

SAVILLS RESEARCH 2021 ESG in the Middle East





Foreword

Today, 55% of the world's population live in cities and this number is set to rise to over 68% by 2050, as the global population swells and urbanizes. With more people projected to live in cities, according to the Organisation for Economic Co-operation and Development (OECD), global building stock is set to double by 2050.

The Middle East too has seen massive levels of construction over the past decade and this number is only set to increase as close to USD 2.5 trillion worth of projects are planned across the region till 2050. Construction and real estate activity contribute significantly to carbon emissions globally, and this rising construction pipeline is likely to continue contributing to changing climate.

Estimates suggest that by 2050, temperatures in the MENA region may increase 4°C higher on average. Temperature records have been repeatedly broken in the region in recent years, with the highest recorded temperature of 54°C being recorded in Kuwait in 2016. Some of the historically driest parts of the world, have also suffered flooding. In Oman, more than fifty per cent of residents in urban areas are concentrated along the Muscat and Al-Bathina coastline, which is highly exposed to storm surges and sudden onsets of sea level rise.

The impact on climate is not just limited to the initial construction phase. Day-to-day operations also contribute significantly to climate related issues. As per International Energy Agency (IEA), electricity consumption in buildings represents nearly 55% of global electricity consumption.

As development continues, due to urbanisation and a growing population, the built environment has an important role to play in combating climate change. There are already solutions that can help reduce carbon emissions. These include modern methods of construction and retrofitting existing projects. The use of technology and the growth in 'smart' buildings will improve energy efficiency and performance, whilst enhancing customer experience.

It's widely accepted that 'green' building status and a drive to more sustainable structures, is crucial. Delving deeper into the subject matter however, requires the understanding of seemingly endless acronyms and certifications.



Richard Paul Head of Professional Services Middle East +971 4 365 7700 richard.paul@savills.me



Building Certifications

Green building certifications are utilised to assess the sustainability credentials of a given building. Although certifications are often voluntary, there are a number of reasons why developers and owners have their buildings certified, as discussed by Marta Schantz, Senior Vice President for ULI Greenprint Centre for Building Performance:

"Demand for green building certifications is on the rise across the globe: Investors request properties achieve them as a way to consistently measure sustainability across their funds; Occupiers gain improved productivity, health, happiness, and employee retention from green buildings and certifications confirm those qualities in an asset; and local regulations increasingly align with green building certifications as a streamlined way to encourage sustainability throughout the jurisdiction."

Organisations with operations across the globe must choose the most appropriate certification for their market and their geography. Many countries have their own ratings methods while some certifications are international.

Rating tools vary in their approach and can differ depending on the sector. While this can be frustrating, there is logic to having different systems, as countries and sectors will rank the priority of sustainability issues differently. For example, in the Middle East, water efficiency will be much more important than in Ireland. That said, a universal building rating system that could be flexible for the local environment, would help coordinate green building adoption globally.

"Lack of good quality data and analytics around ESG variables are the biggest barrier to deeper or broader implementation of sustainable practises"



The three most internationally recognised certifications

LEED

Leadership in Energy and Environmental Design (LEED) is for all building types and sectors. LEED began in the US but is now used worldwide. Buildings can qualify for four levels of certification: certified, silver, gold, and the much-coveted rating, platinum.

The system was developed by the U.S. Green Building Council in 2000 and there are now 83,000 projects that have been LEED certified in nearly 150 countries. The US is unsurprisingly the largest market, accounting for 84% of LEED certifications.



BREEAM

Building Research Establishment Global Environmental Assessment Method (BREEAM) is an international programme that started in the UK, initially focusing on offices, but now covers other sectors too. It was launched in 1990, making it one of the oldest rating systems. It can be used throughout the lifecycle of a building

The certification has a star rating from one to six and a designation of acceptable, pass, good, very good, excellent or outstanding. BREEAM is used in 85 countries and has issued over 570,000 certificates.



WELL

The relatively newcomer on the block is 'WELL', which is slightly different to BREEAM and LEED, as it focuses on wellness and the impact that buildings can have on the health and well-being of those that use them. By analysing the air, water, nourishment, light, movement, thermal comfort, sound, materials, mind and community, the 'WELL' assessment focusses on human aspects and not just environmental.

It was developed in 2014 and uses gradings such as silver, gold of platinum. There are around 4,500 projects that are currently applying for WELL certification, across 62 countries. The US and the UK are the largest markets, followed by China, Australia and France.







According to Anthony Taylor,

Head of Real Estate at Emirates NBD Asset Management,

"The real estate sector has faced significant disruption resulting from challenging dynamics created by the Covid-19 pandemic. UAE residents typically spend over 90% of their time indoors, which means as landlords it is vital, we invest in our assets to ensure this time is spent in the healthiest and most productive environment possible. New considerations must be taken into account for the conditions in which tenants now live and work, and landlords need to remain agile in seizing opportunities to repurpose and reimagine how assets are used. We have taken this approach with one of our flagship assets in Dubai Media City, AI Thuraya Tower 1, and started major refurbishment works at the building. As part of the upgrades we're also looking at how quality of life can be improved for tenants."



