



Unlocking Green Finance for the Built Environment

EmiratesGBC Technical Workshop

September 2024

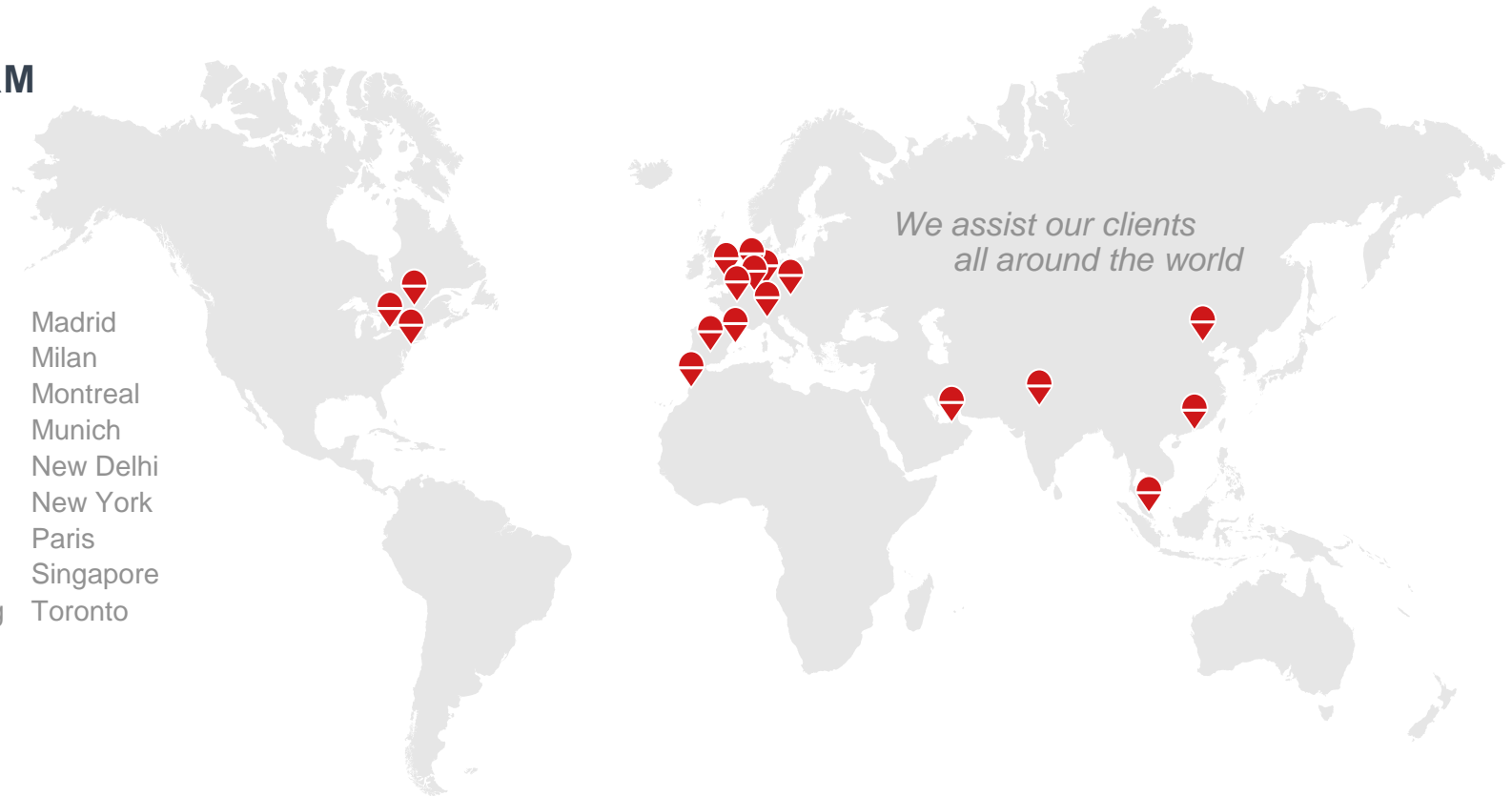
About Accuracy

ACCURACY IS THE SOLE INDEPENDENT FULLY-OWNED PARTNERSHIP IN ITS FIELDS OF EXPERTISE, WITH A TRULY GLOBAL REACH AND SECTOR COVERAGE



OUR OFFICES

- | | |
|------------|-----------|
| Amsterdam | Madrid |
| Barcelona | Milan |
| Beijing | Montreal |
| Casablanca | Munich |
| Dubai | New Delhi |
| Frankfurt | New York |
| Hong Kong | Paris |
| London | Singapore |
| Luxembourg | Toronto |



1 partnership
80 partners



+800
professionals



Across
14 countries

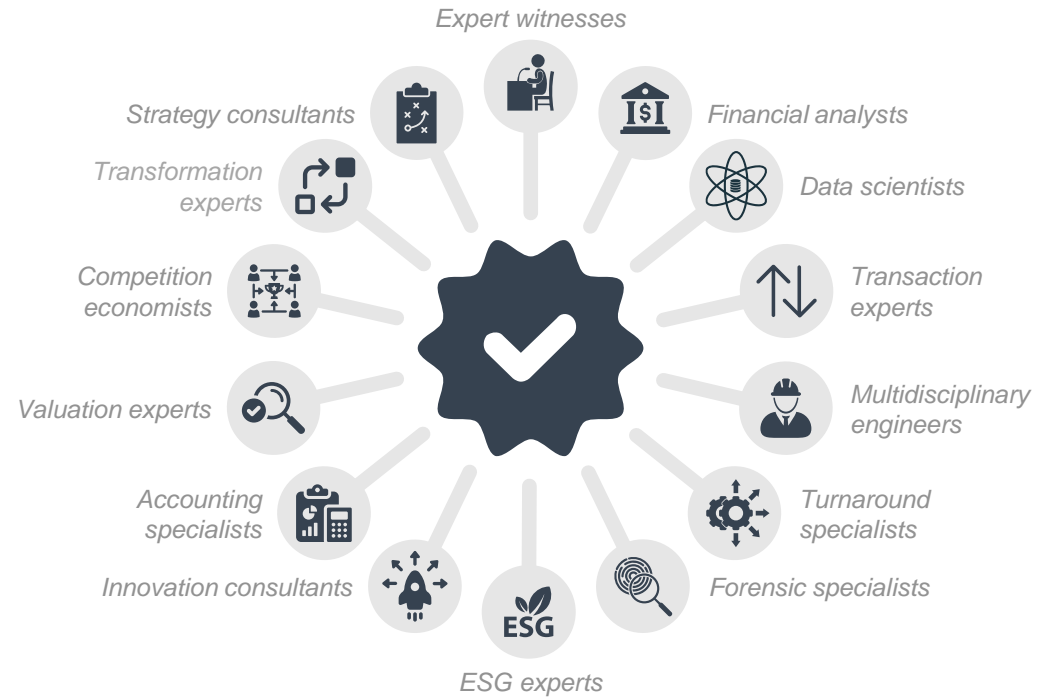
What we do

WE PROVIDE ADVICE AND EXPERTISE TO DECISION-MAKERS AND STAKEHOLDERS FOR THEIR STRATEGIC AND CRITICAL ISSUES

Our strength is to connect strategy, facts and figures



Our people combine various skills for bespoke and effective solutions



How we help

FOUR SITUATIONS FOR A BESPOKE OFFER

Transactions

- We advise companies and investors in the context of complex or international transactions, divestments, carve-outs, business plan preparation, synergy quantification and merger control.
- We provide independent opinions on business or asset valuations in investment contexts (fairness opinions, management packages, etc.).

