3rd Annual EGBC Congress





On October 20th and the 21st 2014, Emirates Green Building Council held its 3nd Annual Congress at the Grosvenor House in Dubai. The Congress was held under the patronage of <u>HE Dr. Abdullah Belhaif Al Nuaimi,</u> the UAE Minister of Public Works. This year's Congress also marked a pivotal step up for EmiratesGBC with the signing of a groundbreaking MOU between EmiratesGBC and the Ministry of Public Works commencing their joint efforts to promote the country's environmental and sustainable global competitiveness.

Leading stakeholders from the region who attended the event included representatives from the Government, construction, development and the supply industry. Under the theme "Sustainable Cities for the Future" over 130 Congress attendees gathered to discuss the opportunities & challenges related to the role of cities & regions in catalyzing, facilitating & stimulating sustainable innovation, products, services, technologies & new business models.

The success of the event would not have been possible without the generous support received from our partners, sponsors and members. Short summaries for each session and highlights of each presentation are provided in the following pages.

Welcome Speech by EmiratesGBC Chairman Saeed Al Abbar

The EmiratesGBC Chairman Saeed Al Abbar warmly welcomed the Congress participants, speakers and sponsors who have supported the Council to become a strong and visible stakeholder in the UAE green building arena. He acknowledged the progresses and achievements reached by all members since the Council's formation, and emphasized the importance of these events where great minds come together to seize opportunities in sharing knowledge and bringing goals to life.

Welcome Address by Guest of Honor—Ministry of Public Works, HE Dr. Abdullah Belhaif Al Nuaimi.

HE Dr. Al Nuaimi opened the Congress with an inspiring presentation highlighting the importance of sustainability in the region and its synergistic relationship with a green economy; a goal spearheaded by HH Sheikh Mohammad Bin Rashid under the UAE's Vision 2021. HE Dr. Al Nuaimi also emphasized the importance of collaboration between stakeholders in the industry and how this process is effectively implemented







CONGRESS

Mr. Saeed Al Abbar, HE Eng Zahra Salman Alaboodi, HH Dr. Abdullah Belhaif Al Nuaimi

at the EGBC's Annual Congress. The welcome address concluded with a quote from HH the late Sheikh Zayed:

"We cherish our environment because it is an integral part of our country, our history and our heritage. On land and in the sea, our forefathers lived and survived in this environment. They were able to do so only because they recognized the need to conserve it, to take from it only what they needed to live, and to preserve it for succeeding generations".

MOU Signing—Emirates Green Building Council and UAE **Ministry of Public Works**

Following HH Dr. Al Nuaimi's welcome speech, the MOU signing ceremony commenced. It was signed by Emirates Green Building Council Chairman Saeed Al Abbar and Undersecretary of Ministry of Public Works HE Eng Zahra Salman Alaboodi.

The MOU signing signifies a new working collaboration between EmiratesGBC and the UAE authorities, one which will further advance Mr. Saeed Al Abbar and HE Eng sustainable urban development in the Emirates.



Zahra Salman Alaboodi,

Session 1 - Keynote Presentations

"Environmental Impact Assessments for Projects" by Dr. Salaheddine Issa, Ministry of **Public Works (MOPW)**

The Ministry of Public works addressed its goals to standardize the Environmental Impact Assessment (EIA) reporting process throughout the region for all new construction developments. Dr. Issa discussed the requirements that have been established to facilitate project implementation based on time, location and surroundings. The presentation delved into the key actions undertaken by the MOPW to assess the environmental impact of projects and identified elements that mitigate harm. Challenges associated with EIAs and addressed by MOPW include a lack of commitment to laws and regulations, absence of awareness, overpopulation and its mismanagement, and lack of monitoring and surveillance.



Dr. Salaheddine Issa

The MOPW aims to alleviate these regulatory hurdles with their Green Palm System introduced which includes an evaluative study of the environmental effects of any new development.

