

## Football World Cup 2022 in Qatar

# *Not only built on sand*

*A cry of horror went through the football world when FIFA President, Sepp Blatter, announced on 2 December 2010 that Qatar would host the World Cup in 2022. The small emirate on the Persian Gulf had completely surprised everyone, beating off competition from the USA, Australia, South Korea and Japan.*

Questions quickly arose as to whether petrol dollars had played their part in this extremely disputed decision. After all, in the past there had already been rumours about various kinds of gifts to members of the Executive Committee responsible for the selection. But the die is cast. The state of the size of a small German federal state will be hosting the world's largest single sporting event in a good ten years time. Therefore, it's time to deal with the problems which the selection of the host country entails and present result-oriented solutions.

Today, some 1.7 million people live in Qatar – and therefore only half as many as the number of people who attended the matches of the 2006 World Cup in Germany. Stadia will have to be built even if only approximately as many people visit the emirate on the Persian Gulf for the major event in 2022. Many stadia and large, architecturally appealing ones. No problem for the seriously rich country – but who will fill the seats after the final whistle? And who can bear the unbelievable heat – daytime temperatures of considerably more than 40°C in the non-existent shade are not infrequent? How can very pleasant conditions be created for the spectators and sportsmen without postponing the entire event to the winter?

The planning architects were therefore put to a serious test. Two completely different approaches come from Germany. The architects' office, Albert Speer & Partner in Frankfurt, together with the Munich-based agency group Serviceplan and Pro-Projekt (contd. on page 10)

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## AL SHAMAL STADIUM

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Planned capacity: 45,120

The shape of the structure in the north of the country, directly beside the sea, was inspired by the dhows, the traditional fishermen's boats of the region. The spectators reach this stadium, with its inspiring shape rising up on both sides, by water taxi among other things and - from neighbouring Bahrain - over the Qatar-Bahrain Friendship Bridge - the then longest bridge in the world.




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To obtain moving images of all the stadia presented here, scan the QR codes with your smart phone and take a look now at the year 2022.

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## AL GHARAF STADIUM

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Planned capacity: 44,740

The structure is being expanded with a modular upper tier to double its present capacity. The facade made of strip-like elements transforms the stadium into a real explosion of colour. The use of the various colours symbolises the friendship of all participating nations as well as mutual tolerance and respect.





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## *AL KHOR STADIUM*

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Planned capacity: 45,330

This stadium, where the group and quarter-final matches are to be played, is reminiscent of a sea mussel and offers a view over the Persian Gulf from the west stand. The spectators are to be able to reach the new building by water taxi, among other things.

(Picture bottom)




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## *AL RAYYAN STADIUM*

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Planned capacity: 44,740

The membrane-like structure of the outer shell of the stadium can be used as a huge screen. Matches, information on the tournament and other film material can be projected onto it. In this way, the modular stadium becomes a gigantic open-air cinema.

(Picture right above)