Disputes

- We combine our economic, engineering, finance, valuation, strategy, data science and accounting expertise to provide an independent and well-documented opinion in all types of disputes, across all continents and in all jurisdictions.

Crises

- We help management teams or shareholders in the context of business recovery or underperformance, whether it be monitoring, forecasting or optimising cash flow.
- We combine our expertise in investigations, finance, accounting, technology and strategy to support our clients in identifying and resolving potential misconduct in civil, criminal and regulatory matters.

Strategy & Business Changes

- We support executives and boards of directors in making critical strategic and financial decisions about their business portfolios, capital allocation and development options.
- We provide bespoke tools and technology combined with skills in data science and artificial intelligence to help our clients process, analyse and visualise data to make informed decisions.



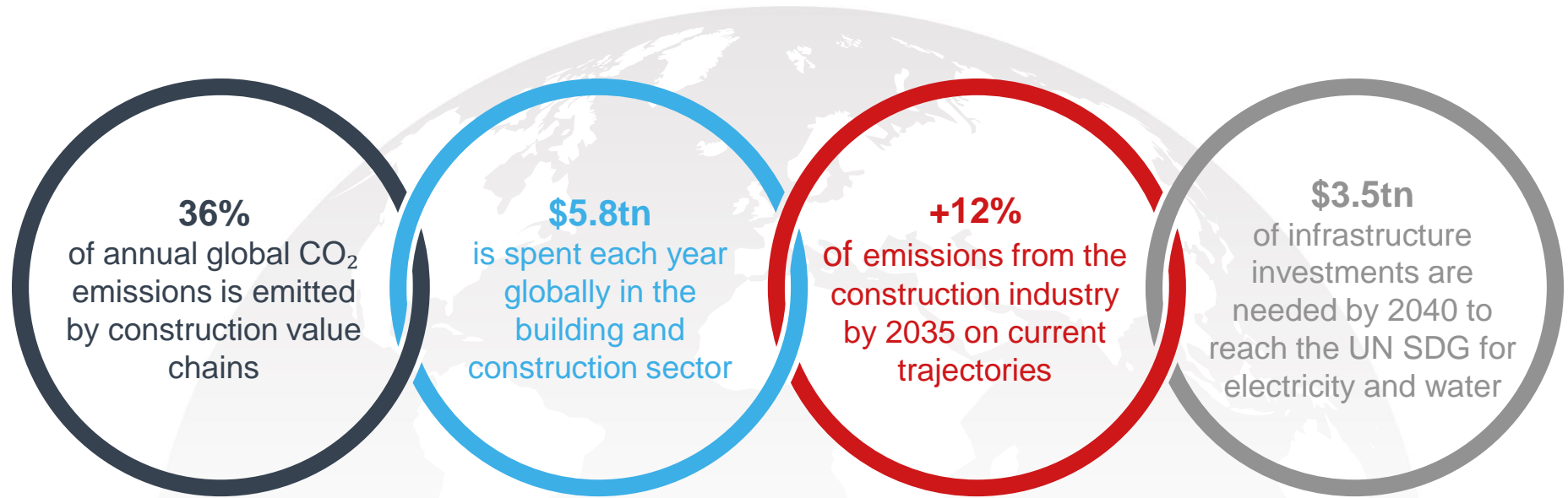


Building Green



Sustainable financing

THE NECESSARY TRANSITION OF THE BUILT ENVIRONMENT



The importance of building green – UAE focus

KEY FACTS & FIGURES

27%

of **CO2 emissions** in the UAE as of 2019 came from the building sector

56%

of the UAE's **emission reduction** to achieve net zero could come from the built environment

50%

of energy can be saved in green buildings through **efficient insulation, energy-efficient systems, renewable energy integration**

30%

of **water consumption** can be saved through sustainable construction of buildings

Economic & social advantages of building green



Lower operating costs

Lower utilities bills



Increased property value

Higher market value & stronger demand from tenants and buyers



Attractive investments

Attract global investors and corporate tenants willing to contribute to sustainable investment growth