"Demand Side Management Strategy 2030. Introduction and Progress to Date" by Faisal Ali Rashid, Dubai Supreme Council of Energy.

Mr. Ali Rashid provided an enlightening presentation, introducing and updating Congress participants on the Demand Side Management (DSM) program of the Dubai Integrated Energy Strategy (DIES) 2030. As part of the national and local agenda, Dubai is well on its goal to diversify its energy supply, promote energy conserva-



Mr. Faisal Ali Rashid









tion, create new jobs through energy efficiency initiatives and influence consumer behaviour and become a role model in energy efficiency and security. The Supreme Council's DSM strategy is its main focus area. The Strategy is broken down into eight programs each headed by a DSM Executive Committee comprised of organizations and regulatory agencies such as DEWA, ESMA, DM, RSB, and RTA. The Strategy has the potential to bring about savings of up to 30% in energy use and 40% in water use. This translates to 19 TWh less energy used and 47 BIG of water used equalling 10.7 Mn tons of CO₂ emissions. In addition to its goals, DSCE outlined the collaborative effort of its Executive Committee. Finally, Dr. Faisal acknowledged that their work would not be possible without the introduction of new technologies, modern equipment and best practice methods, and the above serve to promote the creation of Dubai as a smart city.

The Green Journey – Transition to Low Carbon Built Environment" by Eng. Madiha Salem and Paravasthu Jagannathan - Trakhees EHS.

As the sustainability branch of the first organization in the country to add sustainable building criteria to its development portfolio, Trakhees's Environment, Health, and Safety representatives, Eng Madiha Salem and Paravasthu Jagannathan shared the lessons learned in over six years of commercial licensing for sustainable buildings, policy implementation, and challenges faced with regulation enforcement. The most important message they provided the audience was how lack of awareness com- Eng. Madiha Salem pounded many of the setbacks inherent in the adoption of any new regulatory system.

Through the years, Trakhees has streamlined their regulatory infrastructure, resolving issues that initially led to noncompliance; they identified gaps in the certification process by focusing on a green building consultation pre-qualification program and establishing clear client procedures, forms, and guidelines. In order to effectively implement their environmental goals, Trakhees has also focused on rigorous post operational Measurement and Verification (M&V) and look forward to bench-





Mr. Paravasthu Jagannathan

marking existing and future energy efficient projects. The presentation was followed by a case study of a specific project that undertook sustainable measures using Trakhees's localized in-house Green Building Certification Program.















"Complete Sustainable Communities" by Abdullah Al Saigal and Abdel Aleem Khan – Abu **Dhabi Urban Planning Council**

A relatively new sustainable development rating system, Abu Dhabi Urban Planning Council (UPC) has carved a clear-cut path and taken methodical steps in creating Complete Sustainable Communities (CSCs) within the Emirate. Abu Dhabi's CSCs are informed by welldesigned, integrated, and active communities, buildings, and villas; rated for all three phases of development: design, construction and operation. This holistic approach to sustainable urban planning involves developing healthy and safe communities which enhance the local culture and also maintain the region's precious ecology. As part of the Abu Dhabi Economic Vision 2030, the Estidama Pearl Rating now boasts over 1.5 million square meters of constructed and certified sustainable communities. In addition, mandatory requirements of minimum pearl rating for new communities, buildings and villas and for both the public and private sector, ensure that all future construction is tied with the region's economic and sustainable development goals.





Mr. Abdullah Al Saigal



Mr. Abdel Aleem Khan

Sayed Aga—United Nations Development Program in UAE

Acknowledging EGBC's efforts for its timely Congress, Sayed Aga presented UNs views on climate leadership and the importance of making change. Citing the United Nation's Climate Summit in Paris, he emphasized why gatherings such as the EGBC Congress are important. Global population and rising standards of living are creating an imbalance in the worlds ecosystems and it is only through effective leadership that countries will be able to bring about the necessary change. A good example of this leadership is H.H. Sheikh Mohammad bin Rashid Al Maktoum's Vision 2021 and its enclosed "green strategy". Mr. Aqa Mr. Sayed Aqa emphasized joint collaboration between research institutes such as



Masdar and the government, public-private partnerships, and more effort towards creating a functioning green economy. Numerous examples worldwide are sufficient for local leaders to see how building green makes vital economic sense.

