

## **EmiratesGBC Technical Workshops**

## by Accuracy

**Unlocking Sustainable Finance for the Built Environment** 

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# 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









## 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 —

Strategy

A

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.).

#### **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.



#### **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.

#### **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.

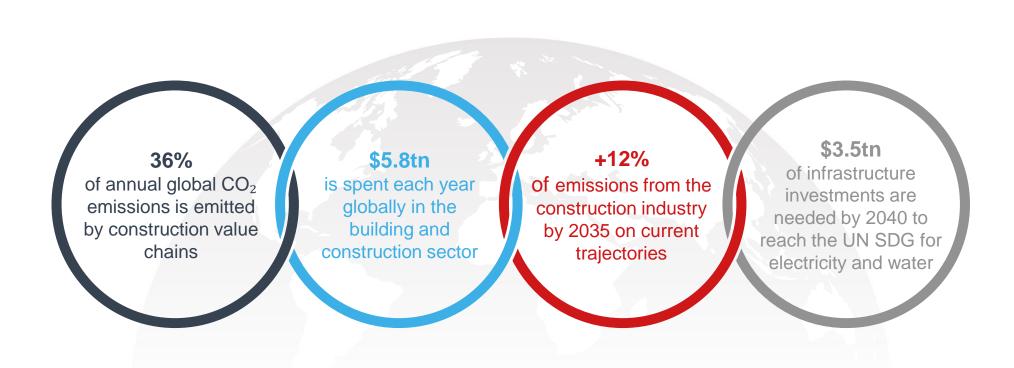


## **Building Green**



## Sustainable financing

## THE NECESSARY TRANSITION OF THE BUILT ENVIRONMENT



## The importance of building green – UAE focus

**KEY FACTS & FIGURES** 

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

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

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

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 spaced, 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.

#### 2031

**1.4 Mtons** of annual hydrogen production vs 300,000 currently

30% share of clean energy in the energy mix

#### 2040

**62%** decrease in CO2 emissions vs 2019 baseline

#### 2050

**Net-Zero** emissions

**15 Mtons** of annual hydrogen production

#### 2030

**19%** decrease in CO2 emissions vs 2019 baseline

#### 2035

Up to \$50 billion investment in renewables to meet energy demand

#### 2045

77% decrease in CO2 emissions vs 2019 baseline

## Advancing sustainability in the built environment

**OVERVIEW** 



## Advancing sustainability in the built environment

## 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.

#### **Passive Design**

- Use Proper Shading Strategies
- 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



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

# TRATEGIES

## 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.



**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



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.



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 nonpotable 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.



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

# 

# 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.

Advancing sustainability in the built environment



**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.



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



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.



**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)

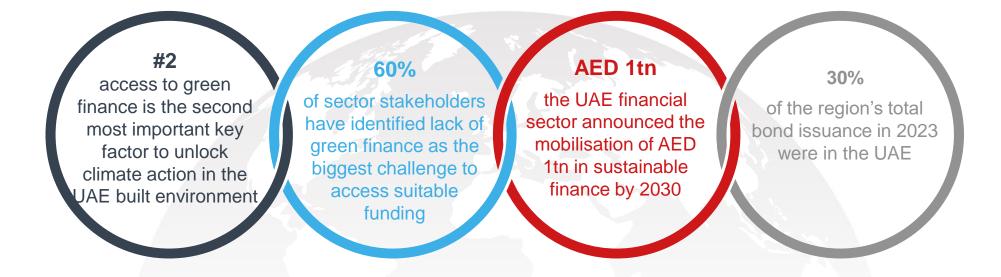
Name	Organisation	Focus	Categories	Credits & Levels	Minimum Fee		
LEED	U.S. Green Building Council	Emphasizes water efficiency, energy & atmosphere, materials and resources, indoor environmental quality, and innovation in design.	<ul><li>→ New Construction</li><li>→ Existing Buildings</li><li>→ Operations and Maintenance</li></ul>	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><li>→ New Construction</li><li>→ Existing Buildings</li><li>→ Refurbished Buildings</li></ul>	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><li>→ New Construction</li><li>→ Existing Buildings</li><li>→ Operations and Maintenance</li></ul>	5 Credits → Bronze/Silver/ Gold	\$6,500		
EDGE	International Finance Corporation	Focuses on energy efficiency, water conservation, and embodied energy in materials.	<ul><li>→ Residential</li><li>→ Commercial</li><li>→ Industrial</li></ul>	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><li>→ New Construction</li><li>→ Major renovations</li><li>→ Existing Buildings</li></ul>	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><li>→ New Construction</li><li>→ Existing Buildings</li></ul>	→ Platinum/ Golden/Silver	\$2,700		
Barjeel	Ras Al Khaimah Municiplaity	Focuses on enhancing sustainability across all sectors including energy efficiency, water conservation and sustainable materials.	<ul><li>→ New Construction</li><li>→ Maintainable Buildings</li></ul>	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.

