Thank you for joining!
This lecture will begin shortly at 12PM BST
Lecture Series

Overview of the seven lectures forming part of this series:

1. **Introduction to the UN 2030 Sustainable Development Goals**, Mina Hasman, SOM
   Provides an overview of the UN 2030 SDGs together with other related international agreements, and describes the importance of the Goals for Built Environment Professionals.

2. **Planning for Rapid Urbanisation**, Ben Bolgar, The Prince’s Foundation
   Outlines a framework for use in secondary cities which are experiencing rapid growth but which may have little or no access to professional planning expertise.

3. **Planned City Extensions**, Alfredo Caraballo, Allies and Morrison
   Provides a reminder of key master-planning and urban design principles such as: site analysis, micro-climate design, density, mixed use, walkability etc.

4. **Resilient Infrastructure**, Ian Carradice, Arup
   Explains the context, relevance and drivers to develop resilient infrastructure by adopting an integrated design approach and considering planetary solutions to address climate related challenges.

5. **Climate Responsive Design**, Peter Clegg, Isabel Sandeman and Rachel Sayers from FCB Studios, and Rafiq Azzam, Shatotto
   Part one is focused on ‘A Manifesto for delivering Climate Responsive Design’, and Part Two, entitled ‘Collaborating for Sustainable Development’, provides a case study of how the principles of Climate responsive design have be used on a project in Bangladesh to create an inspiring and comfortable educational environment for the Aga Khan Academies Unit.

6. **Heritage-led Regeneration**, Geoff Rich, Feilden Clegg Bradley Studios
   Describes the value of heritage led regeneration in terms of the reuse of existing buildings, and the potential to generate social and economic development.

7. **Sustainable Outcomes Guide**, Gary Clark, HOK London Studio
   Provides a practical explanation of the outcomes that need to be delivered if we are to achieve development which is sustainable. Includes meaningful, measurable targets and associated metrics.
UN 2030 SDGs

Aim:
1. to inform on the global climate change context as it relates to built environment and people
2. to give insights on the international commitments that aim to address climate change
3. to provide a detailed understanding of the UN 2030 Sustainable Development Goals
We are living in a rapidly changing world – where climate change has pushed the Earth into an unchartered territory.
Selected significant climate anomalies + events – January 2020

**ALASKA**
January 2020 was Alaska’s coldest January since 2012 and tied with 1970 as the 13th coldest on record.

**CONTIGUOUS UNITED STATES**
The contiguous U.S. had its fifth warmest January on record. No state ranked average or below average for January.

**HAWAIIAN REGION**
The Hawaiian region temperature departure from average for January 2020 was the second highest for January on record.

**SOUTH AMERICA**
South America had its second highest January temperature departure from average on record.

**CARIBBEAN REGION**
January 2020 was the Caribbean’s second warmest January on record.

**ARCTIC SEA ICE EXTENT**
January 2020 Arctic sea ice extent was 5.3 percent below the 1981–2010 average—tying with 2014 as the eighth smallest January sea ice extent since satellite records began in 1979.

**EUROPE**
Europe had its second warmest January on record, behind 2007. Several European countries had a top 5 warm January.

**ASIA**
Much of Russia had temperature departures that were at least +5.0°C (+9.0°F) or higher. Overall, this was Asia’s second warmest January on record.

**GLOBAL AVERAGE TEMPERATURE**
January 2020 average global land and ocean temperature was the highest for January since records began in 1880.

**AUSTRALIA**
Australia had its third warmest January on record. Regionally, Queensland had its second warmest January on record, while New South Wales had its fifth warmest January.