Improved air quality

Healthier indoor environment thanks to nontoxic material, improved ventilation



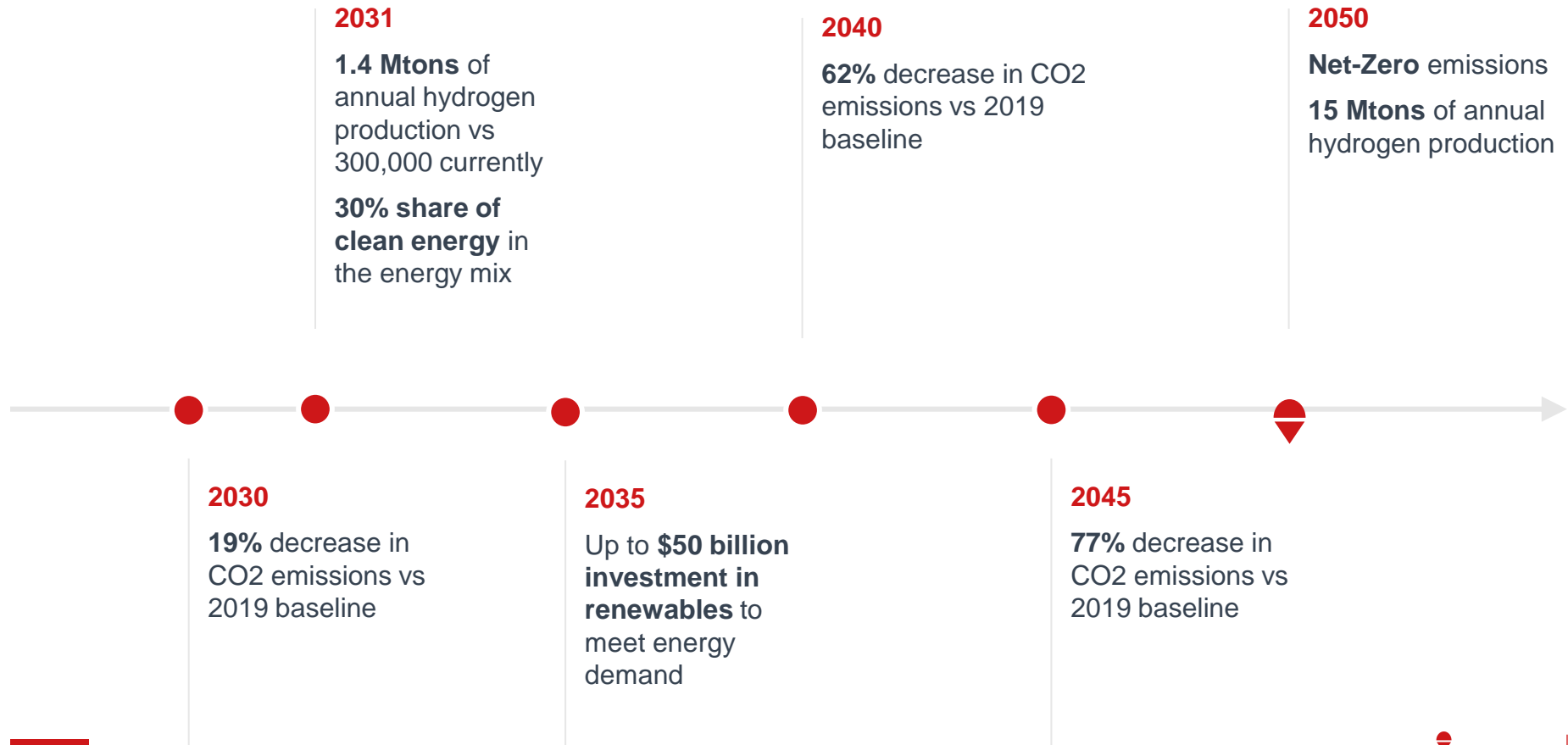
Enhanced quality of life

More comfortable living and working spaces, improving well-being and stabilizing tenant occupation

Climate transition targets

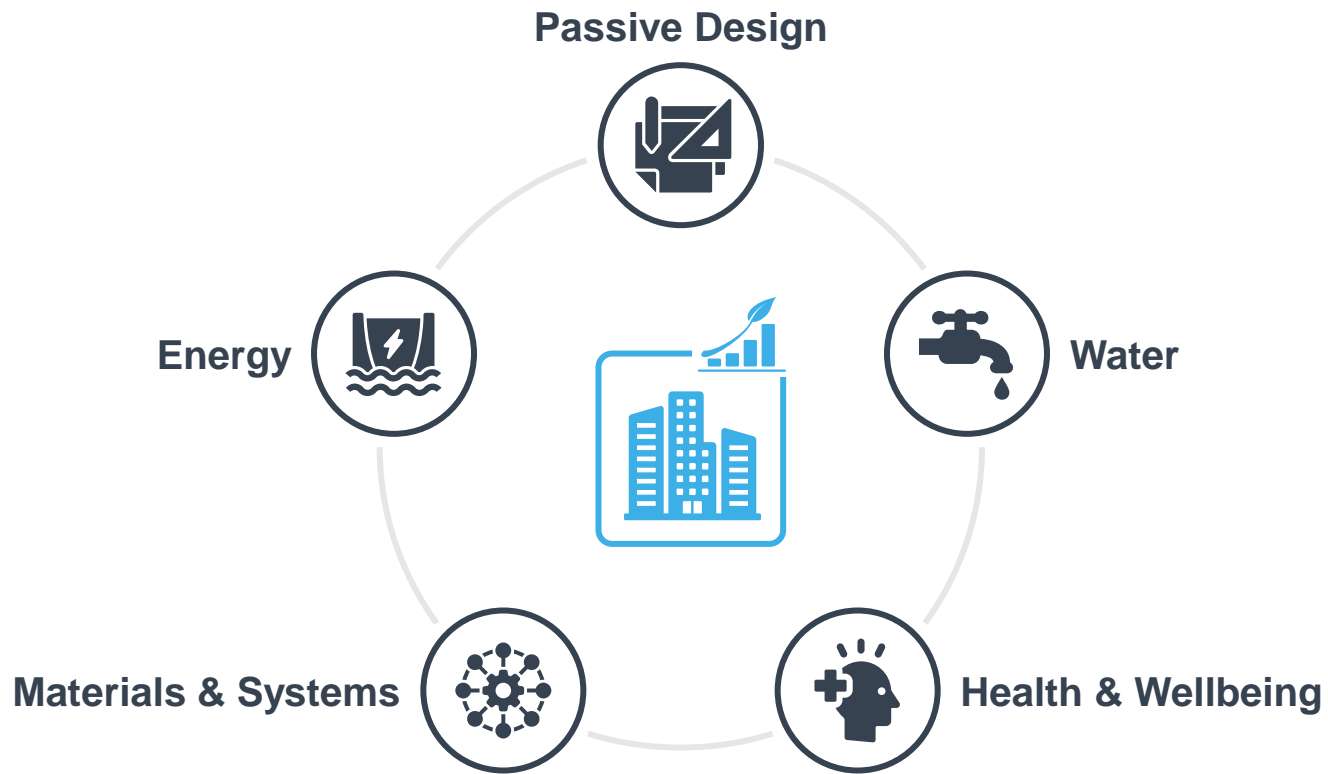
UAE TARGETS

Building green is crucial to meet the UAE's net-zero target by 2050 and limiting its environmental impact.



Advancing sustainability in the built environment

OVERVIEW



Advancing sustainability in the built environment

Passive Design



PASSIVE DESIGN

ABOUT

- Passive design is an approach to building design that leverages the natural environment to maintain comfortable indoor conditions. It focuses on using the sun, wind, and other natural elements to heat, cool, and ventilate a building **instead of relying heavily on mechanical systems.**

COMPARISON

Passive Design

- 1 Use Proper Shading Strategies
- 2 Optimize Building Orientation
- 3 Design for Natural Ventilation
- 4 Install Proper Insulation

Non-Passive Design

- 1 Implement Advanced HVAC Systems
- 2 Incorporate Automated Lighting Controls
- 3 Utilize Mechanical Ventilation
- 4 Integrate Smart Building Technologies



BENEFIT

Passive design strategies can drastically improve energy efficiency and occupant comfort in the UAE's demanding climate.

Advancing sustainability in the built environment

ENERGY EFFICIENCY



ABOUT

Energy efficiency is the **single largest measure to avoid energy demand in the Net Zero Emission** by 2050 Scenario. Furthermore, most efficiency measures result in cost savings to consumers.

STRATEGIES



Building Envelope: *Proper insulation and air sealing to minimize heat transfer. High-performance windows and glazing to control solar heat gain.*



HVAC Systems: *Efficient heating, ventilation, and air conditioning systems with smart controls. Regular maintenance and optimization of existing systems.*



Lighting: *Transition to energy-efficient LED lighting, Implementation of daylighting strategies and occupancy sensors.*



Renewable Energy Integration: *Incorporating solar photovoltaic (PV) systems for on-site renewable energy generation.*



BENEFIT

Energy efficiency significantly reduces energy consumption and greenhouse gas emissions, leading to substantial cost savings, enhanced occupant comfort, and increased property value while promoting sustainability in the built environment.