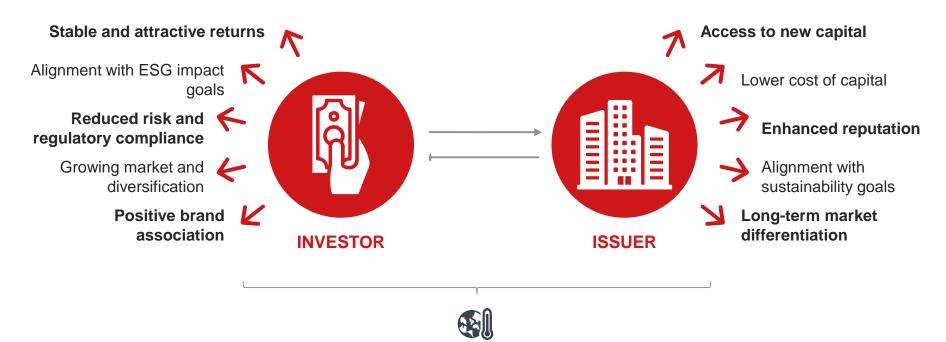
## Why green finance?

## BENEFITS OF GREEN FINANCE FOR THE ISSUER AND THE INVESTOR



#### Green finance: win-win transactions

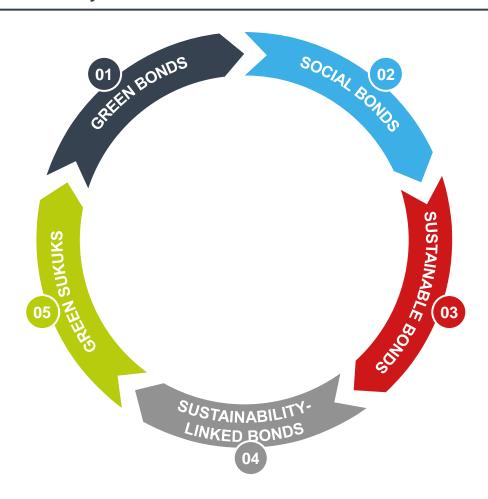
→ Investing in green finance is not only about ethical considerations but also offers **strong financial benefits** such as stable returns, risk mitigation, and access to high growth markets.



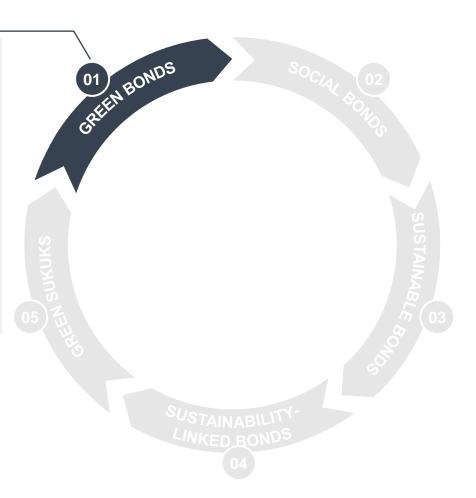
Contribution to climate action and wider sustainability goals

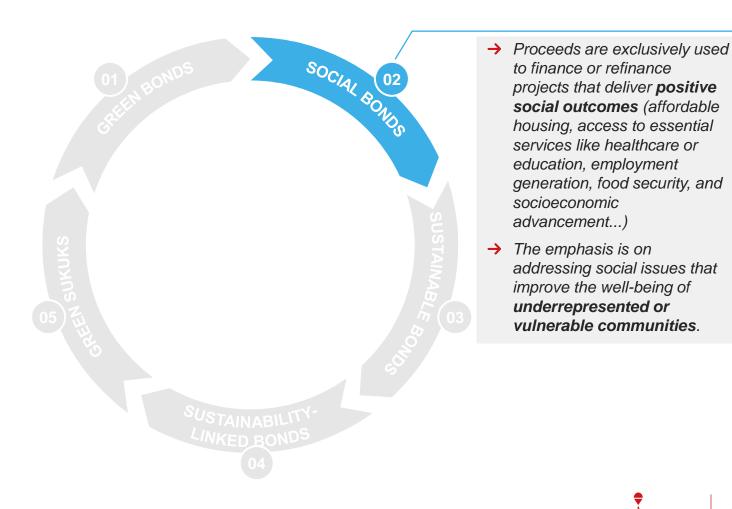


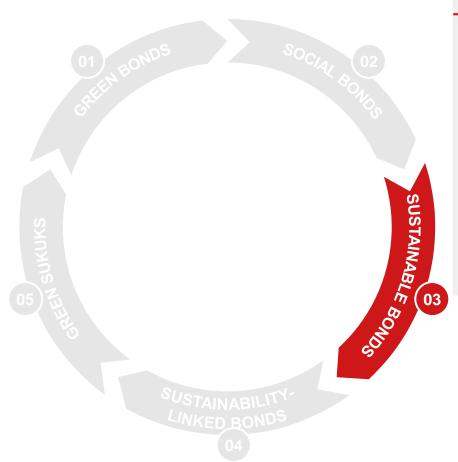
## Sustainable finance as a catalyst



- → 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.