Reducing carbon across real estate asset class

Carbon emissions are present at all stages of a property's lifecycle. In order to properly reach net zero, we need to try to eliminate emissions from the construction stage, through to the operational stage and throughout the building's lifespan. Carbon is emitted from the very moment construction begins, due to the emissions produced by the raw materials used in construction. The use of Cement, during construction, contributes close to 8% of global carbon emissions and carbon is also emitted during the transportation of materials to the building site. These emissions are referred as embodied carbon and unfortunately cannot be reduced during the lifecycle of the project.

When it comes to operational carbon, there are two key areas for all real estate sectors to focus on. Perhaps the most obvious is to remove fossil fuels as a source of energy and only use renewable energy sources. However, grid capacity is stretched, so improving the energy efficiency of buildings to reduce energy consumption is also necessary.

However, each real estate sector has unique challenges, a few of which are discussed below.

ACROSS THE LIFE CYCLE OF PROPERTY Completion **OPERATIONAL CARBON** EMBODIED CARBON and other construction Usage of the building (heating related emissions or cooling, lighting, appliances and equipment) Processing and transportation of raw materials Repair and maintenance **END OF LIFE CARBON** Demolition Disposal and transport of materials (emissions can be recovered if it's Demolition End of usage possible to recycle

THE SOURCES OF CARBON

Tips to achieve sustainable real estate

The targets should be

Relevant The target in-line with local government requirements and market conditions.

Measurable Progress should be periodically measurable.

Understandable Goals should be easy to understand for the various stakeholders.

Transparent The targets and the process to achieve them have to be transparent.

Reliable and Repeatable Measuring progress and making sure they are reliable and repeatable is critical for the success of the program and finally.

Based on factual and accessible data The targets and progress should be measured based on factual and accessible data.

OFFICES

Newly built offices are arguably at the most advanced stage of preparing for sustainability and trying to tackle the effects of climate change. However, the operation of office space, continues to be a significant contributor of carbon emissions.

A topical debate at the moment, discusses the environmental benefits of home working, versus that of occupying traditional office space. Employees working from home, rather than the office, results in a reduction in emissions. But these emissions have not been removed, instead they are relocated to an employee's home. Typically, it is hard to assess the relative benefits of home working versus working from the office, as there are many factors to consider: distance and mode of commute, energy source and efficiency of employee's homes versus the office, the season, even how many video calls are being made.

RESIDENTIAL

Cooling households is one of the largest challenges for the Middle East region. The amount of energy used for cooling homes, is growing faster than ever, as an abundance of new residential supply is being handed over every year.

As per OECD, air conditioning can represent more than 70% of peak residential electrical demand in the region on extremely hot days. It estimates that globally, energy requirements specifically for home cooling will triple by 2050,

New-build properties tend to be more energy efficient. Existing properties however, are harder to regulate. Questions arise around who will pay for retrofitting energy improvements and will governments need to subsidize.

LOGISTICS

The demand for warehouse space is continuously increasing as more retail moves online. In the UAE, the e-commerce sector reached a record USD 3.9 bn in 2020, a 53% y-o-y increase and is projected to grow to USD 8 bn by 2025. Along with more demand for logistic space, this in turn means more deliveries being made across the country, which will give rise to increased carbon emissions.

Warehouses are typically large buildings with thin walls and flat roofs, so by their very nature, they are hard to heat or keep cool. As air warms, it rises, and this presents another challenge, with studies showing it is not uncommon to have 20 degrees temperature difference between the floor and ceiling of a warehouse.

Heating / cooling is not the only source of energy use in warehouses. The recent evolution towards warehouse automation, robotics, data centres and cold storage has meant that warehouses are using more energy than ever before.

HOTELS

Sustainable tourism is a growing section of the hospitality industry, as travellers become more conscious of their 'footprint' they are leaving behind. Although the Covid-19 pandemic has put many trips on hold, as restrictions lift and travel resumes, the sustainability of hotels will likely become an important consideration.

Food and travel are other considerations for hotels. Like supermarkets, food wastage at hotels contributes to carbon emissions. For transportation, although the method guests use to travel is outside of the hotels' control, electric vehicle charging points can be installed and complimentary shuttle services can use electric vehicles.

RETAIL

Energy use for physical stores varies significantly according to the building fabric and age, but there are some common themes that impact carbon emissions for all retail buildings. Bright lighting is used to attract customers, consuming a high amount of energy and doors are often left open or are opened regularly leading to significant energy waste.

Supermarkets are worth a particular mention. Refrigeration is estimated to account for 30% to 60% of electricity consumption for these buildings, as open fridges are still the norm for displaying products, despite calls for refrigerators with doors to be the standard.

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There has been a lot of discussion around the environmental aspects of ESG in the initial sections. However, the social and governance part of the acronym is equally important. While addressing environmental issues do contribute towards improving social factors, a more focused approach is required to navigate the intricate subject matter. In simple terms, 'social' includes factors such as the impact of assets on occupiers and their communities, how technologies are changing how we live / work and what role real estate plays in meeting the requirements of the changing socio-demographic.