Advancing sustainability in the built environment

WATER EFFICIENCY



ABOUT

Water efficiency is a critical strategy for reducing water demand and ensuring sustainable water management in the built environment. By implementing effective water-saving measures, we can significantly decrease consumption and enhance resilience against water scarcity.

STRATEGIES



Implement Low-Flow Fixtures: *Installing low-flow faucets, showerheads, and toilets to significantly reduce water consumption without compromising performance.*



Utilize Rainwater Harvesting Systems: *Collecting and storing rainwater for non-potable uses, such as irrigation, reducing reliance on municipal water supplies.*



Implement Greywater Recycling: *Treatment and reuse of greywater from sinks and showers for irrigation and other non-potable applications, conserving freshwater resources.*



Adopt Smart Irrigation Technologies: *Usage of weather-based irrigation controllers and moisture sensors to optimize watering schedules, ensuring efficient water use for landscaping.*



BENEFIT

Integrating water-efficient technologies and practices can lead to substantial cost savings for consumers while promoting environmental sustainability and preserving vital freshwater resources.

Advancing sustainability in the built environment

MATERIALS



ABOUT

The construction industry is a major consumer of natural resources and generates significant waste. Choosing sustainable materials with low environmental impact is crucial for reducing the carbon footprint of buildings and promoting a circular economy.

STRATEGIES



Prioritize Locally Sources and Recycled Materials: *Using materials sourced nearby reduces transportation energy and emissions. Recycled materials reduce demand for new resources and minimize waste.*



Utilize Durable and Low-Maintenance Materials: *Opting for materials that last longer and require less upkeep reduces the need for replacements and associated resource use over the building's lifespan.*



Consider Embodied Carbon: *Assess the total carbon emissions associated with materials throughout their lifecycle, from extraction to disposal. Choose materials with lower embodied carbon footprints.*



Design for Disassembly and Reuse: *Construct buildings in a way that allows for easy deconstruction and reuse of components at the end of the building's life, minimizing waste and resource depletion.*



BENEFIT

Reduced environmental impact through the minimization of resource use, energy consumption, and waste, leading to a smaller carbon footprint and a healthier environment.

Advancing sustainability in the built environment

INDOOR AIR QUALITY



ABOUT

Indoor air quality (IAQ) is a critical aspect of sustainability in the built environment. As buildings account for a significant portion of energy consumption and greenhouse gas emissions, improving IAQ not only enhances occupant health and comfort but also contributes to the overall sustainability goals of reducing environmental impact.

STRATEGIES



Use of Low-VOC (Volatile Organic Compounds) and Non-toxic Materials: *Select paints, adhesives, and furnishings that are low in (VOCs) to minimize harmful emissions.*



Implement Effective Ventilation Systems: *Design buildings to maximize natural airflow and utilize energy recovery ventilators (ERVs) for a constant supply of fresh air.*



Regular Maintenance and Monitoring: *Install air quality sensors and regularly service HVAC systems to ensure efficient air filtration and timely interventions.*



Incorporate Green Spaces: *Integrate plants and outdoor areas into building designs to naturally filter air and promote occupant well-being.*



BENEFIT

Enhances health and well-being by reducing respiratory issues, increasing productivity, optimizing energy efficiency, lowering emissions (GHGs), and promoting resource conservation, contributing to overall sustainability.

Advancing sustainability in the built environment

VERIFICATION (CERTIFICATIONS)

Name	Organisation	Focus	Categories	Credits & Levels	Minimum Fee
LEED	U.S. Green Building Council	Emphasizes water efficiency, energy & atmosphere, materials and resources, indoor environmental quality, and innovation in design.	<ul style="list-style-type: none"> → New Construction → Existing Buildings → Operations and Maintenance 	110 Credits → Certified/ Silver/Gold/ Platinum	\$3,000
BREAM	Building Research Establishment	Addresses energy & carbon emissions, water & wastewater management, materials & waste, and pollution prevention.	<ul style="list-style-type: none"> → New Construction → Existing Buildings → Refurbished Buildings 	100 Credits → Pass/Good/Very Good/Excellent	\$6,000
WELL	International Well Building Institute	Prioritizes occupant health and well-being through aspects such as indoor air quality, lighting, thermal comfort, acoustics, and promoting healthy lifestyle choices.	<ul style="list-style-type: none"> → New Construction → Existing Buildings → Operations and Maintenance 	5 Credits → Bronze/Silver/ Gold	\$6,500
EDGE	International Finance Corporation	Focuses on energy efficiency , water conservation, and embodied energy in materials.	<ul style="list-style-type: none"> → Residential → Commercial → Industrial 	119 Credits → Certified/Gold/ Platinum	\$3,000
Estidama	Abu Dhabi Department of Urban Planning & Municipalities	Focuses on sustainability, aiming to improve the quality of life in Abu Dhabi by incorporating sustainability principles into new development.	<ul style="list-style-type: none"> → New Construction → Major renovations → Existing Buildings 	Pearl rating system → 1 to 5 pearls.	\$2,700
Al Sa'fat	Dubai Municipality	Focuses on promoting green building practices in Dubai, improving energy efficiency, water conservation and waste management.	<ul style="list-style-type: none"> → New Construction → Existing Buildings 	→ Platinum/ Golden/Silver	\$2,700
Barjeel	Ras Al Khaimah Municipality	Focuses on enhancing sustainability across all sectors including energy efficiency, water conservation and sustainable materials.	<ul style="list-style-type: none"> → New Construction → Maintainable Buildings 	Mandatory → Performance based incentives	\$1,360

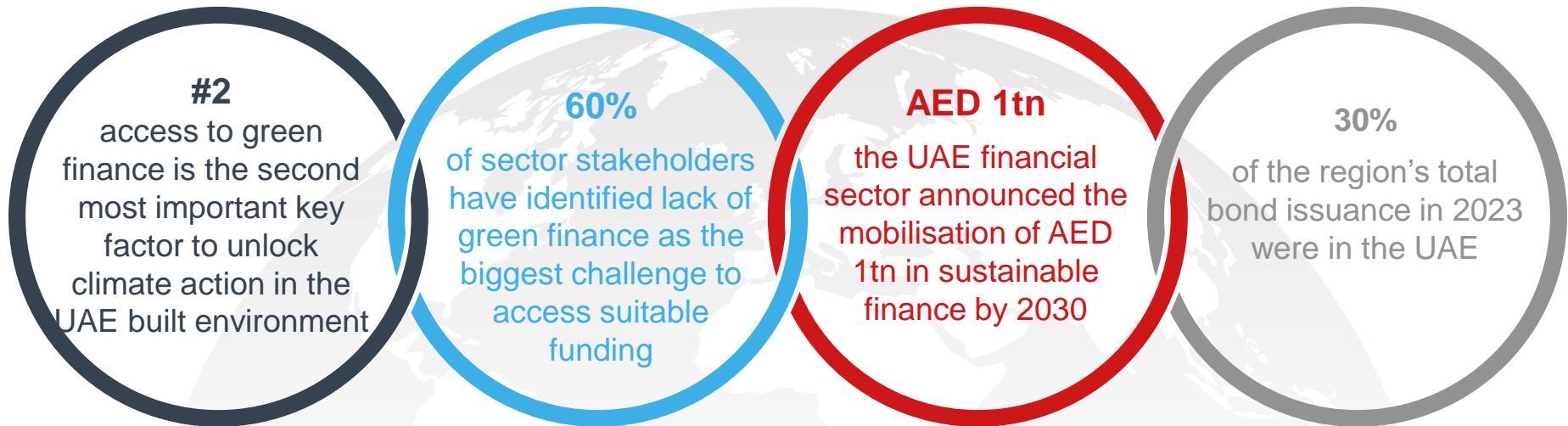


How to finance green buildings?