"Global Action towards Resource Efficiency & Climate Mitigation in the Urban & Building Sector: Driving through Knowledge, Policy, and Partnerships" by Arab Hoballah—United Nations **Environment Program.**

The building sector has made a significant impact on the environment but it also offers tremendous opportunities as well that can reverse the damaging trend. At a city wide level, climate goals can be incorporated into the building sector by translating climate finance into green construction and development. Looking at it in another way, climate goals cannot be achieved without the building sector. The United Nation Environmental Program's Sustainable Buildings and Climate Initiative aims to promote









sustainable building practices worldwide by creating a common language that removes the barriers in sustainable development; other objectives include supporting policy makers in the development of economic and market-based tools, that enable them to serve as active players in implementing their local climate strategies. The role of Green Building Councils is integral for market transformation because of their efforts in local engagement and the creation of effective benchmarking programs.



The presentation introduced other key players involved in this *Mr. Arab Hoballah* process such as designers, contractors, suppliers, material extractors transporters, and resolved the specific challenges they face. Initiatives that were discussed included the development of integrated building sector supply chains and a systems approach to resource efficiency in cities by creating internal economies as critical steps toward climate change solutions.

"C40 CITIES - City Action and Best Practices in Building Energy Efficiency" by Sanjay Sridhar — C 40 Cities Climate Leadership Group

As a global network of megacities working to reduce carbon emissions, the C40, and its 60 member cities understand the importance of data closure. Member cities work actively in close collaboration by maintaining a knowledge sharing platform which provides city leaders, including mayors, access to best practices from each city; a global database of documents, roadmaps and decision-making tools that are measured against local challenges.

The C40 network takes climate leadership to a globally integrated level and enables individual cities to reduce the risks inherent in cli-



Mr. Sanjay Sridhar

mate governance. Member cities access workshops, conferences, and summits to learn which sustainable urban development decisions constitute a reinvention of the wheel. Case studies looked at successful urban development initiatives that have become city hallmarks, for exp, London's RE:FIT energy efficiency program, Japan's Cap & Trade, Melbourne's financing mechanism, and New York City's mandatory benchmarking project. Figures provided highlighted and quantified the effectiveness of each program.

"Green Thoughts, Green Talk: Sustainable Action." by Habiba Al Marashi—Emirates Environmental Group (EEG).

Sustainability is not only an important topic, it is integral if coming generations need to survive on this planet as they will have to share the resources that are currently receding from the globe. The ecological damage from the past few decades continues to grow and biodiversity is reducing in major populated countries worldwide – because of the interconnected elements in nature, this loss can pick up speed if ecological damage continues.



Mrs. Habiba Al Marashi









If sustainability is to become entrenched among planning goals, then it is imperative that all stakeholders come on board, including developers. Taking lessons and help from examples around the world, the UAE is strategically well-positioned to reverse its current trend of Business As Usual (BAU) development and growth. The UAE Government has and will have to ramp up efforts to create more education and awareness in addition to its policy initiatives which make resource efficiency, market-wide compliance and monitoring, and sustainable corporate strategy, a part of mainstream BAU development.

Session 3 - Local and International Advances in Sustainable Cities

"Local and International Advances in Sustainable Cities" | Panel Discussion moderation by Sarfraz Dairkee. Panelists: Kamal Azayem – Dubai Municipality, Anthony Mellows – Masdar City, Antonio Ceci – Aldar Properties, Wasim Aldouni – Diamond Developers.

