildingRegulation.pdf

Indicator Level Findings

Table 2. Indicator-Level Findings for Pillar 2 on Policy and Regulatory Frameworks

Pillar 2: Policy and Regulatory Frameworks				
Indicator	**Guiding question**	**Evidence**	**Capacity level**	**Justification**
Finance-enabling regulatory frameworks	Do regulations mandate or incentivize financial institutions and developers to incorporate climate resilience in investment decisions?	The UAE has adopted the Principles for the Effective Management of Climate-Related Financial Risks, and supervisory authorities, including the Central Bank of the UAE (CBUAE) and the Securities and Commodities Authority (SCA) have begun embedding climate-risk considerations into prudential and disclosure frameworks. This represents progress toward recognizing climate risk within the financial system.	 Amber – Partial or emerging	Regulations and advocacy (such as through EGBC) exist at the built environment level, but financial regulations linking investment decisions to resilience remain limited. Current policies focus on risk management and disclosure, rather than capital allocation or incentive structures that would steer finance toward resilience outcomes. The sustainable finance taxonomy also remains a work in progress.
ESG/ sustainable finance support for adaptation	Do ESG regulations and sustainable finance frameworks explicitly support investment flows into adaptation or resilience sectors?	UAE Sustainable Finance Framework (2021–2031) include adaptation as a theme; SCA requires ESG disclosures for listed companies with mandatory sustainability reporting for listed companies. Most corporates and FIs report on adaptation metrics in sustainability reports (e.g. water and energy efficiency, social factors) and focus on GRI as a standard reporting and disclosures framework.	 Green – Established and functional	ESG regulations are well-developed, and sustainable finance principles explicitly cover resilience sectors, and create strong potential to support investment flows into resilience outcomes.

EIA and permitting with financial implications	Do permitting or EIA systems impose adaptation compliance with implications for financing or project viability?	Abu Dhabi and Dubai permitting frameworks require resilience criteria; EIAs include climate considerations indirectly.	Green – Established and functional	EIA systems and permitting processes enforce adaptation-relevant standards, making compliance a precondition for financing and project approvals. The EIA functions as de facto adaptation safeguards and are a prerequisite for project approval and financing.
Legal mandates tied to adaptation financing	Do sectoral laws assign responsibilities or mechanisms for financing adaptation in key areas (e.g. water, agriculture, housing)?	Sectoral adaptation responsibilities are not yet codified as financial mandates in law. Advancement seen through the Federal Decree-Law No. 11, but sector-specific adaptation financing duties remain unspecified.	Amber – Partial or emerging	While regulatory standards exist for adaptation reporting (Decree Law No.11), there are no obligations for priority sectors to finance adaptation measures in their respective sectors. Adaptation planning at the federal level is limited to prioritized key 5 sectors.

Strengths and Opportunities

Strengths of UAE's Policy and Regulatory Frameworks:

1. The UAE demonstrates a good foundation for regulatory alignment, with all major financial regulators recognizing the SFWG Principles on climate risk, and the DFSA's adoption marking a tangible step toward consistent implementation.

2. The CBUAE's ongoing climate-risk stress testing, now incorporating physical risk assessment along with transition risk from the next year, is a significant milestone in mainstreaming climate resilience within credit risk management.

3. Mandatory green building codes and EIA regimes already embed adaptation considerations in infrastructure planning, influencing both project viability and access to finance. The EGBC's advocacy for built infrastructure is taking roots within private sector, resulting in improved awareness of resilient outcomes.

4. The introduction of ESG disclosure principles and green/sustainability bond and sukuk regulations has established a strong enabling environment for the eventual rollout of adaptation specific financial instruments.

Strengths of UAE's Policy and Regulatory Frameworks:

1. There is scope to introduce targeted incentives or mandates for adaptation finance, such as resilience-linked instruments or guidance for adaptation-linked sukuk to further mobilize private capital. A framework similar to transition taxonomy in Singapore[56] could be adapted to define criteria for adaptation-focused sukuk issuance in the UAE.

2. Financial regulations could integrate transition pathways which explicitly integrate adaptation-related requirements, to systematically incorporate climate resilience into lending and investment decisions.

3. Sectoral legislation could more clearly define financing responsibilities for adaptation actions in key sectors such as water and housing and can help determine which entities fund resilience measures and through what financial instruments.

4. Aligning EIA frameworks across emirates would ensure consistent treatment of heat stress, flooding, and coastal hazards in project approvals. For instance, a unified federal EIA guideline could standardize minimum climate-screening requirements for all major infrastructure and built investments.

The ongoing work on the UAE Sustainable Finance Taxonomy presents an opportunity to finalize adaptation-related categories and metrics, which would provide clearer guidance to markets and investors. Clear classification of resilience-enhancing sectors, such as stormwater, water reuse, and cooling systems could guide banks and investors toward adaptation-aligned assets.

03 Pillar | Risk Transfer and Insurance

The UAE's climate profile is characterized by sea-level rise threats to coastal assets, urban flooding and intensifying heat waves[57], which makes insurance a critical component of its adaptation financing landscape. A strong insurance sector helps absorb the financial impact of disasters, protecting both government and private sector from major losses. Risk transfer mechanisms can also play a proactive role in incentivizing adaptation, through instruments that reward risk reduction or provide rapid liquidity after disasters to reduce recovery time and fiscal volatility

Over the past decade, the UAE has built one of the largest and well capitalized insurance markets in the Gulf region, now regulated by the Central Bank of the UAE (CBUAE)[58]. Regulatory reforms have aligned the sector with international standards, including International Financial Reporting Standards (IFRS)-17 for disclosures alongside a progressive risk-based capital (RBC) regime such as Solvency II along with high standards under Risk Based Supervision (RBS).[59] These measures have strengthened governance and risk management to develop strong foundation for climate-linked insurance solutions.

56 Monetary Authority of Singapore (MAS) (2023) Singapore-Asia Taxonomy for Sustainable Finance. Available at: https://www.mas.gov.sg/-/media/mas-media-library/development/sustainable-finance/singaporeasia-taxonomy-updated.pdf
57 Cepni, O. (2024) Climate risks and financial markets: Understanding the UAE's vulnerability to physical and transition risks. NYU Stern Working Paper. Available at: https://pages.stern.nyu.edu/~jstroebe/PDF/UAE_Climate.pdf
58 Central Bank of the United Arab Emirates (CBUAE) (2023) Insurance Supervision and Regulatory Framework. Available at: https://www.centralbank.ae/en/our-operations/supervision/insurance-guidelines
59 Central Bank of the United Arab Emirates (CBUAE) (2022) Implementation of IFRS 17 and Risk-Based Supervision Framework. Abu Dhabi: CBUAE. Available at: https://rulebook.centralbank.ae/en/rulebook/ifrs17-and-risk-based-supervision

1 State of Insurance Schemes for Climate Resilience

The UAE's climate policy acknowledges the insurance sector's role in adaptation and calls for integrating climate risk into financial systems[60]. The Central Bank of the UAE and Insurance Authority are working with MOCCAE and other entities to promote climate risk integration into the insurance industry. In 2020, a government-led workshop brought together 50 insurers to discuss climate risks and insurance opportunities[61]. The workshop highlighted insurance as a "shock absorber" by covering losses from natural disasters, promoting financial resilience, and supporting health, social protection, and decent work. The workshop found that 43% of UAE insurers are already preparing for climate risks, with opportunities in resource efficiency, renewable energy, and green technologies[62].

Most climate-related losses in the UAE are currently covered through property and casualty (P&C) policies held by businesses and infrastructure operators. These policies bundle natural hazard coverage but do not differentiate risk pricing based on climate exposure or resilience measures. Large infrastructure projects are insured to meet lender and permit requirements, but there is no national framework that explicitly links insurance payouts to climate adaptation outcomes.

Recently, Al Wathba National Insurance Company (AWNIC) has launched parametric insurance coverage for catastrophes, launching a new product with global reinsurer support. This parametric solution, backed by Munich Re in a treaty brokered by Gallagher Re, will provide fast payouts based on predefined triggers rather than traditional loss assessment[63]. Another notable development is by the Al Fujairah National Insurance Co. (AFNIC), which launched FloodGuard insurance that offers coverage for both personal and company-owned vehicles used exclusively for personal or leisure purposes, especially those over seven years old that often do not qualify for comprehensive insurance. This insurance policy that covers third-party accidental loss or damage to motor vehicles against floods and storms has been launched for the first time in the UAE.

At the sovereign level, there is no disaster risk financing strategy in place. Public disaster financing has so far been ex-post in nature and rely on emergency fiscal allocations. The UAE does not operate sovereign risk pools, catastrophe pools, contingent credit lines, or catastrophe bonds that would pre-commit liquidity for disaster events. While government can respond quickly due to strong finances, this approach leaves it vulnerable to growing climate risks especially as cities expand into flood prone areas and economic assets become more concentrated.

CBUAE's growing focus on climate financial risk is a promising development. Its 2023–2024 climate stress tests assessed physical risk exposure in corporate lending and real estate portfolios, including flood and storm-surge scenarios[64]. The next steps will result in stress testing for transition risk as well. These exercises are a key step toward incorporating climate risk into financial oversight and could lead to new expectations for climate related insurance and financial products.

60 UNFCCC (2024). United Arab Emirates Third Nationally Determined Contribution (NDC 3.0): Accelerating Action Towards Mission 1.5°C. November. [online] Available at: https://unfccc.int/sites/default/files/2024-11/UAE-NDC3.0.pdf
61 Global Green Growth Institute (2020). UAE Held Awareness Workshop on Climate Risks and Opportunities for Insurance Sector. Available at: https://gggi.org/uae-held-awareness-workshop-on-climate-risks-and-opportunitiesforinsurancesector/#:~:text=already%20preparing%20for%20climate%20risks,UAE%20in%20collaboration%20with%20GGGI
62 Global Green Growth Institute (2020). UAE Held Awareness Workshop on Climate Risks and Opportunities for Insurance Sector. Available at: https://gggi.org/uae-held-awareness-workshop-on-climate-risks-and-opportunitiesforinsurancesector/#:~:text=already%20preparing%20for%20climate%20risks,UAE%20in%20collaboration%20with%20GGGI
63 Gale, H., 2025. Munich Re backs parametric catastrophe insurance in United Arab Emirates. The Insurer, 23 May. [online] Available at: https://www.theinsurer.com/parametric-insurer/news/munich-re-backs-parametric-catastrophe-insurance-in-united-arab-emirates-2025-05-23/
64 Central Bank of the UAE (2025) Annual Report 2024. Abu Dhabi: CBUAE. Available at: https://www.centralbank.ae/media/tagjsl1q/cbuae-annual-report_2024_a4_en_june-25-2025-revised.pdf

2 Uptake of Climate Risk Insurance Tools

The UAE's insurance sector continues to expand rapidly, with gross written premiums reaching AED 64.8 billion in 2024—a 21.4% year-on-year increase. Health insurance accounted for the largest share (47.4%), followed by property and liability insurance (41.0%), both of which saw significant growth (18.5% and 27.9%, respectively). The sector played a vital role in the country's recovery from the April 2024 floods, with claims payouts increasing by 35.8%, underlining its responsiveness during crises.[65]

The penetration of conventional insurance among UAE corporates is high, which reflects the mandatory nature of coverage in sectors such as construction, transportation, and energy. However, climate-specific instruments, such as parametric products triggered by rainfall intensity or cyclone wind speed, are yet to be developed. Climate insurance premiums are determined by factors such as the level of risk in a given location, exposure type, and market appetite[66]. A higher associated risk typically results in higher premiums. While parametric insurance for climate disasters is often perceived as more expensive than traditional indemnity insurance, it is designed to fill protection gaps, covering losses that conventional policies exclude, thereby justifying its higher pricing[67].

Uptake and availability of microinsurance and SME-targeted resilience products remain limited, which means that households, small businesses, and municipal entities often bear losses directly when disasters occur. In agriculture, where climate-sensitive risks such as salinization and heat stress are relevant, there is little evidence of crop or livestock insurance schemes. This is partly due to the sector's small size and lack of programs to support uptake.

To make insurance payouts more accessible, the CBUAE launched Sandak in 2024, which is the MENA region's first independent financial ombudsman, to further bolster trust and accessibility by resolving insurance-related complaints transparently and efficiently.[68]

3 Climate Data Systems for Risk Pricing

An essential enabler of risk transfer solutions is the availability of granular, high-quality data on hazards, exposures, and vulnerabilities. The UAE has invested heavily in climate and meteorological monitoring, led by the National Centre of Meteorology (NCM), which maintains early warning systems, rainfall radar networks, and seasonal forecasting capabilities[69]. Several research in emirates have conducted hazard mapping exercises, including floodplain modelling and coastal vulnerability assessments.[70] Nonetheless, there is no single climate model for the UAE and often times, the global climate models are relied upon, which are then transposed using local assumptions.

The requirement of a UAE specific climate model is growing and there is a need to organize and diffuse datasets across ministries and departments. As such, the current datasets are not fully used in insurance pricing, financial planning or public investment decisions. Insurers such as Abu Dhabi National Insurance Company (ADNIC) and Orient Insurance have acknowledged rising climate-related losses and hinted at the use of catastrophe models and scenario analyses (e.g. simulating natural disaster impacts on portfolios) to adjust pricing and solvency plans[71] [72]. However, this integration is nascent, and its extent seems to be limited.