Financing a green built environment in the UAE

KEY FIGURES



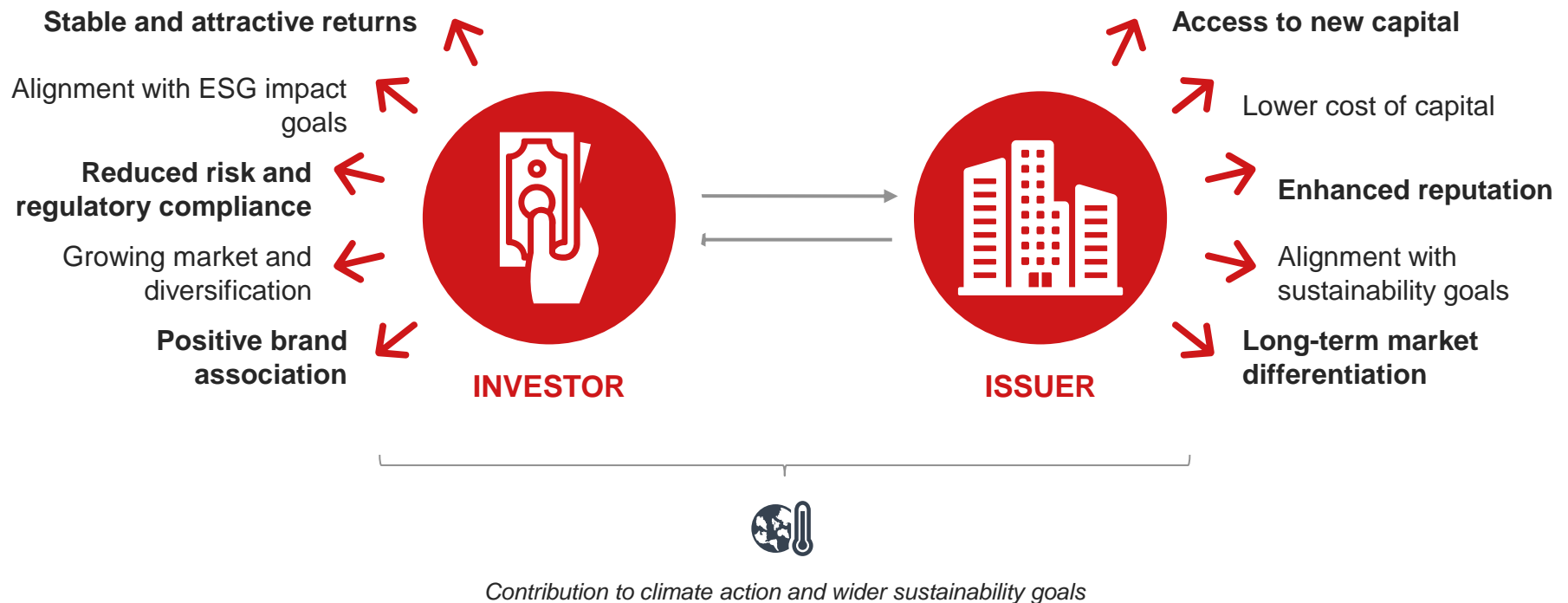
- The increased interest in and availability of green finance by the banking sector present an opportunity for the building sector to access wider options for financing
- GSSSB fall into two categories :
 - **Sustainability-linked bonds** : any type of instrument for which the financial or structural characteristics can vary depending on whether the issuer achieves predefined sustainability objectives;
 - **Use-of-proceeds bonds** : any type of instrument where the net proceeds are exclusively used to finance or refinance, in part or in full, new and/or existing eligible green and/or social projects.

Why green finance?

BENEFITS OF GREEN FINANCE FOR THE ISSUER AND THE INVESTOR

Green finance: win-win transactions

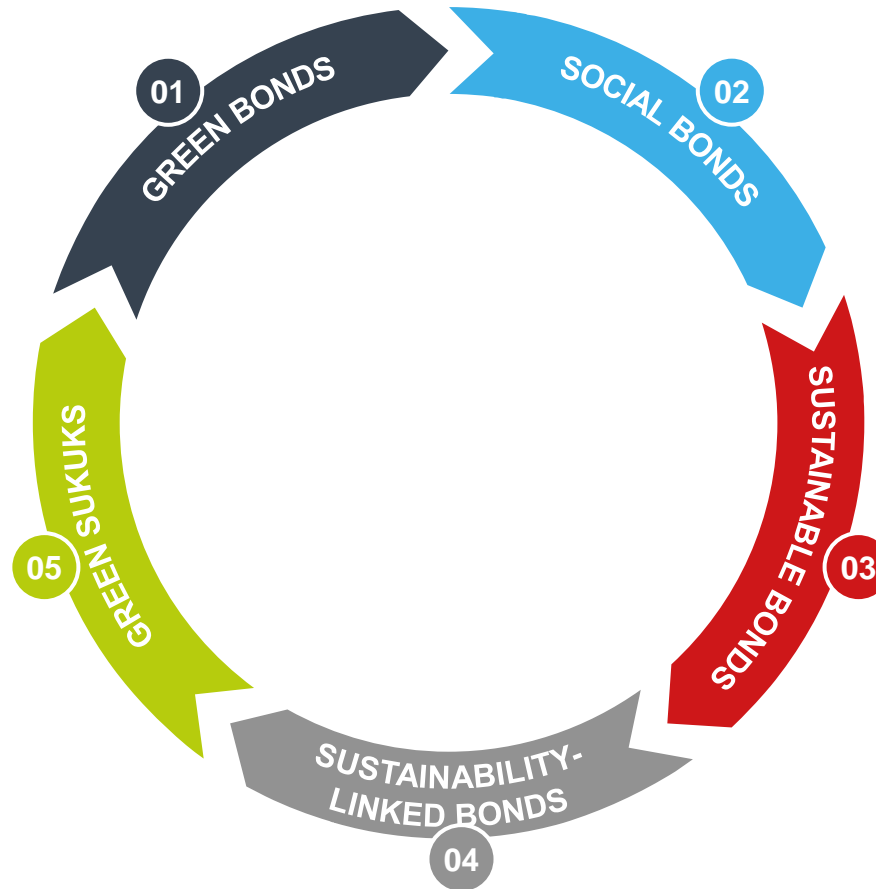
→ Investing in green finance is not only about ethical considerations but also offers **strong financial benefits** such as stable returns, risk mitigation, and access to high growth markets.