The 'G' is governance, and includes things such as culture, diversity and conduct. Governance is widely associated with how corporate's conduct their business operations. However, governments do play a role in creating the broad framework and laying down necessary regulations in which companies operate. Governance should be transparent, inclusive, efficient, accountable and carried out by taking into account the cultural dynamics of the region.

Countries in the region have seen strong economic growth over the past couple of decades and arguable the ESG implication of this economic growth may have been side-lined. It is similar to what was observed across other developed nations in the West, however the timeline is different. The rapid growth in real estate activity in the region coincides with an increasing focus on environmental and social issues. Can economic growth and fast paced development co-exist with responsible ESG policy?

Governments in the region are focused on growing sustainably. This is being ensured through regulatory guidelines and also development initiatives. The two biggest economies, United Arab Emirates (UAE) and the Kingdom of Saudi Arabia (KSA), are currently leading when it comes to such initiatives in the region. Various giga projects launched in Saudi Arabia are centred around the aim of building sustainably.

The LINE in NEOM (a futuristic planned city along the north west coast of KSA), for example, is proposed to accommodate a million residents, while preserving 95% of nature. If completed as planned, it will be the first city with zero cars, zero streets and zero carbon emissions.

What follows are a few government level initiatives to promote ESG in the Middle East.



FUTURE SAUDI CITIES PROGRAM

The program was launched and implemented in order to achieve the sustainable urbanization of the Kingdom, in response to the urban challenges arising from rapid growth. The "Future Saudi Cities" program is fully integrated with the Kingdom's Vision 2030 through its distinct goals and outputs. The main objective of this program is to develop environmentally sustainable cities with adequate infrastructure and high quality of life, in accordance with international standards for sustainability.

MOSTADAM

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Estidama is the Arabic word for sustainability and an initiative developed by the Abu Dhabi Urban Planning Council (UPC). The Estidama Pearl Rating System (PRS) is currently mandatory for proposed construction projects in Abu Dhabi. The PRS has been integrated into the building permit process. Construction of an applicable development is only possible if a project complies with the PRS requirements. The Executive Council Order of May 2010 states all new applicable buildings must meet the 1 Pearl requirements whilst all government funded buildings must achieve minimum 2 Pearls.

On the other hand, in Dubai the city was awarded the 'platinum rating' in the LEED (Leadership in Energy and Environmental Design) for Cities certification by the US Green Building Council in 2019 – becoming the first city in the MENA region to win the award.

In line with sustainable development goals, H.H. Sheikh Mohammed Bin Rashed Al Maktoum approved Al Sa'fat as a green building rating system in 2016. Al Sa'fat includes a set of mandatory requirements for all new buildings to obtain the Silver Sa'fa. Owners aiming to achieve higher performance may apply a set of additional requirements to achieve the Golden or Platinum Sa'fa. Regulations and specifications are based on the principle of improving the performance of buildings in terms of reducing the consumption of energy, water and materials and improving public health, safety and general welfare.





The ideas and concepts around ESG is constantly evolving. It is developing in line with demographic shifts, climate change and technological advancements. The social impacts originating from real estate are taking centre stage.

It is now established that 'Green' buildings are proven to enhance human health and wellness. Better environmental performance leads to economic prosperity, better quality of life, and an improved wellbeing for all. A clear link between ESG and financial performance will accelerate the widespread adoption of these practises. Various studies showcase a positive correlation between the two. Data availability and interpretation continue as the biggest challenge. However, the business case for investing into ESG best practice remains solid. Its importance is expected to continue to grow over the coming years.

Developers, investors and operators have to ensure their assets provide not just a destination but an avenue for individuals to access amenities that promote an improved wellbeing and have a strong integration with the wider community.

Real estate owners that do not adapt, are likely to suffer from "stranded assets", not just because of regulatory burden or consumer perception, but ultimately because of a reluctance to react. From an investor perspective, it's a question of avoiding the famous 'Kodak Moment', where being left behind lost a company its competitive advantage and ultimately its viability. However, change isn't without risk. Rapidly changing policy and financial disruption, from a need to switch to more expensive, low carbon technologies, could impact early adopters. But these risks are relatively small compared to the impact of climate change.



Savills Middle East

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Research



Associate Director Research +971 4 365 7700 swapnil.pillai@savills.me

Swapnil Pillai



Richard Paul Head of Professional Services & Consultancy +971 4 365 7700 richard.paul@savills.me

Suzanne Eveleigh

Head of Sharjah





Edward Carnegy Head of Abu Dhabi +971 2 441 1225 edward.carnegy@savills.me



Ihsan Kharouf Head of Oman +968 2205 7900 ihsan.kharouf@savills.me



+9716 572 3794 suzanne.eveleigh@savills.me



Catesby Langer-Paget Head of Egypt +20 2 37966711 Catesby.Langer-Paget@ savills.me



Harry Goodson-Wickes Head of Northern Gulf +973 1756 2860 harry.goodsonwickes@savills.me



Ramzi Darwish Head of Saudi Arabia +966 11 484 7161 ramzi.darwish@savills.me

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