There is an absence of open-access national platform that consolidates hazard information and loss history for insurers, banks, and policymakers. As a result, risk pricing remains based on historical loss data and global assumptions, rather than location-specific climate risk data. Greater data integration would allow more accurate pricing, improve affordability for safer areas, and encourage adaptation investments in higher-risk zones. There are examples where an open-source National Catastrophe (Nat-Cat) model is used to model pricing and risk, which could be used by all insurers to see exposure, hazard and vulnerability mapping to come up with structured products.[73]

65 Central Bank of the UAE (2025) Financial Stability Report 2025. Central Bank of the UAE. Available at: https://www.centralbank.ae/media/p2rpafum/cbuae-fsr-report_2025_en.pdf
66 BIS (2025) 'Mind the climate-related protection gap – reinsurance pricing and underwriting considerations', FSI Insights No. 65. Basel: Bank for International Settlements.
67 Swiss Re Corporate Solutions (2023) Comprehensive Guide to Parametric Insurance. Zürich: Swiss Re Corporate Solutions. Available at: https://corporatesolutions.swissre.com/dam/jcr:0cd24f12-ebfb-425a-ab42-0187c241bf4a/2023-01-corso-guide-of-parametric-insurance.pdf
68 Central Bank of the UAE (2024) Annual Report 2024. Central Bank of the UAE. Available at: https://www.centralbank.ae/media/ymgnwy3x/2024-en-annualreport.pdf
69 Ministry of Foreign Affairs (UAE) (2024) MoFA and NCM launch the "Early Warning System for All" digital platform, 30 August. Available at: https://www.mofa.gov.ae/en/mediahub/news/2024/8/30/30-8-2024-uae-mofa
70 Subraelu, P., Ahmed, A., Ebraheem, A. A., Sherif, M., Mirza, S. B., Ridouane, F. L. & Sefelnasr, A. (2023) 'Risk Assessment and Mapping of Flash Flood Vulnerable Zones in Arid Region, Fujairah City, UAE – Using Remote Sensing and GIS-Based Analysis', Water, 15(15), Article 2802. doi: 10.3390/w15152802.
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71 Abu Dhabi National Insurance Company (ADNIC) (2024). Annual Report 2023. Available at: https://adnic.ae/documents/20126/52007/ADNIC+Annual+Report+EN_2023_final.pdf
72 Orient Insurance PJSC (2024). Annual Report 2024. [Online] Available at: https://orientinsurance.lk/wp-content/uploads/2025/07/Annual-Report_compressed-1.pdf
73 Oasis Loss Modelling Framework. OasisLMF, 2025, https://oasislmf.org/

Indicator Level Findings

Table 3. Indicator-Level Findings for Pillar 3 on Risk Transfer and Insurance

Pillar 3: Risk Transfer and Insurance				
Indicator	**Guiding question**	**Evidence**	**Capacity level**	**Justification**
Insurance schemes for climate resilience	Are there operational public or private insurance schemes that finance post-disaster recovery or incentivize pre-disaster adaptation?	UAE insurers provide P&C coverage that may include natural hazard protection, but there are no dedicated public risk pools or climate-focused insurance schemes targeting adaptation finance. New innovative products include AWNIC's parametric insurance[74]and AFNIC's FloodGuard. There is no evidence of sovereign catastrophe bonds, contingent credit lines, or government-backed parametric programs.	 Amber – Partial or emerging	Insurance coverage exists but is fragmented and reactive for adaptation and does not systematically support resilience or pre-disaster risk reduction.
Uptake of climate risk insurance tools	What is the penetration of climate-related insurance tools among vulnerable sectors or communities?	Uptake of health and motor insurance is high, however basic policies typically do not cover for natural perils. Penetration of agricultural and microinsurance is limited, as agriculture is a small share of GDP. Corporate real estate and infrastructure projects typically insure against property damage, but uptake of climate-specific or parametric solutions is negligible.	 Amber – Partial or emerging	Conventional insurance uptake is high in commercial sectors, but targeted climate risk products are not yet mainstream.
Data systems for climate-informed finance	Are there national or emirate-level climate data systems that feed into pricing, insurance, or investment decision-making frameworks?	The UAE operates sophisticated meteorological and early-warning systems (NCMS), and some emirates maintain flood hazard maps and coastal data. However, these datasets are not yet systematically integrated into actuarial modelling or public investment decision-making through a Nat-Cat model or UAE's own climate model. No unified national climate risk information platform exists for use by insurers or investors.	 Amber – Partial or emerging	The UAE does not have its own national climate risk insurance model. Climate data is available but not through a systematic national level mechanism that could enable climate-informed financial decision-making among insurers, banks and other Fis.

74 Gale, H., 2025. Munich Re backs parametric catastrophe insurance in United Arab Emirates. The Insurer,

Strengths and Opportunities

Strengths of the Risk Transfer and Insurance Sector in the UAE

1. The UAE's insurance sector is well-capitalized and supported by strong solvency standards, including IFRS-17 for disclosures and a risk-based capital regime, providing a solid foundation for innovation and long-term resilience.

2. The CBUAE practice risk-based supervision (RBS), ensures robust regulatory oversight, and actively promote climate risk considerations through stress testing and supervisory guidance.

3. The UAE benefits from relatively high general insurance penetration across corporates, infrastructure, and real estate projects and offer baseline coverage for major national assets and most employee categories.

4. The availability of climate and hazard data from the National Center of Meteorology, the Federal Competitiveness and Statistics Center (FCSC), and emirate-level risk mapping supports opportunities for improved risk modelling and product design.

Opportunities for Enhancing the Insurance Landscape

1. There remains significant potential to develop and pilot dedicated climate risk transfer solutions, such as parametric insurance for high-risk hazards (e.g. floods and storm surge), catastrophe pools, and contingent credit lines, to enhance resilience across sectors. A pilot parametric flood-insurance facility for coastal infrastructure could serve as a proof of concept under MOF–CBUAE coordination

2. There is an opportunity to extend climate-risk insurance coverage to communities and SMEs, to help safeguard livelihoods and enhance social resilience through tailored products. This could include public-private premium-sharing schemes.

3. Integration of climate data into actuarial pricing remains limited, constraining accurate risk-based premium setting. This could be addressed by setting up UAE's own climate model or a unified national climate risk data platform that can consolidate hazard maps, exposure layers, and loss data to support insurers, banks, and investors in product design and risk pricing.

4. Establishing a comprehensive DRF strategy would enhance financial preparedness and reduce fiscal exposure by aligning sovereign insurance, budget contingencies, and contingent credit lines under one coordinated framework.

5. There is scope to introduce innovative insurance design features, such as premium discounts or preferential terms for resilient infrastructure. CBUAE and SCA could be encouraged to develop supervisory guidance for climate risk transfer, incentivizing insurers to innovate and offer such products.

04 Pillar | Public Finance Management and Budgeting

Public financial management (PFM) forms the bridge between policy ambition and real expenditure. In the context of climate adaptation, it determines whether priorities articulated in the NAP, the Long-Term Strategy (LTS)[75], or emirate-level adaptation plans are budgeted, implemented and monitored. The UAE operates one of the most disciplined fiscal systems in the region, characterized by prudent budgeting, strong procurement oversight, and robust audit systems. Both federal and emirate-level budgets are guided by long-term national visions, such as the UAE Centennial 2071[76]and Vision 2031[77], which explicitly emphasize sustainability, innovation, and resilience. There is a strong institutional foundation to mainstream adaptation into fiscal governance.

Yet, despite these institutional strengths, climate adaptation remains partially integrated into UAE's PFM systems. Climate considerations appear in strategic planning documents, environmental permitting processes, and sectoral investment programs, but they are not systematically embedded within fiscal operations such as budget preparation, expenditure classification, or performance reporting. Adaptation-related spending is not costed ex-ante and is not tagged, which constrains the ability to quantify current allocations or forecast financing needs. As a result, budget visibility of adaptation remains low, which limits evidence-based decision-making.

International practice demonstrates that PFM reforms are often the first step in transforming adaptation strategies into funded, trackable programs.[7879] For the UAE, embedding adaptation within PFM require fine-tuning fiscal tools. This includes updating budget circulars, revising project appraisal manuals to include climate metrics, enhancing economic classification codes for climate expenditure, and introducing audit criteria that assess resilience outcomes. Each of them is outlined below:

1 Budget Classification, Tagging, and Costing

Climate/green budget tagging (CBT) is a PFM tool that marks programs and line items as climate-relevant (mitigation/adaptation) within the chart of accounts or program structure, so governments can identify, cost, budget, and report adaptation spending. International guidance (IMF Green-PFM[80]; World Bank[81]; OECD[82]; PEFA[83]) emphasizes using tagging rules, weights, and performance indicators embedded in budget circulars, economic/functional classifications, and year-end reports to make adaptation visible in the budget cycle and enable outcome tracking. Done well, CBT links NAP priorities to resources, improves MRV, and supports fiscal risk analysis and capital budgeting for resilience.

Although, the Macro-Fiscal Relations Department of the MOF conducts an exercise within the Ministry for collecting climate budgeting data from the emirate departments, currently, there is no federal climate-budget tagging framework or MOF budget-circular instructions that require ministries/emirates to classify, tag, or weight adaptation expenditures (nor of adaptation-specific codes in the chart of accounts). This means adaptation appears within sectoral envelopes but is not identifiable in budget documentation, making it hard to quantify current spend or forecast needs, which could become cornerstone to UAE NAP for finance mapping and resource-mobilization plans.

75 United Arab Emirates (2024) The United Arab Emirates' First Long-Term Strategy: Demonstrating Commitment to Net Zero by 2050 (LT-LEDS). Submitted to UNFCCC, January. Available at: https://unfccc.int/sites/default/files/resource/UAE_LTLEDS.pdf
76 UAE Government (n.d.) UAE Centennial 2071. Available at: https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/innovation-and-future-shaping/uae-centennial-2071
77 UAE Government (n.d.) We the UAE 2031 Vision. Available at: https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/innovation-and-future-shaping/we-the-uae-2031-vision
78 Aydin, Ö., Gonguet, F. & Wendling, C. (2022) 'New IMF guidance on Green PFM', IMF PFM Blog, 9 December. Available at: https://blog-pfm.imf.org/en/pfmblog/2022/12/new-imf-guidance-on-green-pfm
79 IIED (2024) Good practices in accessing and delivering adaptation finance. London: International Institute for Environment and Development. Available at: https://www.iied.org/sites/default/files/pdfs/2024-10/22561g.pdf
80 International Monetary Fund (IMF) (2022) How to Make the Management of Public Finances Climate Sensitive: "Green PFM". IMF How-To Note. Available at: https://www.imf.org/en/Publications/Fiscal-Affairs-Department-How-To-Notes/Issues/2022/12/08/How-to-Make-the-Management-of-Public-Finances-Climate-Sensitive-Green-PFM
81 World Bank (2022) Climate Change Budget Tagging: A Review of International Practice. Open Knowledge Repository. Available at: https://openknowledge.worldbank.org/entities/publication/1a086761-7d47-599a-a837-55b5c1fed627
82 OECD (2021) Green Budget Tagging: Introductory Guidance and Principles. Paris: OECD Publishing. Available at: https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/02/green-budget-tagging_62f62cd1/fe7bfcc4-en.pdf
83 PEFA (2024) Supplementary Framework for Assessing Climate-Responsive Public Financial Management. Available at: https://www.pefa.org/sites/pefa/files/resources/downloads/20240501-PEFA%20Climate%20supplementary%20Framework%20for%20publication-%20Clean.pdf

2 Appraisal of Adaptation Measures in Line Ministry Submissions

International good practice (IMF C-PIMA; IMF Green PFM; World Bank climate-smart PIM; OECD CAIF) recommends that: project appraisal should (i) screen climate hazards, (ii) quantify adaptation options and life-cycle O&M, (iii) integrate avoided-loss benefits in CBA, and (iv) carry climate findings through to selection, budgeting, and ex-post reporting. Where this is embedded in budget circulars and appraisal manuals, governments can compare projects on a risk-adjusted basis and prioritize resilience investment that matter the most today.

At present, climate considerations enter UAE projects mainly through EIA/permitting and high-level strategy, not through systematic, economics-based appraisal in line-ministry submissions. Without mandated climate-risk screening, avoided-loss valuation, and climate-weighting in cost-benefit analysis (CBA), adaptation measures are identified but not fully costed, which makes it difficult to (a) compare resilient vs. non-resilient design options, (b) justify higher capex for lower life-cycle risk, and (c) prioritize adaptation within annual and medium-term budgets. This keeps adaptation partially visible at the project gate, but full appraisals stand limited.

3 Reporting of Adaptation Related Expenditures

A national reporting mechanism aggregates who spends what on adaptation across ministries and emirates and a consolidated statement in budget documents or annual reports. Global guidance (IMF Green-PFM[84]; PEFA Climate[85]; OECD green budgeting[86]) stresses that such reporting makes adaptation visible in public accounts, which enables finance mapping for NAPs/BTRs, and supports fiscal-risk analysis and performance tracking.

Currently, there is no evidence that there is a national mechanism that consolidates adaptation-related expenditures across levels of government in the public fiscal record, which enables legal provisions for data submission and international reporting. This could partly be attributed to the need for stronger cross-ministerial coordination and clearer definition of climate-related roles, particularly in determining whether the mandate for climate finance lies with the MOF or MOCCAE.

4 Capacity of Ministries to Work on Adaptation Finance

Capacity for adaptation budgeting spans people, processes, and platforms: (i) skilled staff who understand climate risk and public finance, (ii) PFM tools (budget circulars, classification codes, appraisal templates, reporting forms), and (iii) institutions that enforce procurement, audit, and performance oversight. Skilled staff remain a central pillar as fully capacitated ministries can convert NAP priorities into costed, budget-linked programs and report the results across government.

Key implementing ministries have strong fiduciary machinery (budgeting, procurement, audit) and clearer mandates, but adaptation-specific budgeting capacity is partial: staff have limited standardized tools to cost, and report adaptation, and lack of common data/methods constrains consistent submissions. This means adaptation priorities are identified, yet the capacity to convert them into costed, budget-linked programs with trackable results is still maturing.

5 Multi-Year Review of Past Adaptation Expenditures

An ex-post review quantifies who spent what, on which adaptation outcomes, and with what results, usually drawing on annual and sector accounts. It underpins NAP finance mapping and UNFCCC transparency (e.g., BTRs)[87] and lets governments recalibrate allocations toward high-value resilience measures. This is also anchored under Medium Term Expenditure Framework where adaptation is clearly tagged and assessed for future allocations.

There is no evidence that the UAE has published a formal multi-year review of adaptation spending by sector for the past 3–5 years or have incorporated adaptation as a discrete category under its Medium-Term Expenditure Framework (MTEF). Establishing multi-year reviews and anchoring adaptation expenditure under forward-looking MTEF statements would close this gap and support upcoming NAP/BTR finance mapping.

84 International Monetary Fund (IMF) (2022) How to Make the Management of Public Finances Climate Sensitive: “Green PFM”. IMF How-To Note. Available at: https://www.imf.org/en/Publications/Fiscal-Affairs-Department-How-To-Notes/Issues/2022/12/08/How-to-Make-the-Management-of-Public-Finances-Climate-Sensitive-Green-PFM
85 PEFA (2024) Supplementary Framework for Assessing Climate-Responsive Public Financial Management. Available at: https://www.pefa.org/sites/pefa/files/resources/downloads/20240501-PEFA%20Climate%20supplementary%20Framework%20for%20publication-%20Clean.pdf
86 OECD (2021) Green Budget Tagging: Introductory Guidance and Principles. Paris: OECD Publishing. Available at: https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/02/green-budget-tagging_62f62cd1/fe7bfcc4-en.pdf
87 Qi, J. & Beauchamp, E. (2023) Adaptation in Biennial Transparency Reports: Frequently Asked Questions (FAQ). NAP Global Network.

6 Functionality of Budget Coding System

Adaptation tagging relies on whether the chart of accounts (CoA) and budget classification structure can accommodate a climate-weighting system (binary or scaled approaches)[88] alongside economic, administrative, functional, and program codes[89]. International guidance (IMF Green PFM; OECD Green Budget Tagging; PEFA Climate) treats this as a practical PFM pre-condition. Without a place in the coding scheme (and in the Integrated Financial Management Information System (IFMIS) forms) to hold a tag, ministries cannot consistently identify, aggregate, or report adaptation spending across years and entities.

The UAE's budget coding system is functionally capable of supporting adaptation tagging (classification structure and CoA maturity are in place), but tagging is not yet activated through MoF budget call circulars, CoA fields, or reporting templates. Overall, there is high implementation readiness but low current usage, which can be closed with light-touch changes to the budget circular/CoA and IFMIS forms aligned to Green-PFM guidance.