Sustainable finance instruments

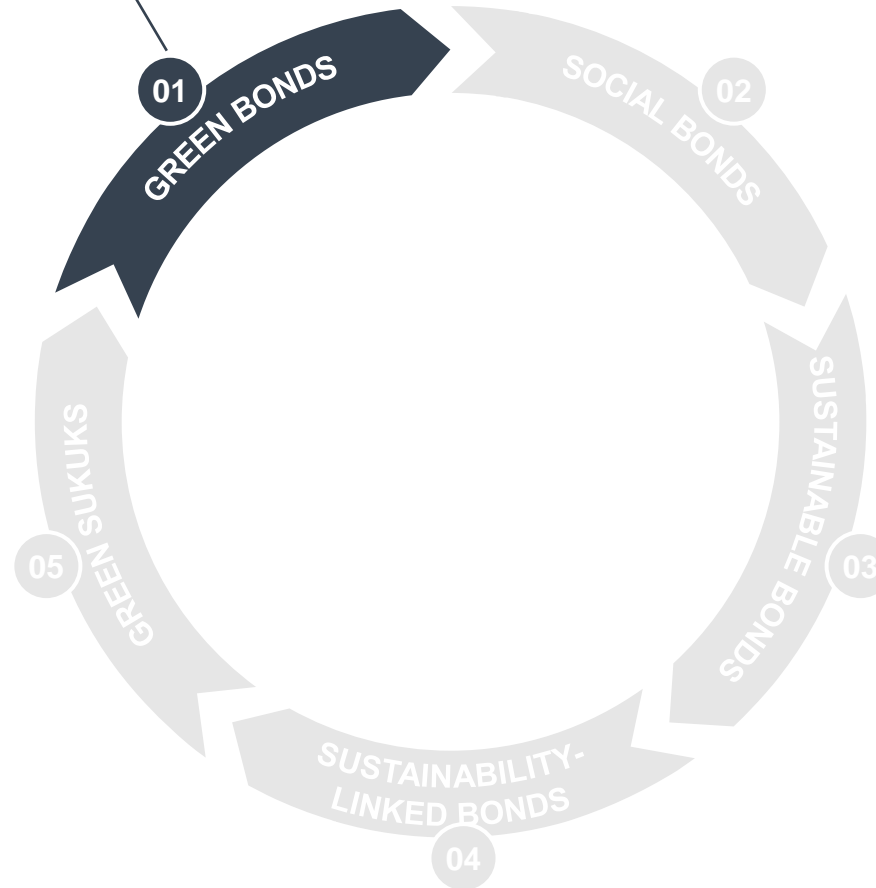


Sustainable finance as a catalyst

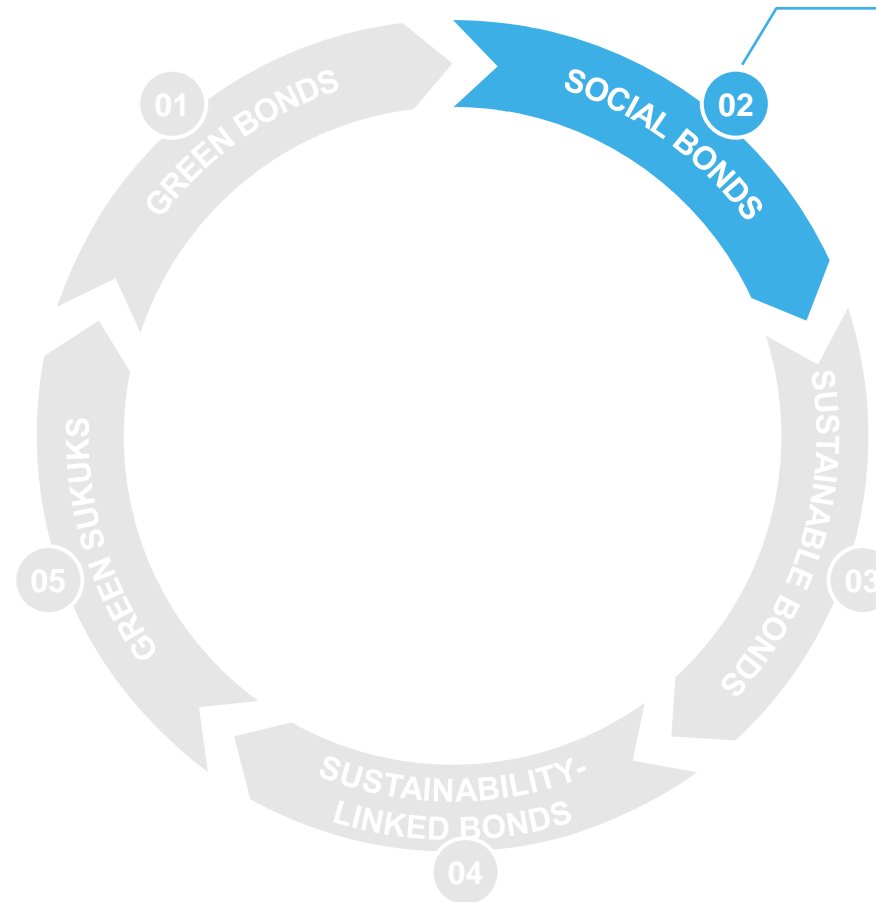


Sustainable finance instruments

- Issued to raise capital for projects with a **positive environmental impact** (renewable energy, energy efficiency, clean transportation, sustainable water management, and green buildings)
- The funds raised are exclusively earmarked for green initiatives, and issuers are required **to report on the environmental impact** of the funded projects.

