

Editorial Preface

EARTH DAY 2022 ‘INVEST IN OUR PLANET’: ARE WE PUSHING THE BOUNDARIES TOWARDS SUSTAINABLE DESIGN?

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Each year on the 22nd of April, billions of people across the globe celebrate ‘Earth Day’. Earth Day was first celebrated in the US in 1970. However, today about 193 countries celebrate this day in order to show the support in solving environmental issues around the globe. This involves several environmental issues from protecting the soil to climate change. Across the world many countries have been pressing for green agendas, ensuring universal and thorough sustainable living conditions for the future. For instance, about 28 major cities, including New York City and Washington, DC, in the US and Cape Town and Johannesburg in South Africa, have committed to achieving net-zero building operations by 2050.

Sustainability has become a focus in the world of architecture and design, inspiring designers to rethink how they design today. In fact, Earth Day is an annual reminder to the designers of their responsibilities to protect the environment and to change how the designers design to mitigate environmental issues. It is known that buildings consume a third of the energy produced and are responsible for nearly 40% of global carbon emissions. The built environment can play a key role in supporting the transition towards a net-zero carbon emissions. Designers have the capability and responsibility to provide solutions that minimize the environmental impact of the structures they design. There are several options such as reuse existing buildings without building a new one. Designers such as the architects can convert poor performing building into beautiful, sustainable and energy efficient without offsetting creativity. For products with high carbon footprints like aluminium, plastics and foam insulation, careful use is essential. Designers should go for the use of high-recycled content materials especially metals which normally contains higher carbon footprint. Other strategies such

as designing the building according to the activity and the time of the day thus uses low electricity and further low energy. Designers should also make wise choices when it comes to the shape, size and colour of their designs which can have extensive consequences.

Landscape architects are also essential actors in creating sustainable places by suggesting a nature-based solution. Landscape architects design with nature by creating a unique and interconnected environmental issue. This can be tackled by most of the landscape architects by looking into urban green infrastructure designs such as bioswales, raingarden etc in mitigating flood and urban heat island, energy and carbon efficient strategies such as green roofs, green wall, which can also enhance climate resilience etc.

Ultimately, the designers need to work closely with other professionals in order to mitigate CO₂ at local and international level at the same time be equipped with information regarding environmental issues. It is no longer a choice to reduce carbon emissions; it is a necessity and not an impossibility in today’s time.

I would also like to thank all of the authors who contributed to this issue. Eight articles have been published where some of these articles are directly or indirectly related to issues related to this year’s Earth Day theme. It is timely, designers need to engage themselves in resolving global issues e.g. towards the reduction of CO₂, flash flood, global warming, food security etc. through research, practice and innovations. It is also hoped that in the future ALAM CIPTA would like to receive more issues related to how designers solve environmental issues in the future. On behalf of the editors, I would like to acknowledge my gratitude to all the authors and reviewers who have contributed to this issue.