7 Monitoring and Auditing of Adaptation Budget Execution

Effective monitoring and auditing require (i) a way to identify adaptation appropriations in the budget, (ii) in-year execution reports that track those lines, and (iii) assurance functions (internal audit, supreme audit institution, performance audit) that verify use and results. Global guidance (IMF Green PFM, PEFA Climate) treats these as core controls for linking adaptation plans to spending and for transparency in NAP/BTR reporting.

The UAE has disciplined budget execution and audit arrangements. The MoF issues execution guidance (e.g., Budget Execution Handbook) and runs multi-year budget cycles whereas UAE Accountability Authority (UAEAA) audits federal entities, and the Abu Dhabi Accountability Authority (ADAA) conducts compliance and performance audits across its mandate and these entities have strong internal-audit rules. These systems ensure funds are spent per approved budgets, but they do not yet single out "adaptation" lines because tagging and tracking is not in place.

Monitoring and audit institutions are mature and active, yet adaptation-specific budget execution monitoring is not operational. Without a tag in the chart of accounts and reporting templates, auditors and finance controllers cannot isolate, track, or test the effective use of adaptation funds across the year.

8 Equity in Targeting and Resource Allocation

This tests whether adaptation funding is guided by clear equity objectives and operational criteria, so resources systematically reach groups with higher climate exposure and lower coping capacity (women, low-income households, informal workers, remote settlements). Strong practice includes explicit targeting rules in plans/budget circulars, screening questions in project appraisal, equity KPIs in program results frameworks, and gender/poverty-disaggregated data in monitoring and audits.

In the UAE, national strategies[9091] and sector plans[92]reference vulnerability reduction and has a strong focus on social well-being, and emirate programs often embed universal service standards (e.g., water, health, urban services). However, most adaptation measures are not yet anchored in formal equity targeting criteria (e.g., thresholds for heat risk, flood exposure, or social vulnerability) that steer budget allocation or project selection. Similarly, gender and location-disaggregated data are collected in several sectors, yet climate-specific datasets (heat-health, flood depth vs. income, exposure of informal workers such as food delivery riders) are not consistently used to prioritize pipelines or to set equity KPIs in policy making or program log-frames.

Foundational policies and universal service approaches are in place (such as mid-day breaks[93]) but blind spots remain (such as status of food delivery riders under heat stresses). Criteria need to be codified in budget guidance or appraisal templates and policy making and budget programs for outdoor workers and marginalized groups can become more concerted.

88 Climate weighting system, as reflected by the OECD, allows countries to classify budget expenditures based on their relevance to climate objectives. Two main approaches are used for weighting: 1) a binary approach, tagging expenditures as either climate-relevant or not, and 2) a scaled approach, assigning proportional weights to capture the degree of climate co-benefits.
89 OECD (2021) Green Budget Tagging: Introductory Guidance & Principles. Paris: OECD Publishing. doi:10.1787/fe7bfcc4-en
90 UNFCCC (2024). United Arab Emirates Third Nationally Determined Contribution (NDC 3.0): Accelerating Action Towards Mission 1.5°C. November. [online] Available at: https://unfccc.int/sites/default/files/2024-11/UAE-NDC3.0.pdf
91 UAE Government (2025). Social Affairs Strategy — Strategies, Plans and Visions. Available at: https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/social-affairs
92 Environment Agency – Abu Dhabi (EAD), 2025. Abu Dhabi Climate Change Adaptation Plan for the Environment Sector (2025-2050). EAD. Available at: https://www.ead.gov.ae/-/media/Project/EAD/EAD/Documents/EN_Abu-Dhabi-Climate-Change-Adaptation-Plan-for-the-Environment-v4.pdf
93 MOHRE Implements Midday Break from 15 June to 15 September 2024." Ministry of Human Resources and Emiratisation (MOHRE), 31 May 2024https://mohre.gov.ae/en/media-center/news/31/5/2024/mohre-implements-midday-break-from-15-june-to-15-september-2024

Indicator Level Findings

Below are indicator level analysis and findings for Pillar 4.

Table 4. Pillar 4: Public Finance Management & Budgeting - Indicator Level Findings

Pillar 4: Public Finance Management and Budgeting				
Indicator	**Guiding question**	**Evidence**	**Capacity level**	**Justification**
Budget circular and classification guidance (adaptation "tagging")	Is there a climate budget tagging or classification system that identifies and tracks adaptation-related expenditures?	No formal nationwide climate/adaptation budget-tagging system is in place. Ministries and emirates submit budget requests under existing functional/economic codes, making adaptation expenditures difficult to isolate or report. While sustainability budgeting has been signalled as a priority, no climate tagging directive is included in the most recent MOF budget circular.	 Red - Not evident	Strong fiscal classification systems exist, but adaptation is not yet visible as a discrete category, limiting the ability to quantify adaptation finance.
Costing of adaptation measures in line-ministry submissions	Do public investment screening or appraisal systems assess climate risks and adaptation costs systematically?	Sectoral and emirate-level climate risk assessments (e.g., in health, water, infrastructure) identify adaptation priorities, but costings are often broad and lack standardized templates. Ministries typically submit lump-sum requests, and unit-costing is uneven. No evidence of consistent use of climate-specific costing tools was found.	 Red - Not evident	Adaptation measures are being identified under adaptation planning (such as Abu Dhabi's environmental adaptation plan) but not costed in a standardized way, and lacking cross-sector comparability.

Reporting of adaptation-related expenditures	Is there a national reporting mechanism that consolidates adaptation-related expenditures across levels of government?	While national plans and reports, such as Biennial Update Reports and NDCs, may include some climate finance figures, they are not a public expenditure reporting system.	 Red - Not evident	Expenditure reporting is credible but climate-blind; adaptation cannot yet be monitored at the aggregate level. The UAE does not yet have a national mechanism that consolidates adaptation-related expenditures across levels of government in the public fiscal record.
Capacity of ministries to plan, budget, and execute adaptation-relevant programs	Do key implementing ministries have the capacity (staff, tools, training) to manage adaptation budgets?	Ministries such as MOCCAE and MOHAP have experience with climate risk assessments and projects, but most do not have dedicated budget/planning staff trained on adaptation finance. EAD has worked on the first environmental adaptation plan and others are being worked at the emirate level. However, limited capacity building emerged as a key constraint across the federal UAE.	 Amber – Partial or emerging	Some line ministries and emirates show readiness, but capacity is not uniform and budget execution tools for adaptation are limited. Understanding of future discounting for climate risks does not exist, especially among public sector stakeholders.
Multi-year review of past adaptation expenditures by sector	Has there been a formal or informal review of adaptation-related spending over the past 3–5 years?	While general environmental and sustainability expenditure reviews are carried out, no dedicated review of adaptation-related spending exists. Adaptation outlays are not embedded in broader budget lines, making them hard to isolate retrospectively. No ex-ante or forward-looking adaptation analysis is available under budgetary documents.	 Red - Not evident	Lack of tagging and reporting has prevented systematic reviews of past adaptation spending at the federal and emirate levels. There is no evidence of multi-year review of adaptation spending by sector for the past 3–5 years.

Functionality of budget coding system for adaptation tagging	Functionality of budget coding system for adaptation tagging	The current classification framework is functional and could accommodate tags, but no adaptation-specific codes exist. Coding remains focused on economic/functional categories without climate markers.	Red - Not evident	Technically feasible to add tags, but not yet operationalized. The absence of climate codes limits adaptation visibility.
Functionality of budgetaMoni-toring and auditing of adaptation budget execution coding system for adaptation tagging	Are there systems to monitor whether allocated adaptation funds are effectively used?	Strong public audit and expenditure tracking institutions exist, but no adaptation-specific monitoring is in place. Audit manuals do not include climate criteria, and performance audits do not assess resilience outcomes.	Amber – Partial or emerging	Systems are credible and adaptable, but without explicit climate criteria, adaptation effectiveness is not yet assessed.
Equity in Targeting and Resource Allocation	Are strategies or criteria in place to ensure adaptation finance supports inclusive outcomes (e.g., women, remote areas, climate-vulnerable groups)?	Social policy frameworks exist at federal and emirate levels, and resilience is embedded in Vision 2031 goals, but there are no adaptation-specific allocation criteria. Women Social policy frameworks exist at federal and emirate levels, and resilience is embedded in Vision 2031 goals, but there are no adaptation-specific allocation criteria. Women Associations are financed through public budget under the Mother of the Nation 50:50 Vision. Vulnerable groups are not explicitly targeted in budget processes for resilience funding.	Amber – Partial or emerging	UAE has strong social development programs, but equity-focused allocation in adaptation finance has not yet emerged under budget setting.

Strengths and Opportunities

Strengths of UAE's PFM and budgeting systems

1. The UAE operates one of the most robust and transparent fiscal systems in the region, with sound budgeting, procurement, and audit practices that provide a solid foundation for integrating adaptation finance.

2. Well-functioning Medium-Term Fiscal Frameworks (MTFFs) and Public Investment Management (PIM) systems can provide mechanisms to incorporate climate-risk screening and adaptation priorities.

3. There is a well-structured coding architecture, and IFMIS provides high implementation of readiness for climate/adaptation tagging and consolidated reporting. Strong fiduciary controls and assurance ecosystems such as robust treasury, internal control, and independent audit (federal and emirate SAIs) enable credible monitoring of expenditure lines once activated.

4. The UAE also has a regular budget documentation & performance reporting with established templates and cycles to readily incorporate adaptation KPIs, quarterly execution tracking, and year-end expenditure tables. Further, EIA/permitting in Abu Dhabi and Dubai already embed resilience criteria.

Opportunities for integrating adaptation into UAE's fiscal systems

1. To make adaptation spending more visible, the UAE could gradually introduce a simple budget-tagging system across federal and emirate entities. A two-code approach (A = primarily adaptation, B = adaptation co-benefit) could be piloted and refined over successive budget cycles to enhance tracking and reporting of adaptation-related expenditures.

2. Future iterations of the annual budget circular could encourage ministries to include a short adaptation annex outlining costed measures, indicative benefits, and three-year spending profiles. This would help standardize costing practices and help institutions align with the Federal Decree Law (No.11).

3. Climate-risk screening and resilience criteria could be progressively incorporated at key stages of the project cycle, such as concept development, appraisal, and selection, using simple checklists in the PIM manual. This would help ensure that investments systematically account for climate risks and long-term resilience.

4. Establishing a consolidated pipeline of adaptation projects with standardized data on scope, costs, financing options, and resilience indicators would enable stronger engagement with development partners, investors, and financing institutions seeking well-prepared and bankable projects.

5. Creating an adaptation expenditure dashboard and gradually linking it to internal or performance audits could provide a clearer picture of national and emirate-level adaptation investments over time.

6. UAE's procurement systems could progressively integrate resilience considerations into technical specifications and evaluation criteria, which will ensure that funded projects deliver long-term climate benefits. In parallel, developing a performance audit guide focused on climate resilience, which covers aspects of economy, efficiency, and effectiveness, would strengthen oversight and help assess the real impact of adaptation spending.

05 Pillar | Sustainable Finance and Capital Markets

The UAE is the Gulf's most active hub for sustainable finance and has aligned itself in a way that directly supports the growth of green and social finance. The UAE Sustainable Finance Framework has set the foundation to draw private capital into climate-resilient projects by creating an enabling environment and demand for sustainable products[94]. Over the past five years, the regulatory and market environment has matured significantly. The UAE SFWG has created a shared policy platform. Its 2023 Principles for the Effective Management of Climate-Related Financial Risks[95] were first of its kind, setting supervisory expectations on governance, risk management, scenario analysis, and disclosure for financial institutions. This was quickly followed by the 2024 Principles for Sustainability-Related Disclosures, which establish a common baseline for ESG reporting quality while the country finalizes more detailed rules under the sustainable finance taxonomy.

94 UAE Sustainable Finance Working Group, (2021). UAE Sustainable Finance Framework 2021–2031. Available at: https://www.investuae.gov.ae/assets/663b7aab52cc952b74457b84_UAE_Sustainable_framework_21.pdf
95 Central Bank of the UAE. (n.d.). [Document Title — CBUAE_EN_5114_VER1]. Retrieved from https://rulebook.centralbank.ae/sites/default/files/en_net_file_store/CBUAE_EN_5114_VER1.pdf

1 Capital Market Activity

Capital market activity has kept pace with regulatory developments, particularly in green and sustainability-linked debt. The UAE has quickly become a regional leader in green bonds and sukuk, with both public and private issuers linking debt financing to the country's climate initiatives. In 2023 alone, UAE-based entities issued roughly USD 10.7 billion in green and sustainable bonds accounting for about 45% of the total GSS bond volume in the MENA region that year[96]. Some notable green bonds include Dubai Islamic Bank's USD 2.75 billion portfolio of sustainable sukuk,[97] Aldar Properties' USD 500 million green sukuk,[98] and Masdar's USD 2.75 billion multi-tranche green bond program[99]. Through these instruments, the UAE is channelling capital into large renewable energy parks, sustainable transport systems and resilient water infrastructure; all key components of national climate mitigation and adaptation efforts.

There is an investor appetite for debt products. However, bulk of these transactions have focused on mitigation themes rather than core adaptation or resilience projects. This is not unique to the UAE but reflects a global pattern; only about 13% of global climate finance flows go to adaptation, with most capital directed toward mitigation[100]. In the UAE as well, these projects are harder to finance due to their added complexity, lack of clear adaptation metrics, limited market structures and mostly public good benefit products and services.

2 Incentives for resilience-aligned investment

The UAE has been introducing fiscal and regulatory incentives that encourage adaptation-aligned and resilience-focused investment. The updated Public-Private Partnership (PPP) Framework (2023–2024) facilitates private investment in infrastructure sectors by integrating environmental and social risk assessments at both feasibility and analysis stages[101]. Complementary fiscal measures, including R&D tax credits (30–50%), duty-free imports and 0% VAT for certified renewable projects have helped lower capital costs and promote innovation in climate-resilient technologies and clean energy[102]. In the built environment, the National Green Certificates Program (2024) establishes mandatory energy and water efficiency standards for new buildings, supported by green financing partnerships with banks such as First Abu Dhabi Bank and developers like Aldar[103].

In 2018, Dubai Financial Market's (DFM) Shariah Standards formally allowed the issuance of green sukuks, equities, and ESG funds, enabling Islamic investors to participate in certified sustainable finance instruments[104]. Additionally, capital regulators including the SCA have established frameworks for green and sustainability-linked bonds, which now require clear environmental objectives and impact reporting. To encourage issuance, the SCA waived listing fees for such instruments in 2024, which lowered the cost of capital for green projects[105].

Although progress has been made in incentivizing sustainable investments, one key challenge is the absence of a published UAE sustainable finance taxonomy with detailed adaptation criteria. While the NDC and Net Zero 2050 strategy explicitly reference adaptation as a thematic priority, investors still lack a codified list of eligible adaptation activities and KPIs. Without such criteria, potential issuers face uncertainty over what would qualify as an 'adaptation' or 'resilience' bond, making it hard for validators to assess frameworks. The taxonomy, currently being developed under SFWG[106], is expected to resolve this by including categories for resilient infrastructure, water security, climate-smart agriculture, and climate-proofing of health systems, and will provide a more robust pipeline for adaptation-linked issuances.

