

THE NEXT GENERATION

Sports stadiums and venues all over the planet are adapting to the new economic times. Big or small, new or old, the watchwords of any construction or renovation are now legacy and sustainability.

By Eoin Connolly

➤ The argument does not always hold true, but there are times when the best solutions are found in adversity. Though it has generally proved resilient through the global economic crisis, the stadium design industry has been confronted with its own worst excesses – particularly in Beijing and South Africa, where some of the most striking new venues of the 21st century have yet to find an adequate long-term purpose. With one of the busiest decades of all time ahead, subtle yet fundamental change has come. Circumstances have pushed legacy and sustainability to the foreground in almost every project.

As austerity measures bite in several markets, the notion of the sporting venue as a municipal property looks set to be seriously threatened. For major sports teams and organisations, this is both a burden and a boon – but an increasing number are coming to grasp the advantages that come with stadium ownership. In Italy, soccer club Juventus' new project has been compared by the club to venues in England. A more illuminating parallel is provided by the MLS, where clubs have long been encouraged to move from stadiums owned by NFL teams or the state into more modest – but impressive – purpose-built facilities that can be built into their own commercial strategies.

Worth noting amidst the upcoming rush of construction is the fact that Cardiff's Millennium Stadium and the Stade de France in Paris will be key venues for major events in 2015 and 2016; a number of games in the Rugby World Cup will be played at the former ground, with the latter staging the final of Uefa Euro 2016. Both were built in the late 1990s, but owing in no small part to a clarity of purpose in the planning stage, both continue to offer advantages that are hard to find elsewhere.

High volumes of demolition and

reconstruction naturally place an onus on developers to take a more responsible approach towards building practices. While sporting venues may only make up a small proportion of the total activity in the construction industry, as high-profile closed-loop projects they are ideal test cases for developing best practice.

This has been recognised by the Brazilian architecture firm Castro Mello Arquitetos, who have led the Copa Verde initiative “to integrate green, sustainable design, construction and technology into all aspects of building, be they for principal or supporting infrastructure,” for the 2014 Fifa World Cup. Hector Vigliecca of São Paulo-based Vigliecca & Associados concurs with this idea, adding that “contrary to the popular belief, the scale of a stadium allows for sustainability practices in which the cost increases are insignificant given the benefits at the administration of resources consumption.”

In many cases, temporary and modular technology can provide useful options to alleviate the problems inherent in large-scale stadium construction. Daniel Cordey is the market chief executive of Nüssli, a Swiss supplier of such facilities who acted as consultant on both Russia and Qatar's successful bids for the Fifa World Cup. He believes that the use of modular facilities “will become standard” in any rounded plan for a major event. As modular technology becomes increasingly sophisticated, clients are finding more ways of putting it to effective use.

“If you see what happened in South Africa,” he explains, “in some of the sports venues the seat capacity was, basically, artificially increased to meet the World Cup mode, and then has been decreased afterwards to create hospitality facilities instead of seats. So you can adapt these venues to the revenue stream, and there are many opportunities to adapt





German firms Stadiumconcept and ArenaCom have conceived a 65,000-seater floating off-shore stadium. Approaching the size of the giant cruise liner RMS Queen Mary 2, the stadium would be founded on a large floating disk and constructed using renewable materials. It would include 180 executive boxes

to new functional requirements or operational requirements, if there's a new owner coming in and taking over a venue."

For smaller organisations – such as lower league European soccer clubs – building a modular element into a stadium can help facilitate a business plan responsive enough to on-field ups and downs. "I think it is a trend to have a facility which offers flexibility in use," says Cordey. "You have the top tier, the top clubs – they know they will have an attendance which is big, and they know the revenue streams very well, and they know they will be consistent," he says. "But there are many other clubs where this might change during their lifespan, so they need more flexibility in their infrastructure."

Nüssli have built complete temporary stadiums for second-tier German soccer club Fortuna Düsseldorf and Canadian Football League team BC Lions, along with the Vancouver Whitecaps, while their usual homes were unavailable, and Cordey sees a growing role for these kind of venues in the future. High-quality temporary seating, he adds, is improving the ability of organisations

like cycling's UCI and skiing's FIS to "offer more value" to sponsors and spectators. What excites him most, though, is the prospect of moving entire stadiums to create regional sporting legacies and give every country the hope of being a tournament host.

Pushing that idea to its logical boundaries, architects at German firms Stadiumconcept and ArenaCom have conceived a 65,000-seater floating off-shore stadium. Approaching the size of the giant cruise liner RMS Queen Mary 2, the stadium would be founded on a large floating disk and constructed using renewable materials and sustainable practices. There would also be room available for 180 VIP boxes and areas, office space for Fifa and local organising committee members, as well as an opulent range of hospitality features: a hotel, a casino, a shopping centre, restaurants and a fitness centre. An option to extend the capacity to 80,000 seats is also mooted, as is a permanent roof and, betraying its inspiration as a stadium solution for Qatar 2022, it is suggested that it could be used in the desert.

All this may seem fanciful; tellingly, no real indication has been given as to the cost of the

vessel and quite how it would be transported. Nevertheless, it is an example of the kind of malleable thinking which may come to dominate the industry in years to come. It is easy to guess at the possible customer base for such a venue – island and coastal states which are cash-rich and land poor – and there is another, nobler motivation behind the concept. A floating stadium, argues chief designer Peter Knoebel, could "be an extraordinary symbol of fair play in the sense of global understanding – not only for the game of football but also the global community."

Over the next dozen pages, *SportsPro* will be profiling ten of the projects being completed over the next ten years which we believe can have a lasting effect on stadium and venue construction and management. No attempt has been made to impose a qualitative ranking of the venues in question. Rather, the list can be viewed as giving a cross-section of industry responses to prevailing challenges. The wisdom of each one can only be the subject of speculation at this point. Whatever their respective fates, collectively they seem certain to alter the landscape in more ways than one. ■