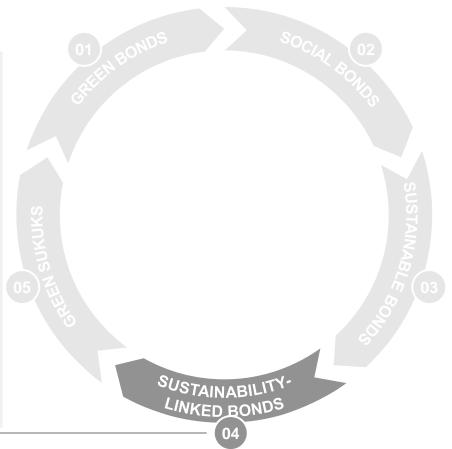




→ Combines aspects of both green and social bonds.

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.

→ 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.



→ 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 assetbased 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.



#### 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.

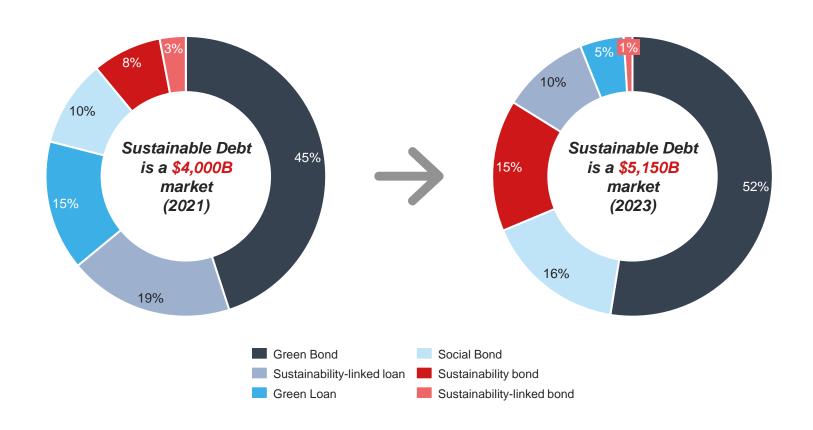


In 2021, Pavilion Energy issues a green Sukuk worth \$300M to finance the construction of its new corporate headquarters in the UAE. The project adhered to green building standards with the development designed to meet LEED Gold certification for energy-efficient lighting, renewable energy integration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

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



## **Evolution of the sustainable debt market**





# 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

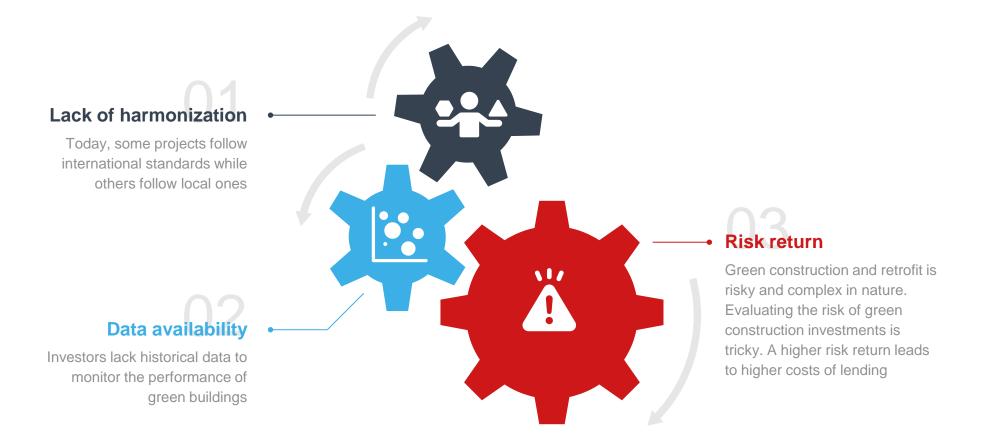
## ALMOST ALL GSSSB ISSUANCES IN THE UAE IN 2023 WERE USED TO FINANCE GREEN BUILDING PROJECTS

			Use of proceeds														
Issuer		Value (\$M)	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	Production technologies and processes
Dubai Islamic Bank		1,000	Х	×	Х	Х		×	×	×	Х	×					
Emirate of Sharjah		1,000	×	×	×	×	X	×	X	X	X	×	×	X	X		
Abu Dhabi National Energy Co.		1,000	×			×		×			X				X		
Aldar Properties PJSC		500	×	×	X	×		×									
Majid Al Futtaim		500	×	×		×		×									
First Abu Dhabi Bank		600	×	×	Х	×		×			Х		×				
Commercial Bank of Dubai		500		×	X	×					X						
Masdar		750	×														
First Abu Dhabi Bank		354	×	×	×	×	X	×			Х		×		X		

Issuance type Green bond Sustainability bond
Country United Arab Emirates

Source: Environmental Finance Database

## Key barriers to green finance in the UAE





Accuracy supports its clients in the financing of sustainable projects



## Accuracy's support

## A 'CONSTRUCTION + FINANCING + ESG TRIAD



Accuracy offers a tailor-made approach combining expertise in the construction sector, financing and ESG

#### 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.



Zulema Juan SANCHIS SAEZ

Partner & Director. Accuracy

#### 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.





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