96 GLA & Company. (2025) Green Bonds and Sustainable Financing: The UAE's Vision for a Greener Future. Legal update, 9 April 2025.
97 Dubai Islamic Bank. Sustainable Finance Report 2024. Dubai Islamic Bank, 2024. https://www.dib.ae/docs/default-source/pdf/sustainability/sustainable-finance-report-2024.pdf
98 Aldar Issues USD 500 Million Green Sukuk for Investors (Aldar) — article about Aldar's green sukuk issuance, 10-year, oversubscribed, uses proceeds for sustainable real estate, https://www.aldar.com/en/news-and-media/aldar-investment-properties-usd-500-million-green-sukuk-issuance
99 Masdar. "Green Bond Issuance." Masdar Newsroom, Masdar, 2024, https://masdar.ae/en/news/newsroom/green-bond-issuance
100 United Nations Environment Programme (UNEP), 2024. Adaptation Gap Report 2024: Come Hell and High Water. Available at: https://www.unep.org/resources/adaptation-gap-report-2024
101 Ministry of Finance, UAE (2025) PPP Manual (Public-Private Partnership Framework). Available at: https://mof.gov.ae/wp-content/uploads/2024/07/UAE-MOF-PPP-Manual-ENG.pdf
102 Ministry of Finance, UAE (2024) Amendments to the Corporate Tax Law—R&D Tax Incentives, 9 Dec 2024. Available at: https://mof.gov.ae/ministry-of-finance-announces-amendments-to-the-corporate-tax-law/
103 Ministry of Energy & Infrastructure, UAE (2024) National Green Certificates Program and Green Financing MoUs. Available at: https://moei.gov.ae
104 Dubai Financial Market (2018) Standard No. 2: Shari'ah Compliance for Issuing Green Sukuk. Available at: https://api.dfm.ae/docs/default-source/Sharia/standard-no-2-dfm-standard-for-issuing-acquiring-and-trading-sukuk-english76b2f0f7f6026339b0d9ff00009be840.pdf
105 GLA & Company (2025) Green Bonds and Sustainable Financing: The UAE's Vision for a Greener Future. Available at: https://www.glaco.com/blog/green-bonds-and-sustainable-financing-the-uaes-vision-for-a-greener-future/
106 DFSA, (2023). The UAE Sustainable Finance Working Group Issues Third Public Statement, DFSA, 5 December. Available at: https://www.dfsa.ae/news/uae-sustainable-finance-working-group-issues-third-public-statement

3 Climate risk integration

Beyond taxonomy work, the UAE is making progress on climate risk integration within financial decision-making. CBUAE's 2024 Financial Stability Report confirms that climate-related risk is now part of the supervisory framework. Banks have completed climate stress tests for flood and storm scenarios, and results indicate that the banking sector has sufficient capital buffers to absorb losses under adverse scenarios. However, integration into operational processes such as loan pricing, collateral valuation, and portfolio steering is still evolving. Most banks and institutional investors have yet to build climate-adjusted risk models. For capital markets, this means that climate risk is an evolving subject and markets continue to augment their capacity to better understand adaptation benefits and as well as physical and transition risks.[107]

Despite absence of a taxonomy, the regulatory scaffolding is largely in place, and the capital markets have demonstrated liquidity for labelled instruments, with banks building an internal capacity needed to integrate climate considerations into credit decisions[108]. The challenge for the coming years is to convert this enabling environment into a sustained flow of adaptation-linked finance. This will require publishing and operationalizing the taxonomy with adaptation categories, building a visible pipeline of resilience projects suitable for capital market issuance, and developing de-risking instruments such as guarantees to attract private sector.

Table 5 Indicator-Level Findings of Pillar 5 on Sustainable Finance and Capital Markets

Pillar 5: Sustainable Finance and Capital Markets				
Indicator	**Guiding question**	**Evidence**	**Capacity level**	**Justification**
Adaptation/ green bond issuance or pipeline	Has the UAE issued or enabled issuance of green or adaptation bonds with clear links to adaptation investment frameworks?	Active labelled market: 18 ESG/green listings (USD 11.7bn) in 2023; DP World USD 1.5bn green sukuk; DIB USD 2.75bn sustainable sukuk outstanding; FAB >USD 3.8bn green bonds since 2017; Aldar USD 500m green sukuk; Masdar cumulative USD 2.75bn green bonds. However, few deals explicitly ring-fence use of proceeds for adaptation.	 Amber – Partial or emerging	Market structure and issuer capacity exist; an adaptation-specific pipeline has yet to emerge because eligibility definitions and outcome metrics are not standardised, and most bonds have not prioritized adaptation

107 Central Bank of the UAE, (2025). Financial Stability Report 2024. CBUAE, 4 August. Available at: https://www.centralbank.ae/media/kaqlwo0h/cbuae-fsr-report_2025_en.pdf
108 KPMG Lower Gulf (2024) The role of UAE banks in the climate transition: Eco-financing the future. Dubai: KPMG. Available at: https://assets.kpmg.com/content/dam/kpmg/ae/pdf-2024/04/eco-financing-the-future.pdf

Incentives for resilience-aligned investment	Do regulatory or fiscal incentives exist to promote investment in sectors critical for climate resilience?	The UAE has issued Sustainable Finance Framework that has integrated environmental considerations into PPP manual and is building a taxonomy. However, targeted fiscal instruments (e.g., guarantees, first-loss, de-risking tools) dedicated to adaptation remain limited.	 Amber – Partial or emerging	Policy signals are strong; hard incentives and blended-finance structures that crowd-in private capital for low-cashflow resilience assets are need to be accelerated.
Climate risk integration in financial decisions	Do banks, investors or supervisors evaluate physical climate risks as part of loan pricing or capital allocation?	UAE's Sustainable Finance Framework 2021-2031, and the SFWG risk-management Principles (2023) set supervisory expectations; DFSA adopted them and initiated guidance to firms; CBUAE integrated climate risk into the Financial Stability Report 2024; Several commercial banks have signalled climate risk assessments in their 2024 sustainability / annual report. The capacity is quite robust.	 Green – Established and functional	The supervisory architecture is in place; physical risks have been evaluated for the last 5 years and transition risk will begin its evaluation by next year. Operational pricing models that embed hazard-adjusted PD/LGD and climate-adjusted collateral values will be integrated.

Strengths and Opportunities

Strengths of UAE's capital markets

1. The UAE has a well-developed capital market infrastructure, with an active pipeline of green and sustainability sukuk and bond issuances, which reflects strong investor appetite for ESG-aligned assets.

2. A coordinated regulatory framework led by the UAE SFWG ensures harmonization across key institutions—including the CBUAE, SCA, DFSA, FSRA, and MOCCAE.

3. There is a growing supervisory emphasis on climate risk under the umbrella of UAE Sustainable Finance Framework, demonstrated by the introduction of climate stress testing and the inclusion of physical risk analysis in the UAE's financial stability assessment.

4. The adoption of the Principles for Sustainability-Related Disclosures will enhance transparency, provide clarity for issuers and investors, and align domestic markets with emerging global standards.

Opportunities for Promoting Adaptation-Aligned Investments

1. The UAE Sustainable Finance Taxonomy presents an opportunity to explicitly include adaptation and resilience criteria, supported by measurable KPIs and reporting templates for sectors such as water security, resilient infrastructure, and health systems. This would help investors clearly identify and track adaptation-aligned projects. For instance, add “urban flood risk reduction (m³ network capacity added per AED)” and “heat-health resilience (reduction in heat-related admissions)” as taxonomy indicators for municipal drainage and hospital cooling retrofits to track progress.

2. A visible pipeline of adaptation and resilience projects could be developed to support labelled issuances such as green or adaptation-linked sukuk, enabling steady deal flow and stronger engagement with both domestic and international investors.

3. Blended finance mechanisms, such as partial credit guarantees, concessional lending, or first-loss tranches, could be used to attract private capital into adaptation projects that are long-tenor or have lower financial returns, complementing the banking sector’s AED 1 trillion sustainable finance mobilisation pledge. For instance, an MOF-anchored partial credit guarantee to credit-enhance a Dubai’s adaptation-linked sukuk, to align better with banks’ AED 1T sustainable-finance pledge.

4. There is scope to integrate physical climate risk (as well as transition risk) into financial pricing models and encourage lenders to reflect resilience benefits through adjusted loan spreads, collateral haircuts, and sector limits. The adoption of hazard-adjusted Probability of Default (PD) and Loss Given Default (LGD) metrics could further strengthen risk-informed lending.

5. Capacity building and market development initiatives, such as arranger workshops and pilot issuance of adaptation-linked sukuk, could support financial institutions and corporates in structuring instruments tied to measurable resilience outcomes and global investor expectations.

6. An annual adaptation pipeline note or registry could be established to improve coordination among ministries, exchanges, and issuers, helping the market anticipate and price upcoming resilience-related transactions throughout the year. For example, a public Adaptation Registry (hosted by MOF/MOCCAE) with project status, expected capex, instrument route (budget, PPP, bond/sukuk) along with market entry, updated each year to guide pricing and syndication.

06 Pillar | Private Sector Engagement in Adaptation Finance

The UAE has assembled much of the institutional alignment needed to mobilize private capital for climate action. The UAE's private sector has demonstrated strong potential to mobilize climate finance, as seen during COP28 with the announcement of over AED 1 trillion in sustainable investment commitments and the launch of major initiatives such as the ALTÉRRA platform and multiple green finance products by national banks.

However, while these developments signal market readiness, most financing continues to favour mitigation-oriented projects rather than adaptation-specific investments. This stems largely from the absence of defined adaptation portfolios, metrics, taxonomies, and pipelines, which makes it difficult for investors to quantify resilience and manage risk-return profiles. As a result, private sector participation in coordination with public entities on adaptation finance remains limited, despite the strong enabling environment and growing appetite for climate-aligned investment.

1 Private sector engagement in adaptation finance

Private finance platforms in UAE are expanding. The Abu Dhabi Sustainable Finance Declaration, hosted by ADGM, grew to 160 signatories by the close of Abu Dhabi Finance Week 2024,[109] bringing together banks, asset managers, insurers and corporates to collaborate on sustainable finance. The declaration itself is voluntary, but its expanding membership signals industry readiness to act once pipelines and rules become clearer. Another major catalyst announced at COP28 was ALTÉRRA, a USD 30 billion climate investment platform seeded by the UAE to mobilize USD 250 billion by 2030. ALTÉRRA's USD 5 billion Transformation arm seeks to reduce risk and attract private investors to underserved and high-risk areas. This de-risking function is key for adaptation projects, which often struggle to secure funding.

Leading corporations are aligning their sustainability investments with national resilience priorities. For instance, First Abu Dhabi Bank (FAB) issued the region's first blue bond in 2025 to fund water infrastructure and marine ecosystem conservation[110], while Mashreq Bank has financed adaptation-relevant projects in the water and infrastructure sectors[111]. Similarly, ADNOC has incorporated nature-based adaptation into its strategy and has a separate adaptation team in practice, committing to plant 10 million mangroves by 2030 as part of their CSR initiatives and investing in marine habitat protection, and DP World launched its Ocean Strategy (2024–2030) to restore coastal ecosystems[112]. Additionally, civil society actors such as Emirates Nature–WWF[113], ICBA[114], and the UAE Independent Climate Change Accelerators (UICCA)[115] are also contributing to the resilience through restoration, research, and policy advocacy on climate resilience.

Despite the positive surge in private sector financing, adaptation-earmarked issuances are limited, mainly because it is harder to turn resilience benefits into measurable cash flows and investible returns. The private-sector engagement question is therefore less about general market willingness and more about converting UAE-specific adaptation needs into investable, risk-adjusted opportunities. Secondly, international initiatives by the UAE such as ALTERRA seem to prioritize developing countries funding rather than local initiatives.

109 GIGATONS Signs ADGMs Sustainable Finance Declaration." GIGATONS, 9 Dec. 2024, https://www.gigatons.com/newsroom/GIGATONS-Signs-ADGMs-Sustainable-Finance-Declaration
110 First Abu Dhabi Bank (FAB) (2025) 'FAB: the first bank in the Gulf to invest in Blue Bonds'. Available at: https://fintechmagazine.com/news/fab-the-first-bank-in-the-gulf-to-invest-in-blue-bonds
111Gulf Business (2023). 'Mashreq to facilitate Dhs110bn in sustainable finance by 2030'. Available at: https://gulfbusiness.com/mashreq-allots-dhs110bn-in-sustainable-finance/
112DP World (2021) 'DP World Mangrove Forest Project aimed at safeguarding the UAE's environment'. Available at: https://www.dpworld.com/news/releases/dp-world-mangrove-forest-project-aimed-at-safeguarding-the-uaes-environment/
113Aldar Properties (2025) 'Aldar and Emirates Nature–WWF partner to study biodiversity of marine ecosystems in Abu Dhabi'. Available at: https://cdn.aldar.com/-/media/project/aldar-tenant/aldar2/images/press-releases/20-jan-25-pr/aldar---press-release---ead-x-wwf-x-aldar-partnership---200125---en---final.pdf
114International Center for Biosaline Agriculture (ICBA) (n.d.) International Center for Biosaline Agriculture – About Us. Available at: https://www.biosaline.org/main
115Abu Dhabi Media Office (2025) 'In partnership with Amazon and 7X, UAE Independent Climate Change Accelerators issues report on ELCV landscape'. Available at: https://www.mediaoffice.abudhabi/en/environment/in-partnership-with-amazon-and-7x-uae-independent-climate-change-accelerators-issues-report-on-uae-commercial-electr

2 Blended finance for de-risking private investments in adaptation

Blended finance tools for adaptation investment are emerging but early stage. Etihad Credit Insurance (ECI), the federal export credit agency, has launched Green Working Capital Insurance to reduce banks' risk when lending to green exporters and is also working on green insurance instruments for startups and SMEs.[116] These products are not explicitly labelled as "adaptation finance," but these tools support climate resilient supply cain and technologies. More broadly, ECI disclosures indicate growing volumes of insured transactions across clean energy, water sustainability and infrastructure, again not strictly adaptation-tagged, but state-backed risk-sharing system that can be directed toward resilience with clearer criteria. Major[117] new initiatives in the UAE such as ALTÉRRA, COP28 guarantees, and Abu Dhabi Fund for Development's (ADFD) concessional loans are facilitating blended finance structure, however these facilities focus on financing international projects in developing countries.

3 Financial tools for SME adaptation investment

UAE banks are expanding sustainable finance options for SMEs, offering green loans, sustainability linked loans and retail green products. Emirates Development Bank designed AgriTech[118] and Solar Finance Programs[119] for SMEs; First Abu Dhabi Bank operates a Sustainable Financing Framework and reports regularly on debt programs[120]. Mashreq bank offers green mortgages to LEED certified buildings. However,none of these are framed specifically as 'SME adaptation' finance, but they demonstrate strong framework and reporting system that could easily support SME adaptation finance once national criteria andKPIs are defined. Importantly, Khalifa Fund, Abu Dhabi's SME development agency, already runs schemes that overlap with adaptation, including a Water Management System Enhancement Fund for efficient irrigation and sustainable water technologies.[121] This is a starting point for an 'SME Resilience Upgrades' window if linked to NAP and bank co-financing.