The first panel session of the Congress allowed local developers to share the ambitious targets they have met to improve energy efficiency. Dubai Municipality (DM) shared the challenges in getting the green codes accepted and the continuing challenges in their implementation. Examples of existing projects were presented to stakeholders, such as DM's Al Fuhaiqi Souq which reduced its energy use by 43% and water use by 15%. Masdar's Anthony Mellows summarized that their success in adopting strategies to building sustainable cities lies in Masdar's adoption of traditional technologies and practices and aligning them with current policies and regulations. The need for education and awareness in all sectors was agreed upon by the panelists as well as the alignment of the current regulatory regime with past lessons learned and translated through adequate Corporate Social Responsibility. This knowledge gap is best filled by Initiatives such as the one between EGBC and the government.







Mr. Sarfraz Dairkee, Mr. Anthony Mellows, Mr. Antonio Ceci, Mr. Kamal Azayem, Mr. Wasim Aldouni

CASE STUDY

"Implementation of the Los Angeles Green Building Code" by Osama Younan - City of Los Angeles

To date, the City of Los Angeles has checked off nearly 78,000 existing structures for positive compliance of its Green Building Code which was launched in 2008. The City and its regulation and compliance enforcement provide a good example of how regional mandates can cooperate with local mandates without conflict and confusion. The first step in developing the Building Code required a change in thinking: the process was only successful because city officials began to equate green buildings with safety. In addition, a



Mr. Osama Younan

combination of the state-wide green building mandate known as CALGreen (2011) and the non-profit









nationwide LEED rating system (2001) has created an effective environment of sustainability, providing the requisite language cities need in order to amend standards based on their local circumstances, and finally adopt and implement them accordingly.

"Existing Policies and Regulations in the Region: Issues, Challenges, and the Need to Develop New Policies" | Panel Session moderated by Saeed Al Abbar. Panelists: James Grinnell—Dubai RSB, Abdel Aleem Khan – UPC, Pravasthu Jagannathan – Trakhees EHS.

The second panel discussion discussed the challenges in implementing existing UAE regulations.

- Trakhees outlined the most prominent lessons learned from their experience in regulating sustainable
 development. It was agreed was that there has to be continued and more focused instructions and guidelines developed for consultants to better streamlining of development. Procedures should be put in place
 which makes it difficult to miss a regulation, and this implies synergy between various regulatory agencies, lack of which can get confusing for consultants.
- Post-occupancy M&V still remains a challenge, and policing projects to their completion is hard to implement when there is little awareness and a lot of green washing.
- Estidama recounted the initial resistance they faced from the industry when the Pearl Rating System was launched. Resolutions came about with stakeholder support and construction support; and by integrating design teams in all aspects of building construction.
- RSB provided the example of pending district cooling regulations: they need to be made an integral part
 of development and people should have the choice to select housing with or without district cooling –
 hence there should be a fair distribution of risk.
- Trakhees believe that more non traditional fiscal instruments need to be explored, and there should be a strong nodal authority, (which most likely will be played by DSCE). Single regulations make it easier for stakeholders to administer and regulatory bodies to enforce.



Mr. Saeed Al Abbar, Mr. James Grinnell, Mr. Abdel Aleem Khan, Mr. Pravasthu Jagannathan

"Meeting the Challenges of Creating Sustainable Urban Future" | Panel discussion moderated by Jeffrey Willis. Panelists: Arvind Rotiwar – Siemens LLC, Daniel Hajjar – HOK.

Densification was the first urban planning component bought up by the panellists. The framework for the discussion was asset management and how UAE cities can use urban planning components such as densification to leverage their sustainable development goals. Gentrification was also highlighted as a challenge that needs to be addressed, as it manifests as another waste of the urban core. Affordability, which only government can check against, must be integrated with supporting infrastructure schemes such as sustainable transportation. The panellists emphasized how sustainable cities are resourceful cities and that food









CONGRESS Mr. Jeffrey Willis, Mr. Arvind Rotiwar, Dr. Daniel Hajjar.

production, such as through urban farming is a method cities should look into as it is one way to achieve resourcefulness without hurting densification. In summation, managed urbanization is a key tool and is effective if it also involves bridging the cultural gap between rural, suburban, and urban areas.