**AFRICA**
July 2019 was Africa’s warmest July on record.

**ANTARCTIC SEA ICE EXTENT**
January 2020 Antarctic sea ice extent was 9.8 percent below the 1981–2010 average—tying with 2011 as the tenth smallest January sea ice extent on record.
Last year, sudden-onset hazards resulted in over 17 million displacements in 144 countries and territories around the globe.
Urban population is expected to increase by 2.4 billion in the next 30 years – with the majority of people living in cities.
In the next 35 years, over 230 billion m² of buildings will be constructed and/or renovated in cities worldwide.
This is an area equal to the entire current, global building stock.
Buildings generate nearly 40% of annual, global Greenhouse Gas emissions.
Failure to manage rapid urbanisation well, also contributes to poverty, inequality and vulnerability.
Climate change is expected to cause approximately 250,000 additional deaths/year.
Built environment professionals have a responsibility to engage with the challenges being faced by cities around the world.
The **UN 2030 Agenda** is a plan for action for people, planet and prosperity, providing a blueprint to deliver a sustainable world in this ‘decade of action’ (2020-2030).
The Paris Agreement – established in 2015 at the 21st Session of the Conference of Parties (COP21) – brings all nations together to combat climate change – by accelerating and intensifying actions and investments needed for a sustainable, low carbon future.
IPCC’s Special Report on Global Warming of 1.5°C highlights the need for “deep emissions reductions,” and “rapid, far-reaching and unprecedented changes in all aspects of society” to limit global warming to 1.5°C.
“...1.5°C would require rapid and far-reaching transitions... at an unprecedented rate.”

(UN Special Report, Global Warming of 1.5°C, October 2018)
UNEP’s Emissions Gap Report presents the latest data on the expected gap in 2030 for the 1.5°C and 2°C temperature targets of the Paris Agreement.

The latest report of 2019 looked at the potential of the energy transition and efficiency in the use of materials.

5x increase in collective current commitments
The Sendai Framework for Disaster Risk Reduction 2015-2030 advocates for substantial reduction of disaster risk and losses in lives, businesses and assets.
The Addis Ababa Action Agenda – adopted in 2015 – provides a global framework for financing sustainable development by aligning all financial flows and policies with economic, social and environmental priorities.
The 17 UN Sustainable Development Goals (SDGs) are an urgent call for action by all countries in a global partnership.

The SDGs are universal.
The SDGs are about integration.
The SDGs are about transformation.
The UN 2030 SDG #1’s mission is to end poverty in all its forms and dimensions by 2030, everywhere.
How can this design contribute to the goal of ending poverty in all its forms and dimensions?
Volontariat Home for Homeless Children, Pondicherry, India
The UN 2030 SDG #2’s mission is to end all forms of hunger and malnutrition by 2030.
How can this design contribute to ending hunger, and encouraging the transition to sustainable agriculture?
The Michigan Urban Farming Initiative, Detroit, Michigan, USA
The UN 2030 SDG #3’s mission is to ensure healthy lives, address inequalities, and promote well-being for all at all ages.
How can this design help ensure healthy lives and well-being for all, at all ages?
Konditaget Lüders – the Fitness Roof Lüders, Copenhagen, Denmark
The UN 2030 SDG #4’s mission is to ensure inclusive, equitable quality education, and promote lifelong learning opportunities for all.
How can this design support quality education and lifelong learning?
The Community Dome (Zaa'tari Classroom), Zaa'tari Village, Jordan
The UN 2030 SDG #5’s mission is to achieve gender equality and empower all women and girls.
How can this design advance gender equality and the empowerment of women and girls?
Kachumbala Maternity Unit, Kachumbala, Uganda, Africa

https://www.hksinc.com/what-we-do/case-studies/kachumbala-maternity-unit/
The UN 2030 SDG #6’s mission is to ensure availability and sustainable management of water and sanitation for all.
How can this design help ensure the sustainable management of water and universal access to sanitation?
Wild Mile, Chicago, Illinois, USA
The UN 2030 SDG #7’s mission is to ensure access to affordable, reliable, sustainable and modern energy for all.
How can this design contribute to a sustainable energy transition?
Mount Sinai Kyabirwa Surgical Facility, Kyabirwa, Uganda
The UN 2030 SDG #8’s mission is to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
How can this design promote decent work for all?
The UN 2030 SDG #9’s mission is to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
How can this design advance sustainable industrialization and innovation, especially in those places that do not have access to modern industry?
Madinat Al Irfan, Muscat, Oman
The UN 2030 SDG #10's mission is to reduce inequality within and among countries.
How can this design help to reduce inequality within and among countries?
The House of the Disabled People’s Organization, Taastrup, Denmark