4 Non-governmental stakeholder engagement in budgeting

Non-state actors in the UAE, including private sector entities and civil society organizations, are actively engaged in climate planning and consultation processes but have limited involvement in budget formulation or allocation for adaptation. While they contribute to the design and review of strategies, as seen in the Abu Dhabi Climate Change Adaptation Plan (2025–2050) and other national climate strategies, formal budgeting decisions remain within government institutions.

Public participation platforms, such as the Sharik.ae, enable public input into policy, and the MOF runs dedicated consultation pages as part of its digital participation program. To date, these channels are broad; they have not been used to gather market input on adaptation budget-tagging, pipeline formation or co-financing models. Creating a formal channel for example, an annual call for private proposals aligned with NAP and taxonomy, could connect government budgets with private investment.[122] A recent development under Federal Decree Law No. 11 mandates the inclusion of private sector representatives in newly established Climate Action Boards. These boards are tasked with monitoring and evaluating national climate policies and recommending appropriate measures and solutions to relevant authorities. This reform marks an important step toward institutionalizing private sector participation in climate governance.[123]

116 Green Working Capital Insurance | Etihad Credit Insurance (ECI)." Etihad Credit Insurance (ECI), https://www.eci.gov.ae/en/products/green-working-capital-insurance
117 Etihad Credit Insurance Achieves AED 16.2 Billion in Insured Turnover with 15.7% Growth." Emirates News Agency (WAM), 27 May 2025, https://www.wam.ae/en/article/bjvvy5i-etihad-credit-insurance-achieves-aed162-billion
118 Emirates Development Bank (2023). AgriTech Loans Program – Max LTV: 90%. EDB Solutions. Available at: https://edb.gov.ae/solutions/agritech-loans#:~:text=Max%20LTV%3A%2090
119 Emirates Development Bank (2023). Solar Energy Financing Program with support for contractor receivable finance. EDB News, 14 September 2023. Available at: https://edb.gov.ae/posts/emirates-development-bank-unveils-bespoke-solar-energy-financing-program#:~:text=EDB%20is%20also%20allowing%20approved,expenses%20while%20awaiting%20customer%20payments
120 First Abu Dhabi Bank (n.d.). SME Growth Loan – designed to encourage lending to SMEs at affordable rates. FAB Commercial Banking. Available at: https://www.bankfab.com/v1/en-ae/ccib/commercial-banking/sme-growth-loan#:~:text=SME%20Growth%20Loan%20benefits
121 Khalifa Fund — Funding Scheme." Khalifa Fund, https://www.khalifafund.ae/services/funding-scheme/
122 Consultations | UAE Government." u.ae, https://u.ae/en/participate/consultations
123 Federal Decree-Law No. 11 of 2024 on the Reduction of Climate Change Effects (2024) United Arab Emirates Legislation Portal, Federal Law. Available at: https://uaelegislation.gov.ae

Indicator Level Findings

Table 6. Indicator-Level Findings of Pillar 6 on Private Sector Engagement and Investment

Pillar 6: Private Sector Engagement in Adaptation Finance				
Indicator	**Guiding question**	**Evidence**	**Capacity level**	**Justification**
Private-sector engagement in adaptation finance	Is the private sector actively participating in or co-financing adaptation actions under national platforms (e.g., FGCR, UAE ESG frameworks)?	SFWG's cross-regulatory framework is operational; disclosure and climate-risk principles are in place across onshore and free-zone markets. The Abu Dhabi Sustainable Finance Declaration expanded to ~160 signatories in 2024, signalling broad corporate alignment. ALTÉRRA launched with USD30 bn and an explicit mandate spanning climate-resilient investment, creating a potential anchor for private co-investment. Concrete adaptation-earmarked corporate deals or funds inside the UAE are limited to date.	 Amber – Partial or emerging	Strong platforms and intent; early evidence of engagement but few UAE-based private transactions that explicitly ring-fence adaptation outcomes require strengthening.
Blended finance for private adaptation investment	Are guarantees /concessional capital available to enable private adaptation investment?	ALTÉRRA includes a USD5 bn "Transformation" arm for risk-mitigation in EMDEs; Etihad Credit Insurance (ECI) is expanding sustainability-aligned instruments (e.g., green working-capital insurance) that could be adapted to climate-resilience supply chains, though distribution of allocation between climate adaptation and adaptation initiatives are not yet visible.	 Amber – Partial or emerging	The framework exists, but domestic, adaptation-targeted blended facilities and guarantees are not yet deployed at scale for UAE projects. Funding and blended finance is available on a deal-by-deal basis.

Financial tools for SME adaptation investment	Do financial institutions offer SME-focused products for climate-resilient technologies / practices?	UAE banks now run a suite of sustainable products (green/transition loans, SLLs); Emirates NBD reports green retail / SME activity (e.g., green auto), and FAB's sustainable-finance framework covers corporate and consumer lending. Khalifa Fund provides concessional SME finance and could support resilience. None of these are yet framed as adaptation instruments (e.g., heat-resilient cooling upgrades, flood-proofing, water-efficiency retrofits) with clear KPIs.	 Amber – Partial or emerging	Supply of green/transition finance is growing, but adaptation-specific SME products and metrics are limited.
Non-governmental stakeholder engagement in budgeting	To what extent are non-state actors (CSOs, private sector) involved in budgeting for adaptation?	The UAE operates formal public-participation channels (Sharik) and MoF runs periodic digital consultations; These are generic, not yet tailored to NAP adaptation-budget tagging or co-financing discussions with industry.	 Amber – Partial or emerging	Infrastructure for engagement exists; the adaptation-budget use-case is not yet institutionalized.

Strengths and Opportunities

Strengths of UAE's sustainable landscape to mobilize private capital

1. The UAE has a robust enabling environment, supported by the SFWG, which provides coordinated supervision and has already implemented climate-risk management and ESG disclosure principles across both onshore and free-zone markets.

2. The availability of catalytic capital, demonstrated by the launch of ALTÉRRA with USD 30 billion in seed funding, including a USD 5 billion de-risking facility, reflects a national commitment to mobilizing private investment, including for resilience-focused and adaptation projects.

3. The UAE benefits from active private-sector engagement, with ADGM's Sustainable Finance Declaration bringing together over 160 signatories from banks, corporates, and investors, fostering collaboration and innovation in sustainable finance products.

4. Market readiness and issuer capacity are high, as UAE banks and corporates have extensive experience issuing green bonds and sukuk under credible sustainable finance frameworks, which can be readily adapted to support adaptation-linked investments.

5. A participatory policy framework exists through national platforms such as Sharik, UICCA and MOCCAE consultations that provide established channels for stakeholder engagement.

Opportunities to drive private sector engagement

1. There is potential to enhance private investment visibility by developing an annual adaptation project pipeline or portfolios with clear taxonomic guidance and measurable KPIs, helping convert high-level commitments into structured, bankable deals.
2. Blended finance facilities could be explored to combine resources from ALTÉRRA, MDBs, and DFIs, offering partial guarantees, concessional tranches, or co-investment options, to attract private capital into resilience sectors such as water security, urban cooling, and coastal protection.
3. Dedicated SME financing lines through commercial banks and the Khalifa Fund could support small businesses in adopting climate-smart technologies—such as flood-proofing, efficient cooling, and water-saving systems—paired with simplified monitoring and reporting. These initiatives could be supported through de-risking transactions for the banking sector and facilitating PPPs.
4. Strengthening adaptation measurement, reporting, and verification (MRV) systems with standardized indicators for avoided losses and resilience co-benefits would improve market confidence and facilitate the issuance of adaptation-labelled instruments.
5. Institutionalizing private-sector participation in adaptation budgeting and project validation through existing platforms and consultations could foster greater collaboration and co-financing opportunities aligned with national adaptation priorities.

Synthesis of Financing Readiness

In this section, the core findings stemming from the indicator level analysis are presented for the public sector, private sector and civil society.

Public Sector

01 Finding

Financing is acknowledged as a necessity in adaptation, but quantified targets and instruments can enhance and accelerate operationalization.

Financing for adaptation is established in the UAE policy but mostly express goals without clear, measurable adaptation targets. Most of the adaptation planning revolves around risk identification, prioritization, and monitoring, which is the first essential step (such as completing CRVAs). However, it does not include specific financial targets such as how much budget or percentage should be spent on adaptation finance, where it should be spent and who will monitor it. The UAE's Third NDCs likewise presents a detailed narrative of adaptation efforts that cover vulnerabilities, sectoral initiatives and coordination but does not specify a unified national adaptation-finance target or sectoral sub-targets. To the most part, quantified finance targets are not yet codified across the country or within sectors.[124]

Recent events and programs show how urgent climate adaptation is, and the scale of public funding required. In response to climate stresses, Abu Dhabi's Environment Agency has launched a Climate Change Adaptation Plan for the Environment Sector (2025–2050)[125], which focused on protecting ecosystem and environmental resilience over time. It reflects multi-year public adaptation spending spending at the emirate level; however, most if it is assumed for budgetary support only. Similarly, some institutions have developed budgeted or partially costed sectoral plans, which reflect emerging institutional capacity and alignment with financial planning. However, adaptation-investment plans remain limited, and the associated costing processes can be institutionalized to promote tracking and efficient use of adaptation-related finance within each priority sector. Similarly, the federal legal framework supports national climate goals and coordination. However, it does not yet include a published financial target for adaptation. Federal Decree-Law No. (11) of 2024[126] on the Reduction of Climate Change Effects provides legal basis for mitigation and adaptation and calls for coordination between national and local plans but it does not set a specific budget or AED-based adaptation-finance target. The finding, therefore, is that national direction and institutional roles are defined, but quantified adaptation-finance targets need to be strengthened in current public documentation to estimate how much is funding required, where it is required and how it will be spent.

124 About the UAE: Strategies, Initiatives and Awards." U.ae https://u.ae/en/about-the-uae/strategies-initiatives-and-awards
125 Environment Agency – Abu Dhabi (EAD), 2025. Abu Dhabi Climate Change Adaptation Plan for the Environment Sector (2025-2050). EAD. Available at: https://www.ead.gov.ae/-/media/Project/EAD/EAD/Documents/EN_Abu-Dhabi-Climate-Change-Adaptation-Plan-for-the-Environment-v4.pdf
126 Federal Decree-Law on the Reduction of Climate Change Effects." UAE Legislation, 28 Aug. 2024 https://uaelegislation.gov.ae/en/legislations/2558

02 Finding

Institutionalized climate budget tagging is not yet evident; tagging will support tracking and co-financing of adaptation.

Institutionalized climate budget tagging is not yet evident in published federal budget materials or in core climate policy documents. The UAE's NDC 3.0 sets out governance arrangements and adaptation narratives, but it does not introduce a climate or adaptation-specific tagging for public expenditures. Likewise, public budget documents focus on process and aggregates without referencing specific climate related tags. In the IMF's 2023 Article IV staff report for the UAE,[127] staff encouraged consideration of green public financial management, including a climate tagging system for budgetary purposes.

Currently, the UAE budget disclosures show spending on the environment and disaster response, rather than a cross-cutting climate or adaptation tag. The federal portal reports an environment budget of AED 316 million for 2025,[128] focused on environmental protection, which is not equivalent to a climate-budget-tag because adaptation expenditures occur across multiple areas like infrastructure, water, health, civil protection. Adaptation is cross-cutting (infrastructure, water, health, civil protection) and requires a classification overlay rather than a single sector line.

The OECD's green budget-tagging guidance and World Bank reviews describe budget tagging as an overlay to existing financial accounts to identify climate-relevant measures including adaptation, for internal tracking and external reporting. Countries vary in granularity (binary vs. weighted tags), but the common payoff is consistent tracking, transparent publication, and better alignment with co-financing (e.g., MDBs, DFIs, labelled bonds/sukuk)..[129]

03 Finding

Sectoral adaptation priorities are identified (such as health, environment, energy, infrastructure and insurance) but there is an opportunity to further translate them into costed adaptation investment plans with clear responsibilities and timelines.

Sectoral priorities for adaptation are explicitly identified in current federal documentation. The UAE's NDC 3.0 sets out adaptation as a parallel pillar to mitigation and builds on the 2019 climate-risk assessment of priority sectors which are health, environment, energy, infrastructure and insurance. There is now a need to translate such plans into costed adaptation investment plans, publishing costed amounts, with designated owners and delivery timelines across all sectors.

In health, for instance, federal documents show a clear path forward. The NDC describes a completed national health vulnerability and adaptation assessment and states that the health-sector adaptation plan is being developed based on the NAP and the MOHAP has also emphasized the goal of building climate-resilient health system[130]. The next step is to include a published investment plan with monetary requirements so that detailed costing can be undertaken in a programmatic fashion instead on a project-to-project basis.

Similarly, Abu Dhabi, Environment Agency has released a public Adaptation Plan for the Environment Sector (2025–2050) which lists 142 adaptation actions, including 86 high-priority projects for the next five years, focused on groundwater, soil and biodiversity[131]. Most activities are earmarked for public funding, which reflects strong state commitment. However, the plan does not include a published financing framework or budget outlining cost estimates, sources, or sequencing. This makes it difficult to compare across programs, measure financing adequacy, or attract complementary private or blended capital.

Infrastructure and energy priorities are also outlined in the UAE NDC 3.0, that covers power system resilience, modernization, emergency responsiveness and coastal protection[132]. While these demonstrate sectoral priorities, there is an opportunity to develop a unified federal document that demonstrates a multi-sector adaptation investment plan, with clear budget estimates, designated leads, and implementation timelines.

127 International Monetary Fund. United Arab Emirates: 2023 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for the United Arab Emirates. IMF, 2023, https://www.elibrary.imf.org/downloadpdf/view/journals/002/2023/223/article-A001-en.pdf
128 Ministry of Finance (UAE) (2025) Federal General Budget: Annual Report 2025. Abu Dhabi: Ministry of Finance. Available at: https://mof.gov.ae/wp-content/uploads/2025/02/Federal-General-Budget-Annual-Report-2025.pdf
129 Organisation for Economic Co-operation and Development. Green Budget Tagging: Introductory Report. OECD, Feb. 2021, https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/02/green-budget-tagging_62f62cd1/fe7bfcc4-en.pdf
130 UNFCCC (2024). United Arab Emirates Third Nationally Determined Contribution (NDC 3.0): Accelerating Action Towards Mission 1.5°C. November. [online] Available at: https://unfccc.int/sites/default/files/2024-11/UAE-NDC3.0.pdf
131 Environment Agency – Abu Dhabi (EAD) (2025). Abu Dhabi Climate Change Adaptation Plan for the Environment Sector (2025-2050). EAD. Available at: https://www.ead.gov.ae/-/media/Project/EAD/EAD/Documents/EN_Abu-Dhabi-Climate-Change-Adaptation-Plan-for-the-Environment-v4.pdf
132 UNFCCC (2024). United Arab Emirates Third Nationally Determined Contribution (NDC 3.0): Accelerating Action Towards Mission 1.5°C. November. [online] Available at: https://unfccc.int/sites/default/files/2024-11/UAE-NDC3.0.pdf

04 Finding

A promising DRR approach is in place but adoption of a strategy on disaster risk financing will strengthen fiscal resilience.

