International Olympic Committee

IF SUSTAINABILITY PROJECT
“BIG STADIUM” HOCKEY EVENTS

NOC AND IF SUSTAINABILITY CASE STUDIES

The world faces significant challenges across a wide spectrum of economic, social and environmental matters. The Olympic Movement has both an opportunity and a duty to actively contribute to the global sustainability debate in line with its vision of "building a better world through sport".

With this in mind, and in response to Olympic Agenda 2020, the International Olympic Committee (IOC) launched the International Federation (IF) Sustainability Project in 2016 to obtain an overview of IFs' sustainability initiatives – identifying common topics, challenges and good practices while also sharing information among the IFs. One outcome of the project was a series of case studies illustrating how IFs are actively contributing towards a more sustainable world.

As part of the IOC's objective to "profile the role of the Olympic Movement in sustainability through the aggregation of information and collective reporting", it was agreed that the identification and sharing of information contribute to the holistic integration of sustainability and should be continued.

These case studies, which now also showcase the best practices of National Olympic Committees (NOCs), form part of a strategic support system made available to the Olympic Movement through the IOC Sustainability Strategy. Each case study is aligned with one or more of the IOC's five sustainability focus areas: infrastructure & natural sites; sourcing & resource management; mobility; workforce; and climate. They are also aligned with one or more of the United Nations (UN) framework of 17 Sustainable Development Goals (SDGs), which provide a common framework for organisations to explain how they plan to contribute to sustainable development and tackle the key global sustainability challenges.

This framework is pivotal for the Olympic Movement – in September 2015, the UN General Assembly confirmed the important role that sport can play in supporting the UN's 2030 Agenda for Sustainable Development and its SDGs.

The IOC provides support to NOCs and IFs in establishing, designing and developing their sustainability strategies.

"Sport is also an important enabler of sustainable development. We recognise the growing contribution of sport to the realisation of development and peace in its promotion of tolerance and respect and the contributions it makes to the empowerment of women and of young people, individuals and communities as well as to health, education and social inclusion objectives."

PARAGRAPH 37, UN 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

Each NOC/IF sustainability project contributes to one or more of the IOC's sustainability focus areas and one or more of the UN SDGs.

IOC FOCUS AREAS

INFRASTRUCTURE & NATURAL SITES | SOURCING & RESOURCE MANAGEMENT | CLIMATE

UN SDGs

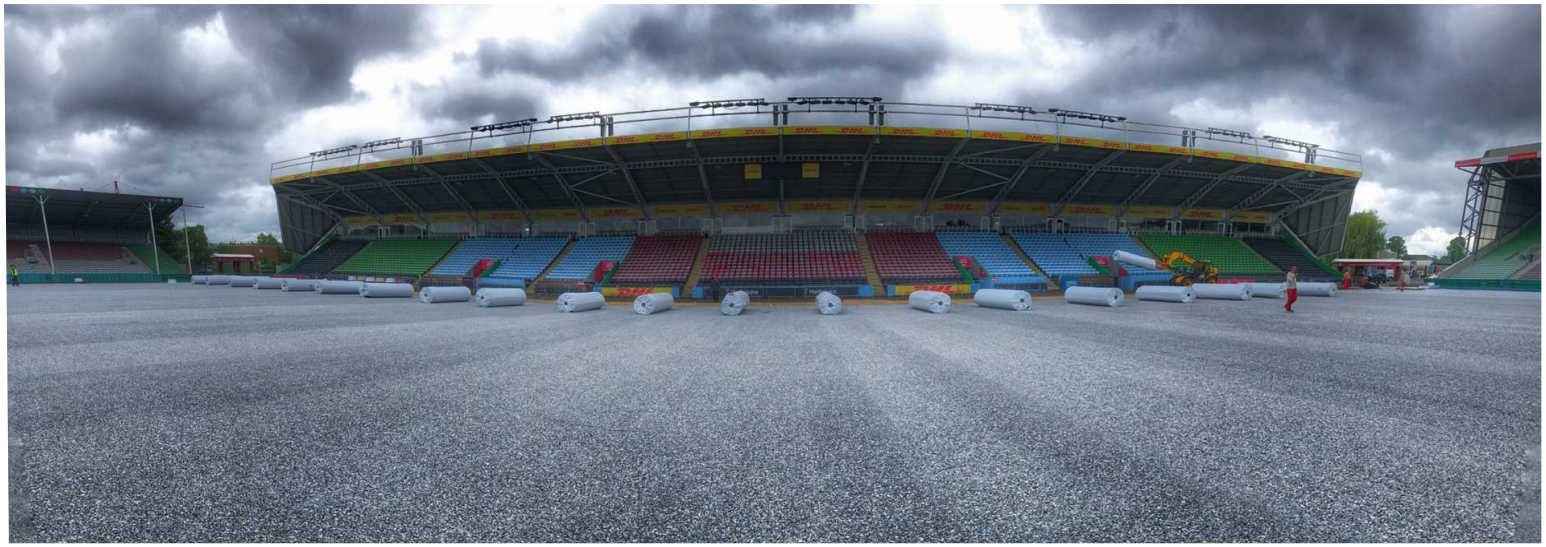
FIH | International Olympic Committee

SUSTAINABLE GROWTH OF HOCKEY WITH PORTABLE REUSABLE PITCH TECHNOLOGY

The International Hockey Federation (FIH) established planet and prosperity as two of the pillars of its Sustainability Strategy. These pillars set priorities to ensure the future of hockey through continuous sustainable innovation, which can generate more income and thus the growth of the sport. A ground-breaking initiative in this regard is "Big Stadium" Hockey: temporarily transforming existing venues normally used for other sports into hockey venues for international matches. In hockey, permanent artificial turf installation has typically been required to achieve the high-performance standards of elite-level competition, for example, ensuring that the surface is perfectly flat so that the ball runs true across it. However, the new capability to temporarily install artificial turf that is up to the required standards, and in just three days, has become a game-changing opportunity for the sport. This is all thanks to an innovative collaboration in the UK between England Hockey, hockey turf supplier Polytan, sports turf specialist STRI and water management experts from Polypipe, who together have installed temporary pitches for international matches at the Stoop Stadium in West London, home of Harlequins Rugby Club, and at Energia Park in Dublin, the former home of Leinster Rugby.