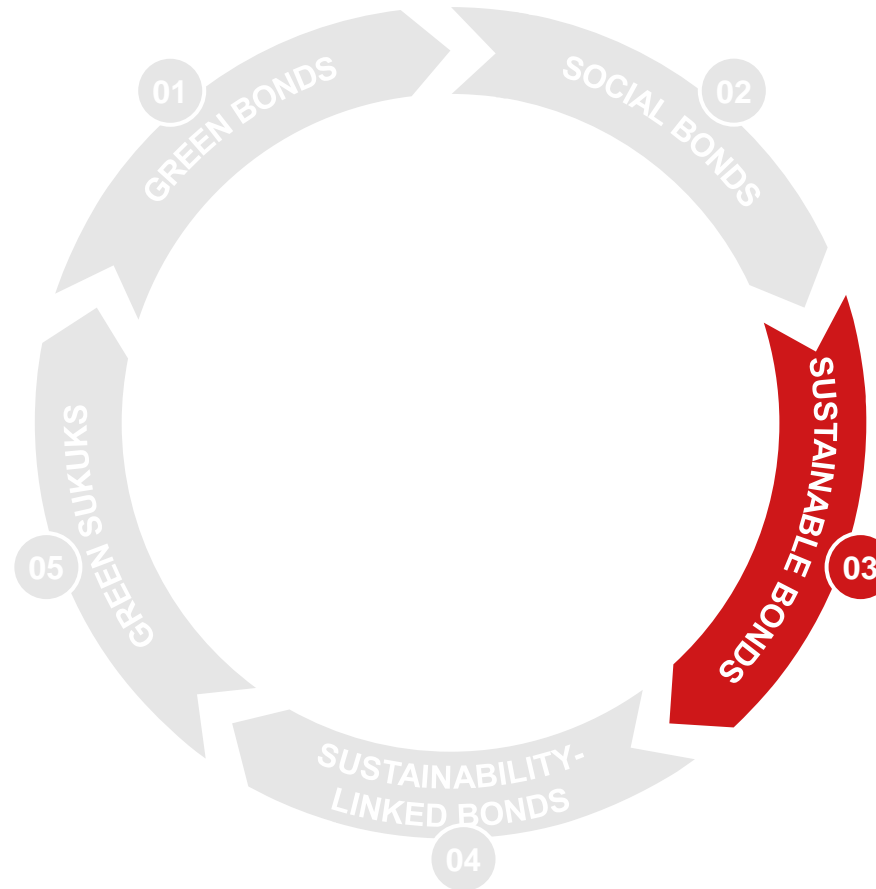


Sustainable finance instruments



- Proceeds are exclusively used to finance or refinance projects that deliver **positive social outcomes** (affordable housing, access to essential services like healthcare or education, employment generation, food security, and socioeconomic advancement...)
- The emphasis is on addressing social issues that improve the well-being of **underrepresented or vulnerable communities**.

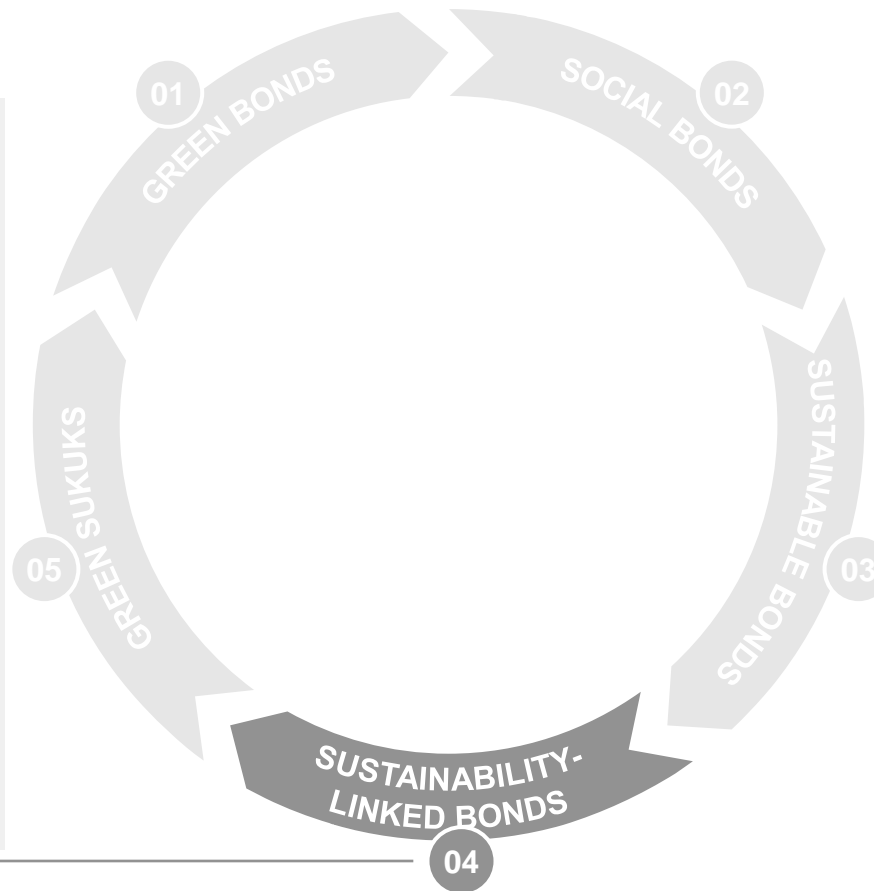
Sustainable finance instruments



→ Combines aspects of **both green and social bonds**. The proceeds from a sustainable bond are used to finance projects that have **both environmental and social benefits**. For example, a bond could be issued to fund a project that includes renewable energy (environmental benefit) and affordable housing (social benefit), **aligning with the broader goals of sustainability**.

Sustainable finance instruments

→ Proceeds are not tied to specific projects. Instead, the issuer **commits to achieving predefined sustainability targets**, and the bond's financial characteristics (such as interest rates) **are tied to the company's performance** against these targets. If the issuer meets the targets, they benefit from better terms. Conversely, failure to meet them could lead to higher costs. This structure encourages companies to **improve their overall sustainability performance**.



Sustainable finance instruments

→ A Green Sukuk is a **Sharia-compliant bond** designed to fund projects with **environmental benefits**, much like a green bond. However, it adheres to **Islamic finance principles**, which means the proceeds must be used for asset-based projects, and the structure must **avoid interest (riba)** and **uncertainty (gharar)**. Green Sukuk are commonly used to finance renewable energy, energy efficiency, and other sustainable projects in Muslim-majority regions, including the UAE.



Sustainable finance instruments

FOCUS ON GREEN SUKUK



Green Sukuk to finance the transition

- Green Sukuk is an innovative financial instrument that combines the principles of **Islamic finance** with environmental sustainability, enabling the funding of eco-friendly projects while adhering to **Sharia-compliant** financial structures.
- The UAE has emerged as a **key player** in the green Sukuk market.
- Like traditional Sukuk, green Sukuk **avoid interest and uncertainty**. They are asset-backed and generate returns through profit-sharing or leasing arrangement ties to specific projects.

Notable green Sukuk issuance



In 2019, the major real estate developer issued the first corporate green Sukuk in the region, valued at \$600 million. The proceeds were used to fund energy-efficient buildings and renewable energy projects across the company's portfolio.