The UAE has established a robust disaster risk reduction (DRR) architecture anchored by the National Emergency, Crisis and Disaster Management Authority (NCEMA). NCEMA is mandated under the supervision of the Supreme Council for National Security to regulate and coordinate emergency and crisis management, prepare essential sectoral and facility plans, and lead a national plan for emergency response. The system includes a nationwide Early Warning System, launched in 2017[133], that disseminates public alerts and safety instructions, and it is continuously strengthened through cooperation with the UN Office for Disaster Risk Reduction (UNDRR), including capacity-building on Sendai Framework monitoring and disaster-loss accounting[134].

In the UAE, disaster financing is primarily managed on an ex-post basis, mainly through NCEMA, which maintains an allocated budget for emergency response. The MOF can provide additional funds as needed, depending on the scale of the event. At the emirate level, disaster financing approaches vary across jurisdictions. In the aftermath of 2024 floods, the Cabinet approved a dedicated AED 2 billion package to address damage to citizens' homes,[135] and the 2025 Federal General Budget recorded approximately AED 1.5 billion to support those affected by heavy rains and floods, alongside an increase in the special reserve from AED 1.0 billion (2024) to AED 2.5 billion (2025).[136]

What is not yet visible in published federal documentation is pre-arranged disaster risk financing (DRF) strategy that sets out how the UAE finances disaster risks in advance (or ex-ante disaster risk financing). Public budget and policy materials reviewed emphasize emergency management and post-event support but do not present a federal framework describing ex-ante financial protection, for example, the mix of contingency reserves, dedicated disaster funds, contingent credit, insurance or capital-market risk transfer, mapped to the UAE's risk profile. International best practices recommend such strategies to protect government finances and ensure timely liquidity following disasters. One example is of the Caribbean Catastrophe Risk Insurance Facility (CCRIF SPC) operates as a multi-country parametric risk pool, providing timely payouts to member governments based on pre-defined triggers tied to wind speed, rainfall, or other meteorological thresholds[137]. The UAE could pilot a similar strategy and platform.

05 Finding

Enhance planning-stage appraisal guidance for investments by adding a climate weighting and standard adaptation KPIs to ensure climate-resilient options are preferred.

Planning-stage appraisal across the federal government relies on established budgeting, but there is no published rule requiring a specific 'climate weighting', or a standard set of adaptation KPIs to guide project selection. Recent updates from the MoF mention procurement reforms and a new Federal Government Procurement Procedures Guide [138] that integrates environmental objectives in bid evaluation, but without introducing a quantified climate-resilience weighting for project appraisal at the planning stage.

Where federal guidance becomes more granular such as the 2024 PPP Manual,[139] it sets out feasibility and appraisal requirements, including social, economic and environmental analysis, and it provides an annex on KPIs for contract management. The manual, however, does not prescribe a common resilience framework or resilience infrastructure guidelines. In other words, appraisal disciplines are in place, but a uniform climate-specific weighting or KPI standard applicable across sectors needs to be developed. Moreover, digitalizing or simplifying the PPP appraisal process could help reduce its duration, addressing stakeholder concerns about procedural delays.

133 NCEMA (2018) The National Early Warning System. Available at: https://www.ncema.gov.ae/en/e-participation/blog/the-national-early-warning-system.aspx
134 NCEMA (2019) NCEMA and UNDRR discuss cooperation, 29 October. Available at:
https://www.ncema.gov.ae/en/media-center/news/29/10/2019/ncema-undrr-discuss-cooperation.aspx#page=1
135 UAE Approves Dh2 Billion to Repair Rain-Damaged Homes of Citizens." Gulf News, 6 May 2024
https://gulfnews.com/uae/government/uae-approves-dh2-billion-to-repair-rain-damaged-homes-of-citizens-1.102312819
136 Cabinet Allocates AED 2 Billion to Stand by UAE Citizens with Rain-Damaged Homes." Protocol Dubai,
https://www.protocol.dubai.ae/en/media-listing/news-events/cabinet-allocates-aed2-billion-to-stand-by-uae-citizens-with-rain-damaged-homes/
137 Caribbean Catastrophe Risk Insurance Facility (CCRIF SPC), 2025. CCRIF SPC: Parametric Insurance for Caribbean and Central American Governments. CCRIF SPC.
Available at: https://www.ccrif.org/sites/default/files/publications/technical-materials/Brief-on-CCRIFSPC-July2024-RevisedApril2025.pdf
138 Federal Procurement." Ministry of Finance (UAE), https://mof.gov.ae/federal-procurement/
Public-Private Partnership Manual. Ministry of Finance, UAE, July 2024, https://mof.gov.ae/wp-content/uploads/2024/07/UAE-MOF-PPP-Manual-ENG.pdf
139 Public-Private Partnership Manual. Ministry of Finance, UAE, July 2024, https://mof.gov.ae/wp-content/uploads/2024/07/UAE-MOF-PPP-Manual-ENG.pdf

Private Sector

01 Finding

The UAE's sustainable-finance taxonomy is still in development. Accelerating the framework publication for adaptation screens, will facilitate classification of adaptation investments and move away from a fragmented approach for private capital.

Across the UAE's financial sector, the sustainable-finance taxonomy remains under development. The UAE's SFWG stated in its 5 December 2023 public communiqué that, alongside governance and disclosure workstreams, it is 'formulating a sustainable finance taxonomy specific to the UAE,' and it published high-level 'Design Principles' (including a traffic-light concept and minimum safeguards) to guide that work.[140] Subsequent outputs in 2024 focused on disclosure principles for reporting entities, which confirmed progress on adjacent building blocks while the taxonomy itself has not yet been placed on the public record. This suggests that a national taxonomy remains an active work program.

In the absence of a published UAE taxonomy, private issuers are using international standards like ICMA's Green Bond Principles and Green Loan Principles and, in some cases, parts of the EU Taxonomy. Masdar's Green Finance Framework,[141] for example, states alignment with the ICMA principles and where possible with EU Taxonomy technical screening criteria focusing mainly on mitigation (like renewables, storage, T&D efficiency), with no UAE-specific adaptation screen referenced. Other UAE frameworks (e.g. TAQA's Green Finance Framework[142] and Emirates Global Aluminium's framework[143]) follow similar approaches. Until a UAE taxonomy is issued, classification choices remain issuer-defined and heterogeneous.

New UAE frameworks such as Etihad Rail announced its Sustainable Finance Framework in August 2024,[144] continue to emerge and regional data show the UAE alongside Saudi Arabia as the main contributors to Middle East GSSSB issuance.[145] The banking sector has also emphasized the need for a sustainable finance taxonomy along with templates to promote adaptation related KPIs which could include quantitative financial metrics such as taxation or IBOR. Without a national taxonomy, issuers and investors default to international handbooks where climate change adaptation doesn't fully reflect local priorities.

02 Finding

Programs for clear bankable adaptation pipeline/portfolios are present in some Emirates (such as Tasreef). Their acceleration can be supported, especially for non-tariff public good assets (drainage, health-facility resilience, NbS).

Across the UAE, there is strong progress in building adaptation project pipelines, with some programs already defined at multi-year scale. Dubai's Tasreef approved at AED 30 billion with completion planned by 2033 and quantifies expected system performance (a roughly 700% capacity uplift and the ability to manage more than 20 million m^3 of stormwater per day)[146] . This is a well-defined adaptation asset class, with a capex envelope, schedule, and measurable outcomes, precisely the elements investors look for in climate linked financing.

A common feature of these adaptation investments is that they are public-good assets, such as storm drainage networks, health-facility resilience upgrades, and ecosystem restoration, where direct user-fee revenues are limited or absent. . In such cases, private capital engages through green bonds or via public-sector programs rather than project-finance models. Recent UAE market practice shows readiness on the financing side (for example Etihad Rail), suggesting that, private capital can be attracted when adaptation portfolios are well defined and costed.

Taken together, the evidence indicates that some emirates have advanced concept into multi-year adaptation pipelines suitable for financing, with Dubai's Tasreef and Abu Dhabi's environment-sector plan as present examples, while there are other smaller emirates that are funding adaptation on project-by-project basis. There is a need for projects to come up with clear budgets, schedules, and measurable outcomes for classification and financing as part of adaptation portfolios to help mobilize private finance

140 UAE Sustainable Finance Working Group Issues Third Public Statement." Dubai Financial Services Authority (DFSA), https://www.dfsa.ae/news/uae-sustainable-finance-working-group-issues-third-public-statement
141 Green Finance Awards 2023. Masdar, 2023 https://masdar.ae/-/media/corporate-revamp/downloads/awards/masdar_green-finance_2023.pdf
142 TAQA. (2023, April). TAQA Green Finance Framework. https://www.taqa.com/wp-content/uploads/2023/04/TAQA-Green-Finance-Framework.pdf
143 Emirates Global Aluminium (EGA). (2024, June). EGA Green Finance Framework. https://www.ega.ae/media/dzqhhatf/green-finance-framework.pdf
144 Etihad Rail Launches Its Sustainable Finance Framework for Green Investments in Transportation and Infrastructure." Etihad Rail, https://www.etihadrail.ae/en/post/etihad-rail-launches-its-sustainable-finance-framework-for-green-investments-in-transportation-and-infrastructure
145 Aletihad News Center." Saudi Arabia and UAE dominate MENA sustainable bond issuance in H1 2025: Bloomberg, 14 July 2025, https://en.aletihad.ae/news/4590171/saudi-arabia-and-uae-dominate-mena-sustainable-bond-issuance
146 Mohammed bin Rashid bin (2024). Mohammed bin Rashid approves AED 30 billion 'Tasreef' project to enhance Dubai's rainwater drainage network by 700 %. WAM, 24 June. Available at: https://www.wam.ae/en/article/b3ts1zx-mohammed-bin-rashid-approves-aed30-billion-tasreef

03 Finding

UAE banks are integrating climate risk, including physical risk, into credit processes under Central Bank principles and climate stress-testing using Network for Greening the Financial System (NGFS) scenarios; however, bank-by-bank adjustments to pricing, tenor or collateral explicitly, linked to physical risk are still being phased in.

Across the banking system, physical risk is being integrated into risk governance and lending practices led by the CBUAE and the UAE SFWG, which will be complemented by the integration of transition risk as well from the next year. The SFWG's 'Principles for the Effective Management of Climate-Related Financial Risks,' launched in November 2023,[147] set expectations that banks identify, measure, manage, and disclose climate-related financial risks. Public releases by the CBUAE and fellow supervisors confirm that these principles now underpin supervisory dialogue in the UAE's financial sector.[148]

Supervisory climate analysis is underway and explicitly references NGFS methodologies. The CBUAE reports that banks have tested transition-risk using NGFS scenarios on corporate lending to climate-vulnerable sectors, and that the central bank itself performed a top-down climate physical-risk analysis in 2024 of banks' real-estate lending, which focused on rainfall-induced flooding and storm-surge hazards under IPCC pathways.[149] Emirates NBD's 2024 ESG report confirms this trend. The banks used NGFS scenarios to assess impacts on climate related credit losses and highlighted how physical risk can affect collateral values.[150]

A review of the sustainability and annual reports of showed that UAE banks and institutional investors are making progress in managing climate risks, but changes to lending terms such as differentiated loan pricing, shorter tenors, or higher collateral haircuts by hazard zone are still being phased in. While the CBUAE could provide guidance, the private banks will eventually carry out physical risk assessments themselves and see its implications on their portfolios. Current UAE bank publications emphasize governance, policies, scenario analysis and capacity building initiatives, but do not yet present pricing or risk-based lending tables. This is consistent with the CBUAE's approach of testing first, then moving towards implementation. In short, the evidence shows integration of climate risk into risk management and NGFS-based stress testing is active and quite advanced, while changes in day-to-day credit terms linked to physical risk are being assessed at a bank-to-bank level.

04 Finding

The UAE has large catalytic platforms (e.g., ALTÉRRA; GCFC), but dedicated, large-scale UAE blended facility focused solely on adaptation is yet to be established. Adaptation blending is occurring deal-by-deal or via global/regional vehicles, not through a standing domestic adaptation facility.

The UAE has established large catalytic climate-finance platforms with global reach, but a blended finance facility focused solely on adaptation is yet to be established. Blended finance is a strategic approach that combines public and private funding to mobilize private capital flows towards sustainable project by de-risking them. ALTÉRRA, the USD30 billion climate investment vehicle announced at COP28, was designed as a catalytic, private-markets platform with USD25 billion for climate strategies and $5 billion to mobilize flows into the Global South. Its mandate covers transition efforts, not just adaptation.

Other institutions from COP28, like the Global Climate Finance Centre (GCFC), reinforce market design and capacity but are not a ring-fenced adaptation fund. Nonetheless, blended finance tools are emerging. Brookfield's Catalytic Transition Fund (CTF) was opened to fundraising in 2024 with a USD1 billion anchor from ALTÉRRA and subsequently reported a first close of USD2.4 billion. Disclosures emphasize clean-energy and transition assets in emerging markets, with features such as capped returns for early investors, but it is not limited to adaptation-only.[151]

147 Rulebook Central Bank of UAE, centralbank.ae, rulebook.centralbank.ae/ar/rulebook/ LINK
148 DFSA Adopts UAE Principles for the Effective Management of Climate-Related Financial Risks Ahead of COP28." DFSA, 16 Nov. 2023, https://www.dfsa.ae/news/dfsa-adopts-uae-principles-effective-management-climate-related-financial-risks-ahead-cop28-1
149 UAE: Central Bank Assesses Implications of Climate Risks on Financial Sector." Middle East Insurance Review, MEIR team, 24 Aug. 2025, www.meinsurancereview.com/News/View-NewsLetter-Article?id=92662&Type=MiddleEast - Sustainable Finance
150 ESG Report 2024. Emirates NBD, 2024, https://cdn.emiratesnbd.com/assets/pdf/esg_report_2024.pdf?utm_source=off-plan-repository%3Fd7140693_page%3D2
151 Brookfield Opens Fundraising for Catalytic Transition Fund with Anchor Commitment from Alterra." Alterra Capital Holdings, 2024 https://www.alterra.ae/news/brookfield-opens-fundraising-for-catalytic-transition-fund-with-anchor-commitment-from-alterra-targeted-to-raise-up-to-5-billion-to-scale-up-climate-finance-in-emerging-markets

Civil Society Organizations

01 Finding

Worker-protection policies and awareness are strong (e.g. Midday Break and Safety-in-Heat campaigns with multilingual materials). Financial safety nets are also present and could be expanded to provide further coverage.