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## *AL WAKRAH STADIUM*

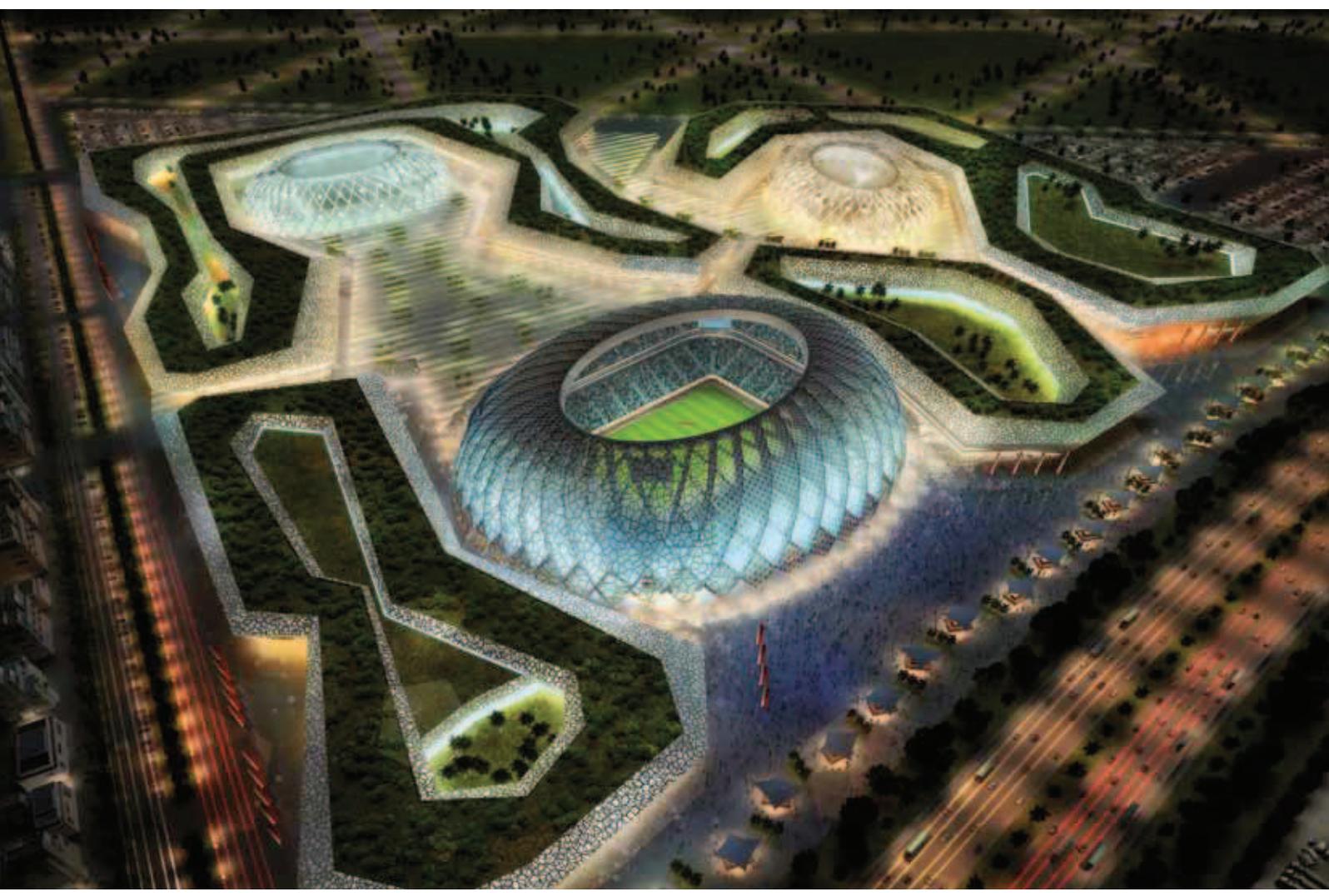
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Planned capacity: 45,120

The arena with the transparent outer shell is situated in a sports complex with a multi-functional hall, swimming pools, spas and shopping centres and is located in the heart of a large, impressive park landscape.

(Picture right bottom)





(contd. from page 6) Planungsmanagement, is responsible to a not inconsiderable extent for the fact that Qatar's bid was accepted by FIFA. They convinced the committee with their 4 kg heavy bid and the innovative draft plans contained in it. The plans are based on motifs which characterise Qatar, at least outwardly, and therefore stand for the wide diversity of the country. Every stadium will gain control over the extreme desert climate by means of a sophisticated cooling system: the fact that Qatar not only has a surplus of oil and gas but also of sun was exploited. The stadium interior is cooled by solar thermal energy to the 27°C demanded by FIFA, the heavy cold air is pumped from the seated terraces into the stands, it sinks downwards and lies like a bell over the pitch. Initial trials in a test stadium thus achieved an amazing cooling effect down to 23°C. Solar collectors in the car parks and on roofs generate the required energy. Opaque roof elements, which are pulled over the stadium two days before the start of a match, provide additional cooling. They reflect the sunlight and prevent direct solar radiation, thus stopping the steel structure from heating up.

Planners and architects are therefore solving in this impressive way part 1 of the „extreme case Qatar“ – the climate – brilliantly. Part 2 – the stadia not required in this size after the World Cup – will be dismantled in a quite mundane way and, in some cases, donated to poorer countries where football is not so well developed.

The fact that the second part of the task can also be solved in a different way is proved by the vision of the Düsseldorf architects' office, stadiumconcept, together with the Frankfurt-based project developer arenaCom. Together they developed a unique project – a floating stadium to hold 65,000 people which, after the final match, can be towed to any country in the world with access to the sea. As Qatar is a peninsula with a long coastline, the basic requirements are definitely fulfilled. According to the chief planner, Peter Knoebel, people often shy away from dismantling owing to the horrendous costs. Not a problem for the rich desert emirate but a crucial advantage for any subsequent users. The floating stadium minimises construction costs and implementation risks of future organisers and would be a global symbol of sustainability and – what's more – of fair play and international relations. Whether the revolutionary structure, which is to rest on a foundation of two pontoons and comprise recyclable and energy-extensive materials to a great extent, will in fact be built rests in the laps of the Arabian gods – but it would definitely be a sign that sustainable architecture on water is feasible and sensible.

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## OFFSHORE STADIUM

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Planned capacity: 65,000 spectators

The vision of a floating, fully FIFA-compatible offshore stadium impresses by its unique concept, distinctive architecture and its sustainable, eco-efficient overall concept. Apart from this, it offers various opportunities for alternative events and commercial uses, attractive development possibilities for the entire area as a marina site combined with buildings, as well as alternative financing options through global leasing capacity.

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