Editorial

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In October 2018 the Institution of Civil Engineers (ICE) co-hosted the Global Engineering Congress (GEC), a gathering of over 3000 built environment professionals from around the world. The theme of the congress was the mobilisation of the global engineering community to meet the Sustainable Development Goals (SDGs) laid out by the UN in *Transforming Our World: the 2030 Agenda for Sustainable Development* (UN, 2015).

If you have not come across *The 2030 Agenda for Sustainable Development*, it is a worthwhile read that sets out the full breadth of life touched by the 17 SDGs listed below (UN, 2015: p. 14).

1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3. Ensure healthy lives and promote well-being for all at all ages.
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.
7. Ensure access to affordable, reliable, sustainable and modern energy for all.
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
10. Reduce inequality within and among countries.
11. Make cities and human settlements inclusive, safe, resilient and sustainable.
12. Ensure sustainable consumption and production patterns.
13. Take urgent action to combat climate change and its impacts.
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development.

Goals 6, 7, 9, 11 and 13 have been identified as those areas in which built environment professionals can take a leading role in driving the change necessary to realise the desired outcomes (GEC, 2018:

p. 4). To that end ICE, the American Society of Civil Engineers and the Canadian Society for Civil Engineering released a joint statement of intent in October 2018 committing to ‘...provide leadership and advocacy, nurture collaboration; build capacities, knowledge and skills; and share our stories’ (McMasters, 2018).

With the SDG agenda in mind, we turn to our first paper. Agapiou and Yakubu (2019) examine the causes of non-compliance with structural building code standards and regulations in Nigeria. Using quantitative data obtained from a wide range of local industry participants the authors deconstruct ‘non-compliance’ to its underlying causes and motivations. The findings describe a complex web of causal factors which are broken out into three broad thematic categories: technical, sociological and administrative governance. In contemplating how the situation may be improved, the authors offer a framework for a new independent regulatory body. The paper speaks to the heart of professional conduct and the importance of society at large holding professionals accountable to uphold the public good.

In our second paper, Tariq *et al.* (2019) offer an analytical review of failed water public–private partnerships (PPP) in developing countries. The authors examine 16 PPP schemes, identify potential reasons for the failure of each scheme and conclude by making a series of recommendations for improved water PPP conception and execution. The paper highlights the complexity of undertaking a PPP in what is perhaps the most emotive utility. Reasons for failure are shown to vary by region, with the consistent villain being tariff hikes which have in some cases resulted in social unrest or refusal to pay. It is clear from the recommendations that entities undertaking a PPP do so at their peril if insufficient care and consideration is paid to the needs, interests and representation of the consumer.

For our final paper, Bikçe *et al.* (2019) investigate the cost impact of specifying a ‘hordy’ slab as opposed to a solid slab if earthquake response is taken into consideration in respect of the Turkish Earthquake Code 2007 (MPWS, 2007). For readers unfamiliar with ‘hordy’ slab construction, also known as ‘hourdi’, it is well worth searching the term on the internet in order to appreciate the wide variety of precast, void-forming and in situ component assembly combinations used in practice. Utilising analytical models and data from constructed buildings, the authors distinguish the relative earthquake performance of each slab type and conclude that solid slab construction is more cost-effective than ‘hordy’ slabs by a significant margin.

By my reckoning the papers in this issue contribute to knowledge advancement in SDGs 6 (water and sanitation), 9 (resilient

infrastructure), 11 (safe, resilient and sustainable settlements) and 16 (effective, accountable institutions).

What if we all resolved to adopt the SDGs as a measure to ensure the ongoing efficacy of our professional practice? What might our collective effort achieve?

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