Worker-protection measures around heat are well-institutionalized and highly visible in the UAE, anchored in the annual Midday Break and emirate-level heat-stress programs enforced by the Ministry of Human Resources and Emiratisation (MoHRE) implements the Midday Break every year from 15 June to 15 September, which prohibits outdoor work under direct sun between 12:30 and 3:00 p.m. This is part of MOHRE's Occupational Heat Stress Prevention policy and is enforced through inspections and guidance to employers.[152] In parallel, Abu Dhabi Public Health Centre's 'Safety in Heat' program[153] provides technical guidance for employers and supervisors on hazard identification, hydration, rest cycles, and worker training, supported by detailed English-language technical guidelines; Dubai Municipality publishes technical guidance for managing heat stress at work.[154]

Awareness materials and worker-facing information are disseminated in multiple languages and reflects the linguistic profile of outdoor workforces. MoHRE, for example, has issued rights-and-duties guides in seven languages (Arabic, English, Urdu, Bengali, Chinese, Hindi, Malayalam), and Safety-in-Heat outreach routinely targets employers and workers with practical materials for prevention and early recognition of heat illness.[155] On financial protection, there are safety nets embedded in labour-market regulation. Since 2018, employers may substitute the traditional bank guarantee with "Taa-meen" that protects workers' dues up to AED 20,000, including unpaid wages, end-of-service benefits, repatriation, and medical expenses related to work injuries or occupational diseases.[156] Separately, Federal Decree-Law No. 33 of 2021 provides for work-injury and occupational-disease compensation.[157] Current financial protections rely on general labour laws, mandatory health coverage and employer support, highlighting the need for safety net for heat related risks.[158]

To facilitate insurance compliance for low-income and domestic workers, the government introduced a new basic insurance package in 2025 costing only AED 320 per year link.[159] This affordable plan has no waiting period even for chronic conditions and covers workers up to age 64 (older individuals can also be covered with a medical clearance). Such measures greatly improve accessibility for vulnerable groups like domestic helpers, laborers, and the elderly. At present it would be important to consider the coverage of such schemes to identify any vulnerable groups that might not be able to access these incentives.

152 MOHRE Implements Midday Break from 15 June to 15 September 2024." Ministry of Human Resources and Emiratisation (MOHRE), 31 May 2024https://mohre.gov.ae/en/media-center/news/31/5/2024/mohre-implements-midday-break-from-15-june-to-15-september-2024
153 Safety in Heat." Abu Dhabi Public Health Centre (ADPHC), https://www.adphc.gov.ae/en/Public-Health-Programs/Injury-Prevention/Safety-in-Heat
154 Technical Guidelines for Management of Heat Stress. Dubai Municipality, Aug. 2022, https://www.dm.gov.ae/wp-content/uploads/2022/08/DM-HSD-GU38-MHSW2_Technical-Guidelines-for-Management-of-Heat-Stress-at-....pdf
155 A Guide in 7 Languages to Inform Workers of Their Rights and Legal Obligations." MOHRE, 22 Feb. 2022, https://mohre.gov.ae/en/media-center/news/22/2/2022/a-guide-in-7-languages-to-inform-workers-of-their-rights-and-legal-obligations
156 UAE: New Insurance Policy Reportedly Covers Worker Wages, Benefits in Case of Company Bankruptcy or Failure to Pay Dues." Business & Human Rights Resource Centre, https://www.business-humanrights.org/en/latest-news/uae-new-insurance-policy-reportedly-covers-worker-wages-benefits-in-case-of-company-bankruptcy-or-co-failure-to-pay-dues/#:~:text=upon%20recruiting%20a%20new%20employee%2C%20the%20employer,policy%2C%20which%20costs%20Dh120%20for%20two%20years.
157 "New UAE Labour Law decrees: All you need to know about occupational disease and injury." Gulf News, 31 May 2022, https://gulfnews.com/living-in-uae/ask-us/new-uae-labour-law-decrees-all-you-need-to-know-about-occupational-disease-and-injury-1.1653969663347
158 Federal Law No. (8) of 1980 on Regulation of Labour Relations." UAE Legislation Portal https://uaelegislation.gov.ae/en/legislations/1541/download
159 Ministry of Human Resources & Emiratisation (2025) UAE Basic Health Insurance Scheme for Northern Emirates – Mandatory Health Insurance effective 1 January 2025. MOHRE. Available at: https://www.mohre.gov.ae/en/media-center/awareness-and-guidance/health-insurance-scheme.aspx

02 Finding

Project-level community-based monitoring exists, corroborating accuracy of data collection and reporting. Linking these efforts into existing data monitoring and management system will further strengthen data integrity and inform decision-making.

Project-level, community-based environmental monitoring is active in the UAE and help support official datasets. Environment Agency–Abu Dhabi (EAD) operates "Sahim," a citizen-science program delivered with Emirates Nature–WWF, where volunteers collect data on issues like plastics pollution and biodiversity.[160] The Sahim app ensures standardized recording and quality control, making the data useful for policy making. EAD has publicly emphasized the importance of these large data sets.

Beyond plastics and terrestrial observations, citizen scientists are contributing to marine and coastal monitoring. Emirates Diving Association runs the UAE chapter of Reef Check, training EcoDivers to track coral reef condition.[161] Similarly, Emirates Nature–WWF's Leaders of Change program uses platforms like iNaturalist to gather biodiversity records which is verified by experts[162].

Parallel to these CSO programs, federal and emirate authorities publish environmental datasets and maintain official monitoring systems. MOCCAE's Open Data portal regularly releases national environmental series (for example, sea quality indicators and species lists), while EAD's Environmental Data Portal provides time-series on marine-water quality and other parameters, alongside the geographic distribution of flora, fauna and habitats. Media coverage also highlights MOCCAE's environmental geospatial platform to support institutions. With these, government data infrastructure for monitoring and public access is established and expanding.[163]

Analysis of the survey results and KIIs also revealed that monitoring and governance mechanisms are used by CSOs and other project developers but on a project-to-project basis and this information is not always publicly available. Taken as a whole, the evidence demonstrates that project-level, community-based monitoring is already occurring in the UAE under CSO and regulator-endorsed programs, which produce observations on plastics, biodiversity and reef health, women's sustainable agriculture initiatives[164] that can integrate the data into official records. At the same time, while authorities publish extensive environmental datasets, public documentation could show a consistent system for integrating this data into national or emirate level databases. Strengthening these links would improve data quality and support better decision making.

03 Finding

Systematic post-event learning informs robust policy and evidence-based investments. Encouraging dissemination of post-event/project data will facilitate and accelerate knowledge sharing in organizations or communities.

Post-event learning is taking shape across the UAE through a mix of official monitoring, academic and insurer event studies, and CSO-led documentation. With extreme rain episodes, multiple analytical products have been released: NASA's Earth Observatory has produced spatial extent and intensity, catastrophe-risk firms and (re)insurers have issued post-event technical summaries [165] and UAE research institutions have published after-event remote-sensing case studies.[166] There is an emergent practice of compiling and disseminating hazard, exposure and impact evidence soon after major events, which are key ingredients for learning loops and for calibrating resilience investments.[167]

The institutional backbone for loss accounting and lessons-learned is also being strengthened. NCEMA's collaboration with the UN Office for Disaster Risk Reduction has included capacity-building on the Sendai Framework Monitor and disaster-loss accounting systems (DesInventar methodology), to record disaster impacts and costs. Public statements by UNDRR and NCEMA emphasize training UAE authorities to compile losses and report against the Sendai targets with yearly analysis of what hazards cost and where resilience payoffs are highest.[168]

On the environmental side, emirate-level open data platforms provide continuous monitoring to which post-event readings can be compared. Environment Agency–Abu Dhabi's Environmental Data Portal publishes marine-water quality time series for ~40 parameters and periodic reports; MOCCAE's national open-data catalogue similarly provides datasets on sea-quality indicators, species lists, and

160 Sahim." Environment Agency–Abu Dhabi (EAD),https://www.ead.gov.ae/en/Join-the-Movement/Communities/Sahim
161 "Reef Check." Emirates Diving Association, https://www.emiratesdiving.com/events/reef-check/#:~:text=By%20collecting%20data%20on%20a,arrange%20their%20own%20dive%20gear.
162 Leaders of Change – Member Profile." Leaders of Change UAE https://www.leadersofchange.ae/member-badge/11717-aynJz6LNldn9moDEtV
163 Open Data." MOCCAE, https://www.moccae.gov.ae/en/open-data/moccae-open-data
164 Mother of the Nation, n.d. Under the Patronage of Sheikha Fatima: The General Women's Union Launches the Official Roll-out Plan for the "We Plant for Sustainability" Initiative. Available at: https://motherofthenation.ae/en/news/under-the-patronage-of-sheikha-fatima-the-general-women-s-union-launches-the-official-rollout-plan-for-the-we-plant-for-sustainability-initiative
165 Gulf Floods, April 2024. [PDF] Gulf-Floods-April-2024.pdf
166 Remote Sensing and Climatic Data for Flood Impact Assessment in the UAE. https://research.uaeu.ac.ae/en/publications/remote-sensing-and-climatic-data-for-flood-impact-assessment-in-a
167 Deluge in the United Arab Emirates." NASA Earth Observatory, 21 Apr. 2024, https://earthobservatory.nasa.gov/images/152703/deluge-in-the-united-arab-emirates
168 Empowering Disaster Risk Reduction: UNDRR ROAS Workshop Explores Sendai Framework Monitor." United Nations Office for Disaster Risk Reduction (UNDRR), https://www.undrr.org/news/empowering-disaster-risk-reduction-undrr-roas-workshop-explores-sendai-framework-monitor-and

other environmental series.[169] They are maintained up to date, which helps compare conditions before and after events.[170]

Civil-society organisations complement this architecture with post-project documentation and citizen-science records that make learning tangible. Emirates Nature–WWF's tracks changes in key landscapes (e.g., Wadi Wurayah), using tools like camera traps and acoustic sensors which produce verified datasets. New five-year strategies announced by EAD and WWF emphasize citizen science as a long-term data source.[171] What is needed is a single, consolidated after-action dataset or report series that links event chronologies, damage/loss statistics, environmental measurements and recovery metrics into one place for each significant shock. In practice, dissemination remains distributed across agencies, research outlets and CSO publications. Linking these sources into existing monitoring portals would further ease knowledge transfer within organizations and communities and guide future investments.

What Scales Next for Adaptation Finance?

This section presents recommendations to enhance UAE's adaptation financing capacity and scale-up adaptation capital flows.

Figure 6. Recommendations for strengthening the UAE's adaptation financing capacity.

Recommendation 1

Incorporate climate budget tagging and continue increased efforts towards institutionalization of adaptation as a process in budget formulation.

MOF alongside MOCCAE can embed climate budget tagging within the federal budget framework so that adaptation spending can be identified, tracked and assessed across programs and years. The UAE already operates a mature, program-based budgeting system with defined phases, which includes planning, preparation, review, approval and execution, where ministries submit plans with KPIs to the MOF through annual circulars. This makes it easy to add climate tags without changing the accounting system.

OECD and World Bank reviews describe climate budget tagging as an overlay that assigns a tag to individual budget measures according to their relevance to climate objectives. When applied consistently, it generates an auditable series of climate-relevant outlays that finance ministries and sector authorities can use for planning, monitoring and reporting. Countries tailor granularity to their needs, but the common features are a controlled taxonomy, documented criteria, and integration into routine budget documents. A UAE version could focus on key adaptation areas like flood protection, heat-health resilience, water security, ecosystem resilience, using clear tagging rules linked to outcomes. An indicative pathway, grounded in the UAE's existing budget cycle, would sequence technical work within budget milestones. First, define a small set of adaptation categories and include them in the next annual budget circular so entities can apply tags consistently during formulation. Second, add tagging rules to the templates that ministries already use for the budget submission and reviews. Third, execution-stage reports would include a short annex that aggregates tagged spending by sector and adaptation category, which can create the first official budget statement without changing funds appropriation structures.

Over time, this approach would strengthen planning and co-financing. Tagged outlays would give MOF and MOCCAE a clear picture of its adaptation spending, help align federal and emirate level efforts, and support international reporting. It would make it easier to attract investments by showcasing public funding already committed to resilience.

169 Open Data." MOCCAE https://www.moccae.gov.ae/en/open-data/moccae-open-data
170 Marine Water Quality Catalogue." Environment Agency–Abu Dhabi, https://edp.ead.ae/map/Catalogue/MWQ
171 Annual Report 2024. Emirates Nature–WWF, May 2025 https://data.emiratesnaturewwf.ae/media/files/2025-05/Emirates_Nature-WWF_Annual_Report_2024_EN.pdf

Recommendation 2

Add climate weightages in project investment appraisal to prioritize climate adaptation investments

Another key recommendation to enhance UAE's adaptation financing is to introduce climate-resilience weightages in project appraisal so climate-robust designs are preferred when projects are appraised. The UAE existing budgeting system already supports this. For instance, federal entities submit programs plans with KPIs to the MOF through the annual cycle.[172] Procurement law and the new Federal Government Procurement Procedures Guide also require that tender evaluation criteria and their weights be announced upfront.[173] These features mean the system already accommodates weighted criteria and can disclose them. By embedding weight, the UAE can ensure that resilience is factored into project selection, making climate proof designs a part of public investment decisions.

Current federal guidance is comprehensive on feasibility and procurement, but it does not yet prescribe a common climate-weighting factor or a standard set of adaptation KPIs at the planning stage. The 2024 PPP Manual requires environmental and social analysis, lays out feasibility studies, and provides KPI guidance for contract management, yet it stops short of mandating a quantified climate-risk screening threshold or shared adaptation metrics. Likewise, procurement law focuses on transparency and proportionality of evaluation weights rather than defining specific climate weights.

International public-finance practice offers tested methods for incorporating climate into appraisal that the UAE can adapt without altering its core budget architecture. The UK Green Book's supplementary guidance on "Accounting for the effects of climate change"sets out how to factor in climate risks, uncertainty, long term assets, and adaptation benefits when evaluating project options[174]. IMF Green-PFM and C-PIMA materials[175] similarly frame how climate considerations can be embedded across the public-investment management cycle, from screening through appraisal to selection and portfolio management.

An indicative pathway, aligned with the UAE budget and procurement cycle, would proceed in three moves that stay within current rules. First, add a climate-resilience screening test at concept and pre-feasibility, that require projects to identify physical risks (e.g. flood, heat, water stress) and explain how their design addresses these risks. Second, introduce a formal climate weight, for example, a percentage share within the appraisal process so projects that reduce long term risk or offer adaptation benefits score higher. UAE procurement law already allows weighted criteria. Third, specify a small set of adaptation KPIs (e.g. peak-flow handled, cooling-improvement in health facilities, additional water-storage secured, hectares protected/restored) to be carried from appraisal to monitoring so impact is measured.

To support climate resilience scoring in project appraisal, teams can use proven methods for valuing resilience. The World Bank's work on adaptation economics and climate toolkits for infrastructure PPPs describes the "triple dividend" of resilience[176] , avoided losses, boosting development, and delivering environmental/social co-benefits. These tools help integrate hazard data and design alternatives into cost–benefit and risk analysis. Using these methods within existing feasibility templates would allow the planning entities to quantify resilience benefits consistently and make the climate weight an extension of current practice rather than a parallel methodology.

