

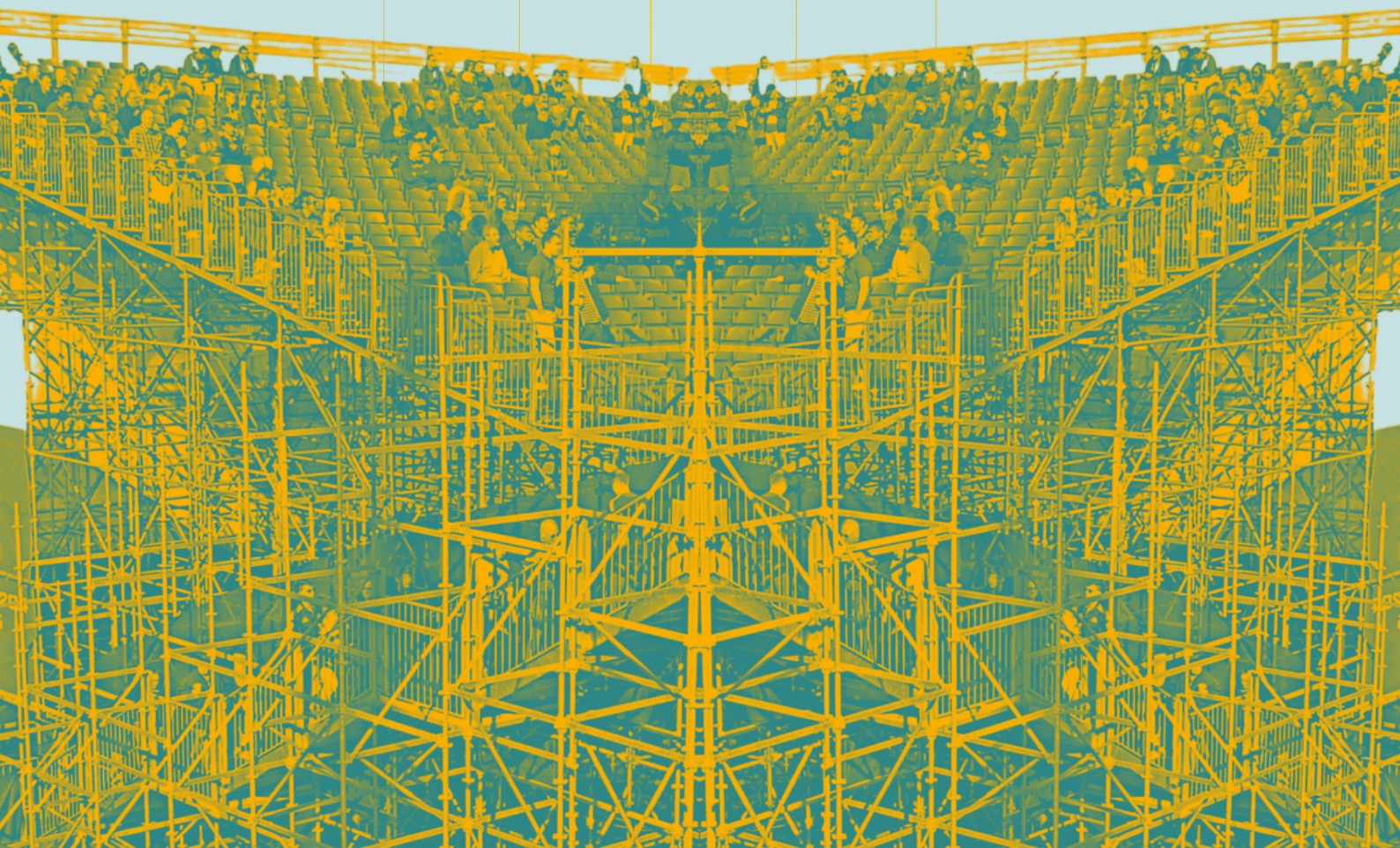


ACCESS

Achieving Circularity in Cities through
Environmental Sustainability of Sports

USING EXISTING VENUES AND TEMPORARY INFRASTRUCTURE

Build for scale, build to last



GENERAL DESCRIPTION OF THE PRACTICE

Since the last two decades, there has been an increase in efforts to build environmental-friendly sports arenas around the world, which are designed with the future in mind.

The Beijing 2022 Games maximized the use of existing sports facilities and infrastructures: the headquarters was located in the renovated facilities of Shougang Park in the northwest of the megacity. Through the rehabilitation of an old industrial site, the impact on resources and the environment was reduced, creating a sports leisure place with a post-industrial atmosphere and style on the edge of the city of Beijing.

In the Beijing area, the legacy of Beijing 2008 was fully reused, in the Zhangjiakou competition area, the pre-existing ski slopes of Genting Snow Park were used as one of the competition venues, and the pre-existing Zhangjiakou Genting Hotel was transformed into the Zhangjiakou Mountain Press Centre during the Games.

During the World Athletics 2022 Diamond League final, the most important athletics competition, the structure of the grandstands, pallets and containers were reusable and reused from previous events. The figure below shows the views of the grandstands in Sechselautenplatz square.

The Tokyo 2020 summer Olympic Games strategy for climate action entailed the use of pre-existing buildings: instead of building all new facilities, 60 percent of the structures used during the games were pre-existing buildings.

CHALLENGE

Mega sporting events such as the World Cup or the Olympics require short term, extremely costly infrastructure projects. Some of these have been described as “white elephants” – that is, structures like stadiums that are built with no future planning apart from the single big event, that put financial strain on a city and become largely unused and empty after the event, with the maintenance costs dumped on the government. Statistics from the European Commission indicate that the building industry accounts for about 50% of all extracted materials in Europe and that the construction sector is responsible for over 35% of the EU's total waste generation. The main problem is the saturation of production density, consumer goods and building mass of today's society.

In addition, often sporting events use temporary structures, such as tents, containers, barriers, stands, and other installations that are built within and aside venues for operational needs. These are increasingly prominent within Olympic bids. Temporary stands can be positioned in places where permanent facilities would not be possible, including city centres and heritage sites.

To avoid white elephants and reduce the environmental impact of the sporting infrastructure, sporting venues and structures should be designed and planned beyond the event (“design with the future in mind”), so that they are repurposed for different needs or reused for future events. Repurposing and reusing existing sport structures would greatly reduce the environmental impact linked to the use of resources, GHG emissions and waste generation.



RESULTS

The positive environmental impact of this practice is clearly linked to the reduced need of building new infrastructures and therefore reduced use of materials and waste generation.

In economic terms, this practice also prevents the white elephant phenomenon (huge economic investments in venues that remain vacant, have a big environmental impact and are too expensive to maintain) that were very common for mega sporting events especially in the past.

REPLICABILITY POTENTIAL

The replicability potential of this practice is high if the structures (both permanent or temporary) are designed with the future in mind, so that they can be easily repurposed (in the case of permanent venues) and dismantled and reused (in the case of temporary structures).



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This factsheet is a part of a larger collection of good practices available on the project's website

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The **ACCESS project** is one of the latest European projects which explores and challenges environmental sustainability and environmental management in sports. Co-funded by the European Union's Erasmus+ programme, ACCESS is looking at narrowing the gaps between the current environmental performances of sport organisations, their strategies, and practices on one side and strategies and targets of their respective cities or regions with the overall objective – making these sport organisations a reference point for sustainability in sports in their countries and turning them into replicators of solutions for achieving it.



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