Developing the world's first elite-level portable pitch for hockey:

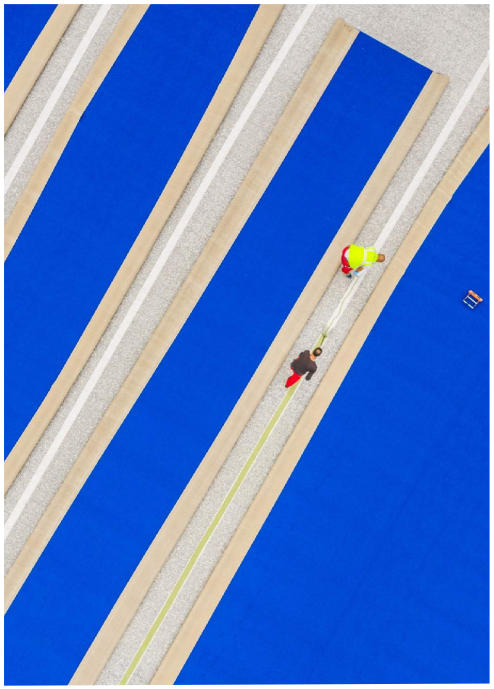
The first "Big Stadium" elite hockey turf pitch was laid within the existing rugby stadium at the Stoop, in London. The portable system was intended not only to take hockey into big stadiums, but also to enable athletes to perform at their best in world-class facilities. Thus, the development process included proof-of-concept testing and performance testing with various products and system configurations, which allowed the partners to identify the optimal solution. Furthermore, to ensure environmental sustainability, the turf was made from 60% renewable materials and required 65% less water than previous turfs.



OBJECTIVES

- To transform the fan and athlete experience at major elite hockey matches using temporarily laid, portable artificial turf pitches within existing sports stadiums.
- To reduce the environmental footprint of hockey, avoiding the need to construct new permanent venues and large temporary spectator infrastructure for international hockey events, and reusing portable turf pitches on multiple occasions.
- Bring about a step change in the fan experience in line with spectator expectations of major sporting events, and increase the number of "Big Stadium" Hockey events to reach all continents and 10 countries by 2030.

After being used at the Stoop, the pitch surface was installed permanently at Bisham Abbey, also in England, meeting all FIH standards for player performance, player safety and technical construction requirements such as flatness, uniformity and drainage. A turf that can be rolled up and reinstalled in a new location extends the life and legacy of the surface and is therefore an environmentally friendly solution that helps reduce the sport's carbon footprint.



The system also improves the utilisation of existing stadiums and thus adds value for owners and stakeholders. Rugby matches can take place one weekend, and hockey games the next. Placing hockey pitches in larger stadiums also means more fans can attend, which enhances the atmosphere. Moreover, "Big Stadium" venues offer better facilities for TV broadcasting, so fans watching on TV also enjoy a better experience.

Requirements and challenges for "Big Stadium" pitches:

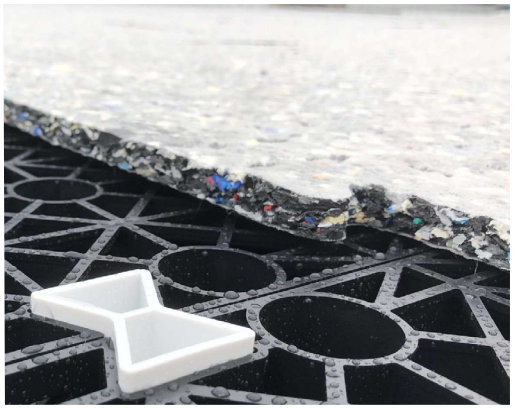
Developing and installing a temporary elite standard pitch suitable for international matches is, however, a great challenge. First, to protect the natural grass underneath the turf and allow it to breathe, the system must ensure adequate airflow. It also has to be installed, played on and removed within eight days, or the grass will die due to lack of sunlight. This speed is also necessary so that the stadium can be used for rugby and hockey on alternate weekends, without compromising either sport.

BENEFITS

- Improves the utilisation of existing stadiums for owners and stakeholders, and offers collaboration opportunities between different sports, like rugby and hockey.
- Reduces the environmental impact of hockey since the turf is made from green technology, the system is reusable and utilises existing venues.
- Enhances the experience for fans at the venue, as well as the broadcast audience, by having the games take place in bigger stadiums.

The system that was developed overcame all of these challenges, enabling 12,000 fans to watch top-level international hockey in a first-class stadium.

Moreover, the turf needs to be properly removed and stored so that it can be reused multiple times as a portable pitch, and ultimately as a legacy surface at a permanent location. This allows the system to have a very low impact on the environment.



"The Big Stadium Hockey technology opens up every sports stadium in the world to be a potential venue for international hockey. Rather than spending large budgets building temporary seating, amenities and food and beverage outlets, which deliver a sub-standard fan experience, hockey is now able to focus on putting on world-class events for our world-class athletes."

JON WYATT, SPORT AND SUSTAINABILITY DIRECTOR

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