Session 4—UAE Leading the Way—Presentations from Award Winners

"The Change Initiative", by Gundeep Singh—The Change Initiative

"Problems cannot be solved at the same level of awareness that created them." - Albert Einstein. As a 2014 EGBC Award Winner for Green Building of the Year, Mr. Singh voiced his views on sustainability and how the interpretation of the word has deviated from its purpose. According to Mr. Singh sustainability is not how we implement it these days and we should get it right: sustainability is and should not be about money, and about targeting the mass market. It can't simply be a buzzword. Instead, Mr. Singh emphatically emphasized that sustainability should be the ethos that defines a country or a city's lifestyle. Mr. Gundeep Singh



In summation, Dubai cannot become truly sustainable unless its residents think and live sustainably. Unless customers don't push for it and the government does not support it, suppliers will never supply it, i.e. sustainability. "Sustainability rests on the cusp of commercial viability, value and practicality (and)... sustainable cities will only come if we invest in the future and not just the present."

"Making Sustainable Communities" by Jeevan D'Mello— **Emaar Community Management Group**

As a 2014 EGBC Award Winner for Green FM Company, Emaar Community Management shared best practices from their Green Facility, and their successful award-winning creation of integrated and holistically sustainable communities. Moving beyond the regulars such as solar lighting, fixture refurbishment, and xeriscaping, Emaar Communities boast an extensive waste segregation program, golf Mr. Jeevan D'Mello carts, and transportation to and from public transportation hubs - last



year they channelled 8000 commuters to avoid traffic blockage and congestion which depletes air quality in neighbourhoods as well as the quality of life. Initiatives also include clothe drives which build community morale. Getting the community involved is the premise and the way Emaar identifies with sustainability and sustainable communities.

Day 2 Program dedicated to workshops

Workshop 1—Commercial Sector Workshop and Building Tour—Dubai Airport Free Zone Authority (DAFZA) | Facilitated by Faisal Al Belooshi and Ali Dham Al Ani — DAFZA and Jayant Tamanhe—Siemens,

At DAFZA, Congress participants were introduced to an impressive record of energy and water savings achieved at the Authority's headquarter building. Sustainable initiatives implemented included district cooling, building system optimization systems, and lighting retrofits. The work undertaken has enabled

DAFZA to save over 16 million AED in a span of three years. Current numbers show that their sustainable strategy saves them

> over one million in water usage. AED 1993 per month is saved at their headquarters which equates to 8.90 AED per head in water expenses





Workshop 2—Hospitality Workshop — facilitated by Chris Brown — HOK, Sandrine Le Baviant — Farnek and Rohit Salunki —Sofitel Hotel

At the hospitality workshop attendees conducted a roundtable discussion looking at the merit of regulations and how they can be effectively streamlined with sustainable goals. Currently these goals are thwarted by lack of synergy between head agencies and regulations that are still in the development stages. Progress remains slow. Workshop participants discussed the need for regional codes and not just a variety of emirate-specific regulations. Fewer codes and systems overall can potentially lead to better compliance and less confusion between consultants and clients. EGBC's role as an important stake-holder and networking platform was also acknowledged.



Shocking statistics were shared by participants regarding inadequate regulations leading to missed economic opportunities, and the consensus was that the hospitality industry and their bottom line can benefit from regulations that promote sustainable technologies.







Emirates Green Building Council would like to thank the sponsors who contributed toward the success of the 2014 Annual Congress:

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The Emirates Green Building Council was formed in 2006 with the goal of advancing green building principles for protecting environment and ensuring sustainability in the United Arab Emirates.

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