172 "Federal Budget Framework and Process." UAE Ministry of Finance, Ministry of Finance, Government of the UAE, https://mof.gov.ae/en/public-finance/uae-financial-sustainability/federal-budget-framework-and-process/
173 Government tendering and awarding." The Official Portal of the UAE Government, u.ae, https://u.ae/en/information-and-services/business/public-private-people-partnership/ppp/government-tendering-and-awarding
174 Department for Environment, Food & Rural Affairs (2025) Accounting for the Effects of Climate Change: Supplementary Green Book Guidance. London: HM Treasury / DEFRA. Available at: https://assets.publishing.service.gov.uk/media/6830434ce9440506ee953a33/Accounting_for_the_effects_of_climate_change_Green_Book_supplementary_guidance.pdf
175 IMF (2021) Strengthening Infrastructure Governance for Climate-Responsive Public Investment (C-PIMA). Available at: https://infrastructuregovern.imf.org/content/PIMA/Home/PimaTool/C-PIMA.html
176 Global Facility for Disaster Reduction and Recovery (GFDRR) (2018) The Triple Dividend of Resilience: Investing in disaster risk management to boost development. Washington, DC: World Bank

Recommendation 3

A disaster risk financing strategy will institutionalize platform that adheres to effective disaster response and sustainability of resources.

The UAE's disaster-risk reduction system is mature. NCEMA coordinates preparedness, response and recovery nationwide, supported by early warning and emergency protocols. Recent experience of climate stresses in 2024 showed how costly these risks can be, and the 2025 budget reflects this with increased reserves.[177] This profile and ability to respond after disasters create a strong foundation for a sovereign DRF strategy, one that ensures quick access to funds and protects the budgets before disaster occur.

International practice frames DRF as a risk-layered approach that matches instruments to event frequency and severity. For frequent, low impact shocks, countries use budget reserves; for moderate risks, they rely on contingent credit; and for rare severe disaster, they turn to insurance and capital market solutions. This mix ensures fast cost-effective response without disrupting development plans. An indicative pathway for the UAE is to create a single DRF strategy. It would formalize the use of existing budget reserves, set clear rules for when and how funds are accessed, and explore credit and insurance options tailored to the UAE's climate risks. This would turn UAE's emergency system into financial safety net, giving ministries more certainty in protecting long-term fiscal goals when disasters strike.

UAE experience shows that when adaptation investments are packaged as costed, multi-year programs with quantified outputs, they become easier to classify, finance and monitor. The UAE has done this earlier with its solar program roll out. Dubai's Tasreef rain-drainage also exemplifies the same approach. This combination of defined budget, timeline and measurable outcomes can be used by lenders and investors to evaluate and raise funding.

For non-tariff public-good assets, such as stormwater tunnels, flood walls, health-facility resilience upgrades, and ecosystem restoration, the financing question then becomes more about visibility of budgets and viability gap funding. In such cases, grouping projects into portfolios with unit costs and delivery schedules helps align annual budgets with shared metrics (e.g. drainage capacity added). It also helps tracking the same KPI over a long-term, which can be measured and assessed for performance.

An indicative pathway consistent with UAE practice is to convert sector plans and emirate programs into financing-ready portfolios that specify: (i) the multi-year capex envelope and phasing; (ii) standard unit-cost for major components (e.g. km of tunnel, m^3/day capacity, facility retrofits); (iii) a concise set of outcome indicators that can be tracked in sustainability reports; and (iv) a calendar that matches funding needs with planned issuance. Such an approach could help raise multi-year financing for sectors that are critical to adaptation.

Recommendation 4

Establish a blended finance facility to expedite execution of adaptation portfolios through diversification, risk transfer, and innovation

The UAE has already demonstrated its ability to design and host catalytic climate-finance platforms of global significance. ALTÉRRA launched at COP28 with a USD 30 billion mandate and the Global Climate Finance Centre (GCFC) headquartered in Abu Dhabi, signal the country's ambition to lead in mobilizing international capital for climate action. UAE-anchored blended funds are also emerging, such as Brookfield's Catalytic Transition Fund (CTF), which reached a first close of USD 2.4 billion in 2024 with ALTÉRRA as anchor[178]. However, these initiatives are not explicitly positioned as a blended finance facility dedicated to adaptation. Existing facilities such as Alterra could be encouraged to disaggregate financing based on mitigation and adaptation outcomes to enable measurement of adaptation financing needs.

At the same time, the UAE's adaptation pipeline is defined in portfolio form, from NbS to drainage facilities and to environment and eco-system projects. These projects are often major public investment that don't generate much revenue streams. This is where blended finance becomes very useful as it uses public or philanthropic funds like concessional loans, guarantees or first loss capital to lower the risk of private investors.

Internationally governments use sovereign backed blended finance facilities to gather resources, standardize project preparation, and create repeat issuance platforms.[179] By creating similar institution in UAE, adaptation projects can benefit from financialguarantees, portfolio aggregation, and access to capital-markets. The facility could also serve as a vehicle for innovation, which would pilot new instruments such as resilience bonds, insurance-linked notes, or hybrid debt-equity models and provide a mechanism for aligning international adaptation finance with domestic programs.

177 Ministry of Finance (UAE) (2025) Federal General Budget: Annual Report 2025. Abu Dhabi: Ministry of Finance. Available at: https://mof.gov.ae/wp-content/uploads/2025/02/Federal-General-Budget-Annual-Report-2025.pdf

178 Brookfield Opens Fundraising for Catalytic Transition Fund with Anchor Commitment from Alterra." Alterra Capital Holdings, 2024 https://www.alterra.ae/news/brookfield-opens-fundraising-for-catalytic-transition-fund-with-anchor-commitment-from-alterra-targeted-to-raise-up-to-5-billion-to-scale-up-climate-finance-in-emerging-markets

179 OECD (2025) DAC Blended Finance Guidance 2025: Case Studies. Paris: OECD Publishing. Available at: https://www.oecd.org/en/publications/oecd-dac-blended-finance-guidance-2025_e4a13d2c-en/full-report/case-studies_f6e822b0.html

An indicative pathway, building on UAE precedents, would be to situate an adaptation-focused blended facility alongside existing platforms, encourage both public and private co-mingling of funds, but with a focus on domestic adaptation projects. This would complement ALTÉRRA's global mandate by focusing on domestic adaptation and resilience projects, such as stormwater drainage, flood protection, health-system resilience, and ecosystem-based adaptation projects. In doing so, the UAE would institutionalize a permanent blended structure capable of diversifying stakeholders, transferring risk away from the public balance sheet, and enabling innovative instruments, all of which would expedite the execution of adaptation portfolios already identified at the emirate and sector levels. In fact, research on blended finance[180] and sovereign wealth funds in the MENA region[181] has already been conducted by the UICCA, which could serve as a guidance.

Recommendation 5

Encourage systematic community MRV, institutionalize post-event learning, and publish gender-disaggregated data across five priority adaptation sectors

Community MRV is already an active feature globally, with citizen science programs mobilizing volunteers to collect field data on habitats and species for conservation and climate adaptation purposes. The Abu Dhabi Mangrove Initiative[182] and Emirates Nature–WWF's restoration work in the Northern Emirates also demonstrate how communities are directly engaged in collecting growth, survival and site-condition data for mangrove projects. These efforts bring civil society into the evidence base for adaptation. However, they remain largely project-specific, and public documentation does not show a routine mechanism for integrating these datasets into the monitoring platforms (such as a National Air Quality Platform or emirate-level environmental observatories).

In most cases, post-event learning is practiced by CSOs but not yet published. There is a need to strengthen cross-emirate 'after-action review' or public data release that compiles loss data, lessons, and recommended resilience measures. In international adaptation finance, post-event learning exercises ensure that fiscal lessons, infrastructure vulnerabilities, and community impacts are documented and feed back into future planning cycles [183].

Last, gender-disaggregated data is acknowledged in UAE sustainable development and social policy reporting but is not visible in climate-adaptation documentation. The UAE's third NDC identify health, environment, energy, infrastructure and insurance as the five adaptation priority sectors, yet the indicators published so far are sectoral and technical, without breakdowns by gender or vulnerable group[184]. This could be strengthened under national gender strategies, and the SDGs would mean regularly publishing gender-disaggregated adaptation data, heat-related health outcomes, access to resilient infrastructure, insurance coverage and participation in environmental programs will likely bring climate reporting in line with national equity frameworks.

An indicative pathway could be established: to consolidate existing community-based MRV platforms into the national data system, to make post-event learning as a routine (such as an annual publication) after major climate shocks and publish gender-disaggregated adaptation indicators across the five priority sectors. This would elevate the role of CSOs and communities in monitoring, enhance transparency and accountability after extreme events and ensure that adaptation outcomes are assessed through an inclusive lens consistent with the UAE's social policy goals.

180 FRONTIER25 (2024) Blended Finance in the Middle East and North Africa. Dubai: Frontier25. Available at: https://frontier25.com/our-insights/research/blended-finance-in-the-middle-east-and-north-africa
181 FRONTIER25 (2025) Sovereign Wealth Funds as Drivers of Climate Resilience in the MENA Region. Dubai: Frontier25. Available at: https://frontier25.com/our-insights/research/soverign-wealth-funds-drivers-climate-resilience-mena-region
182 ADMI (n.d.) The Abu Dhabi Mangrove Initiative. Available at: https://www.admangroves.ae/
183 Global Facility for Disaster Reduction and Recovery (GFDRR) (2018) The Triple Dividend of Resilience: Investing in disaster risk management to boost development. Washington, DC: World Bank / GFDRR. Available at: https://documents1.worldbank.org/curated/en/993161515193991394/pdf/P151463-01-05-2018-1515193988640.pdf
184 UNFCCC (2024). United Arab Emirates Third Nationally Determined Contribution (NDC 3.0): Accelerating Action Towards Mission 1.5°C. November. [online] Available at: https://unfccc.int/sites/default/files/2024-11/UAE-NDC3.0.pdf

Annex 1: Six Pillars and Associated Indicators under the Hybrid Framework

Pillar	Indicator
Strategic Policy and Coordination	Financing linked national adaptation strategy
	Joint planning and financing coordination
	Costed sectoral adaptation plans
	Integration into budget frameworks
Policy and Regulatory Frameworks	Finance-enabling regulatory frameworks
	ESG/ sustainable finance support for adaptation
	EIA and permitting with financial implications
	Legal mandates tied to adaptation financing
Risk Transfer and Insurance	Insurance schemes for climate resilience
	Uptake of climate risk insurance tools
	Data systems for climate-informed finance
Public Finance Management and Budgeting	Budget circular and classification guidance (adaptation "tagging")
	Costing of adaptation measures in line-ministry submissions
	Reporting of adaptation-related expenditures
	Capacity of ministries to plan, budget, and execute adaptation-relevant programs
	Multi-year review of past adaptation expenditures by sector
	Functionality of budget coding system for adaptation tagging
	Monitoring and auditing of adaptation budget execution
	Equity in Targeting and Resource Allocation
Sustainable Finance and Capital Markets	Adaptation/ green bond issuance or pipeline
	Incentives for resilience-aligned investment
	Climate risk integration in financial decisions
Private Sector Engagement and Investment	Private-sector engagement in adaptation finance
	Blended finance for private adaptation investment
	Financial tools for SME adaptation investment
	Non-governmental stakeholder engagement in budgeting

Annex 2: List of Survey Participants

A total of 23 entities participated in the survey questionnaire.[185]

S.no	Heading as Entities participated in the survey questionnaire
1	Emirates Green Building Council (EGBC)
2	Zayed International Foundation for the Environment
3	Ajman University- Office of Sustainability
4	Dubai Environment and Climate Change Authority (DECCA)
5	Emirates Environmental Group
6	Mashreq Bank
7	Abu Dhabi National Energy Co. (TAQA)
8	Ministry of Finance (MOF)
9	Ajman bank
10	National Emergency Crises and Disasters Management Authority (NCEMA)
11	Fujairah Research Centre
12	Emirates Nature WWF
13	CBUAE, Financial Stability Department
14	University of Sharjah, Sustainable and Renewable Energy Engineering Department
15	Dubai Health Authority (DHA)
16	Environment Agency Abu Dhabi (EAD)
17	Dubai Supreme Council of Energy (DSCE)
18	Abu Dhabi Agriculture and Food Safety Authority (ADAFSA)
19	UAE Independent Climate Change Accelerators (UICCA)
20	Securities and Commodities Authority (SCA)
21	Ministry of Energy and Infrastructure (MoEI)
22	Fujairah Environment Authority (FEA)
23	Abu Dhabi National Oil Company (ADNOC)

185 The list may be amended as more stakeholder responses become available

Annex 3. List of Conducted Key Informant Interviews (KIIs)

Below is the list of KIIs conducted as part of UAE's adaptation financing capacity assessment.[186]

S. No	Entity	Date Conducted
1.	Dubai Climate Change and Environment Authority (DECCA)	7 October 2025
2.	General Women's Union (GWU)	7 October 2025
3.	Central Bank of the UAE (CBUAE)	7 October 2025
4.	Federal Competitiveness and Statistics Center (FCSC)	8 October 2025
5.	Ajman University	8 October 2025
6.	Environment Agency Abu Dhabi (EAD)	8 October 2025
7.	Abu Dhabi National Oil Company (ADNOC)	9 October 2025
8.	Emirates Green Building Council (EGBC)	9 October 2025
9.	Ministry of Climate Change and Environment (MOCCAE)	9 October 2025
10.	Mashreq Bank	15 October 2025
11.	Ministry of Finance (MOF)	6 October 2025
12.	UAE Independent Climate Change Accelerators (UICCA)	16 October 2025

186 The list may be amended as more stakeholder responses become available.

Annex 4. List of Participating Entitiesin the Validation Workshop

S. No.	Name of the Entity
1.	Ministry of Finance (MOF)
2.	National Emergency, Crisis and Disaster Management Authority (NCEMA)
3.	Ministry of Energy and Infrastructure (MOEI)
4.	Federal Competitiveness and Statistics Centre (FCSC)
5.	Environment Agency – Abu Dhabi (EAD)
6.	Dubai Environment and Climate Change Authority (DECCA)
7.	Fujairah Environment Authority
8.	Umm Al Quwain Municipality
9.	Abu Dhabi Department of Municipalities and Transport (DMT)
10.	Central Bank of the UAE (CBUAE)
11.	Mashreq Bank
12.	DP World
13.	DEWA
14.	Abu Dhabi National Oil Company (ADNOC)
15.	Emirates Green Building Council (EGBC)
16.	Abu Dhabi Agriculture and Food Safety Authority (ADAFSA)
17.	Emirates Nature – WWF
18.	UAE Independent Climate Change Accelerators (UICCA)
19.	Zayed International Foundation for the Environment
20.	UOS Research Center
21.	CCRN - Climate Change Research Network (Ajman University and others)
22.	Emirates Environmental Group (EEG)
23.	General Women's Union (GWU)
24.	Abu Dhabi National Energy Company (TAQA)
25.	Abu Dhabi Quality and Conformity Council
26.	AbuDhabiNationalEnergyCompany(TAQA)
27.	Ministry of Climate Change and Environment (MOCCAE)
28.	Global Green Growth Institute (GGGI)

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