The UN 2030 SDG #11's mission is to make cities and human settlements inclusive, safe, resilient and sustainable.
How can this design make our cities more inclusive, safe, resilient, and sustainable?
Empower Shack, Cape Town, South Africa
The UN 2030 SDG #12’s mission is to ensure sustainable consumption and production patterns.
How can this design transform production and consumption patterns, to make them more sustainable?
Mjøstårnet, Brumunddal, Norway
The UN 2030 SDG #13’s mission is to take urgent action to combat climate change and its impacts.
How can this design be part of the urgent action that is needed to combat climate change and its impacts?
Qún lì Stormwater Park, Harbin City, China
The UN 2030 SDG #14’s mission is to conserve and use the oceans, seas and marine resources for sustainable development.
How can this design be part of caring for our oceans and seas?
The Wadden Sea Centre, Jutland, Denmark
The UN 2030 SDG #15’s mission is to protect, restore and promote sustainable use of terrestrial ecosystems.
How can this design help to protect and restore ecosystems and preserve biodiversity?
Q in Huángdào Red Ribbon Park, Q in Huángdào City, China
The UN 2030 SDG #16’s mission is to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
How can this design contribute to the development of peaceful, inclusive, and just societies?
Manica Community Centre, Manica, Mozambique
The UN 2030 SDG #17’s mission is to strengthen the means of implementation and revitalize the global partnership for sustainable development.
How can this design advance the global partnership needed to achieve all of these goals?
The Climate Tile, Copenhagen, Denmark
SDGs as a powerful tool to create change.
Advancing Net Zero
A World Green Building Council global project

WorldGBC definition:
A net zero carbon building is highly energy efficient with all remaining energy from on-site and/or off-site renewable sources.

100% of buildings must operate at net zero carbon by 2050.

All new buildings must operate at net zero carbon by 2030.

Key Principles:
1. Measure and disclose carbon
   Carbon is the ultimate metric to track, and buildings must achieve an annual operational net zero carbon emissions balance based on metered data.

2. Reduce energy demand
   Prioritise energy efficiency to ensure that buildings are performing as efficiently as possible, and not wasting energy.

3. Generate balance from renewables
   Supply remaining demand from renewable energy sources, preferably on-site followed by off-site, or from offsets.

4. Improve verification and rigour
   Over time, progress to include embodied carbon and other impact areas such as zero water and zero waste.

UN 2030 SUSTAINABLE DEVELOPMENT GOALS
SKIDMORE, OWINGS & MERRILL LLP

The Global Alliance for Buildings and Construction (GlobalABC) connects private sector and organisations to drive the transformation towards a zero-emissions, efficient, and resilient buildings and construction sector.
- Raising ambitions to meet the Paris Agreement goals
- Mobilising all actors along the value chain
- Connecting with key stakeholders
“A Pathway to 2050” roadmap identifies that – with capacity building, multi-stakeholder engagement and financing – the transition towards zero-emissions is possible.
We must be bold enough to demand meaningful change, and inventive enough to make it a reality!
Commonwealth Association of Architects
Engaging with the UN 2030 Sustainable Development Goals

We hope you found this lecture of interest and that you will be interested in the other lectures in this series:

1. Introduction to the UN 2030 Sustainable Development Goals
2. Planning for Rapid Urbanisation
3. Planned City Extensions
4. Resilient Infrastructure
5. Climate Responsive Design
6. Heritage-led Regeneration
7. Sustainable Outcomes Guide

The Commonwealth Association of Architects would like to extend its thanks to all the contributors for their support in the creation of this pilot programme. The CAA welcomes feedback together with suggestions for future topics and would be pleased to hear from subject matter experts from around the Commonwealth who may be interested in contributing future material.

For this or any other issue, please contact: admin@comarchitect.org
Thank you for joining!

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