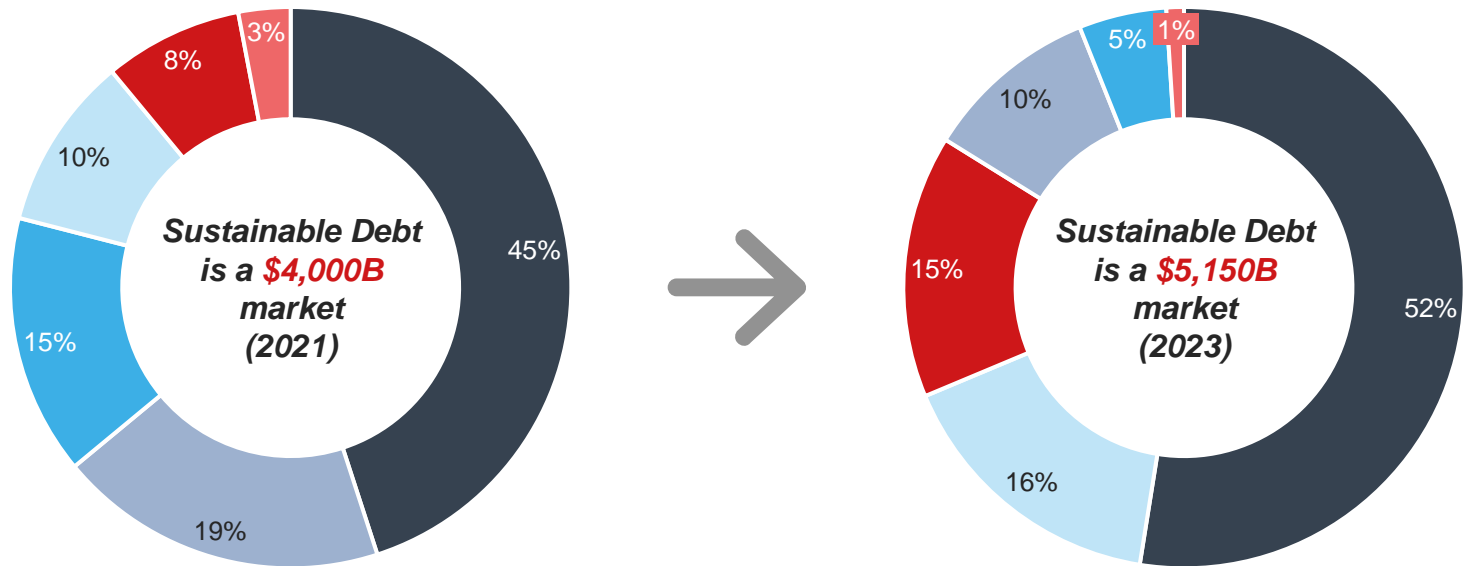
In 2021, Pavilion Energy issues a green Sukuk worth \$300M to finance the construction of its new corporate headquarters in the UAE. The project adhered to green building standards with the development designed to meet LEED Gold certification for energy-efficient lighting, renewable energy integration and sustainable water use.

Sustainable finance instruments

EVOLUTION OF THE GLOBAL SUSTAINABLE DEBT MARKET (2021-2023)



Evolution of the sustainable debt market



- Green Bond
- Sustainability-linked loan
- Green Loan
- Social Bond
- Sustainability bond
- Sustainability-linked bond



Sustainable finance trends in the UAE



The UAE sustainable finance regulatory landscape

REGULATIONS & VOLUNTARY INITIATIVES



- The sustainable finance landscape in the UAE is supported by a combination of government initiatives, regulatory frameworks and growing investor interest.
- The UAE has developed a robust regulatory framework to support sustainable finance, aligned with its broader goals of sustainable development and net-zero emission by 2050.

2019

Dubai Sustainable Finance Working Group: coordinates efforts between key stakeholders. Its objective is to support the growth of sustainable finance by promoting best practices and facilitating the issuance of green and sustainable bonds

2021

UAE Sustainable Finance framework: provides guidelines for incorporating sustainability into its financial system. It sets expectations for banks, insurance companies, and asset managers to integrate ESG factors into their decision-making and investment processes.

2023

UAE securities and Commodities Authority: issues guidelines for the issuance of green bonds and green Sukuk, outlining the criteria for these instruments to ensure they finance environmental beneficial projects.



Key figures on sustainable finance in the Middle East



Middle East GSSSB issuance reached **\$19.4 billion** in 9M 2023



The Middle East GSSSB share of the overall market is about **30%** of total issuance in the region (as of 9M 2023)



The **UAE and Saudi Arabia** account for the majority of GSSSB issuance



Green bonds remain the leading GSSSB category

GSSSB issuance in the Middle East should continue to increase in the coming years.

The UAE and Saudi Arabia will likely remain the leaders in the region's GSSSB market.

2023 GSSSB issuances in the UAE

ALMOST ALL GSSSB ISSUANCES IN THE UAE IN 2023 WERE USED TO FINANCE GREEN BUILDING PROJECTS

Issuer	Value (\$M)	Use of proceeds													
		Energy efficiency	Green buildings	Pollution prevention and control	Renewable energy	Sustainable management of living natural resources	Sustainable water management	Access to essential services	Affordable housing/basic infrastructure	Clean transportation	Employment generation including through the potential effect of SME financing and microfinance	Climate change adaptation	Socioeconomic advancement and empowerment	Terrestrial and aquatic biodiversity conservation	Eco-efficient products
Dubai Islamic Bank	1,000	x	x	x	x		x	x	x	x	x				
Emirate of Sharjah	1,000	x	x	x	x	x	x	x	x	x	x	x	x		
Abu Dhabi National Energy Co.	1,000	x			x		x			x			x		
Aldar Properties PJSC	500	x	x	x	x		x								
Majid Al Futtaim	500	x	x		x		x								
First Abu Dhabi Bank	600	x	x	x	x		x			x		x			
Commercial Bank of Dubai	500		x	x	x					x					
Masdar	750	x													
First Abu Dhabi Bank	354	x	x	x	x	x	x			x		x		x	

Issuance type ■ Green bond ■ Sustainability bond
Country ● United Arab Emirates

Source: Environmental Finance Database

Key barriers to green finance in the UAE

01 Lack of harmonization

Today, some projects follow international standards while others follow local ones

02 Data availability

Investors lack historical data to monitor the performance of green buildings

03 Risk return

Green construction and retrofit is risky and complex in nature. Evaluating the risk of green construction investments is tricky. A higher risk return leads to higher costs of lending





**Accuracy supports its
clients in the financing of
sustainable projects**



Accuracy's support

A 'CONSTRUCTION + FINANCING + ESG TRIAD'



Ensuring that strategic, tactical and ethical issues are balanced and complementary

A thorough understanding of the construction sector

The construction sector is undergoing a revolution with the increase in size and complexity of projects. Accuracy provides expert advice on large capital projects worldwide and accompany owners, contractors and funders in the development of their projects.



Juan SAEZ
Partner & Director,
Accuracy

Zulema SANCHIS

In-depth knowledge of (sustainable) financing issues

Accuracy assists clients in accessing the sustainable financing market (sustainability-linked loans, green bonds, sustainable private bond, etc.), in assessing the cash need and relevant financing method, in drafting documents and in negotiating with the banks.



David CHOLLET
Julie MALZAC

Partner & Director,
Accuracy

A controlled and integrated ESG perspective

At Accuracy, ESG issues are dealt with in an integrated manner, with specific skills and a dedicated team. The questions of criteria, compatibility and communication linked to these issues will thus be addressed as closely as possible to the concrete challenges faced by the teams.



Sophie CHASSAT

VP Sustainability,
Accuracy



www.accuracy.com