

Sustainability in Cricket Equipment, Clothing and Apparel

PASIC Briefing no. 1

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Introduction

[BASIS](#) (The British Association for Sustainable Sport) in partnership with [The Centre for Sustainable Design](#)® (CfSD) at [UCA Business School for Creative Industries](#) hosted a stakeholder workshop in July 2021 that considered sustainable sportswear, with the lens specifically on cricket. The event created a platform to debate environmental and social issues in playing the game and how the cricket industry needs to address fundamental issues within supply chains, codes of conduct and its own sporting community to help tackle sustainability challenge. The outcomes from the workshop will be presented in PASIC Briefing no. 2.

[BASIS](#) and [The Centre for Sustainable Design](#)® have partnered to launch a new initiative to open discussions around sustainability, innovation, cricket equipment and clothing, and facilitate connections and networking. PASIC (Platform for Accelerating Sustainable Innovation in Cricket) is an online platform that aims to initiate discussions related to how sustainability can help drive innovation in cricket equipment, clothing and apparel. To date PASIC have organised three webinars that can be accessed via this [link](#). PASIC is a programme that focuses specifically on cricket that sits within the [BASIS](#) Technical Innovation Special Interest Group (TISIG) - that covers Sustainable Sportswear across various sports. TISIG is Chaired by Niall MacPhee, Associate Director at Sports Labs Ltd.

[BASIS](#) exists to help develop best practice strategies and integrate sustainability into the sports sector, to encourage action and collaboration and to use the influence of sport to educate our participants and fans. Through webinars, workshops, and members' forums we encourage an open dialogue between leading academics, sustainability professionals and professional sports people, engaging all relevant stakeholders to inspire systematic sustainable change within their organisations. In turn, this allows sports organisations to leverage the power of their platforms to facilitate change through the invested attention of loyal fans.

[The Centre for Sustainable Design](#)® (CfSD) is based at the [UCA Business School for the Creative Industries](#) and was established in 1995. CfSD focuses on research and knowledge transfer related to sustainable innovation and product circularity and completes research, training and consultancy projects worldwide. The Centre has organised over a thousand conferences, workshops and webinars for business, policymakers and academia and participated in numerous UK and European funded projects. Further details of projects can

found on this [link](#) and research on this [link](#). CfSD also supports PhDs related to its core competence and expertise.

Cricket clothing: scale of the problem

The clothing sector is the second most polluting industry in the world. Accounting for 20% of industrial wastewater production and 10% of global carbon emissions, it has an environmental impact only beaten by fossil fuels. The economic value of the associated waste and discarded clothing is estimated to be approximately \$500 billion.¹

While sportswear only accounts for a small portion of this global industry, it is a sector heavily reliant upon highly polluting synthetic fibres, as consumer expectations of performance clothing demand fabric to be sweat-wicking, stretchy and breathable.

In PASIC [Webinar#1](#) we invited Yashi Dadhich, Founder of [KAHANI](#) to address the scale of the problem in relation to cricket clothing. Below are some extracts from her presentation:

- For a single match, 24 individuals will take to the field – 22 players across both teams plus two umpires. If all 24 involved wear a minimum of a t-shirt, trousers and socks, this accounts for 96 items of clothing.
- Keeping these 96 items of clothing in mind we can cast the lens closer onto the environmental impact of a single polyester t-shirt. Manufacturing requires 5.5 kg CO₂ emissions, equivalent to driving a car for 22.2 km. Across all 24 taking to the field, the manufacturing emissions of their t-shirts alone is equivalent to driving a car for almost 533 km. These numbers don't even factor in the other items of clothing being worn, the fact that most of this type of clothing eventually ends up in landfill or the 1900 microfibers released by each t-shirt from a single wash.
- Beyond traditional cricket whites, competition kit is often screen printed with dispersive dyes and finished with chemicals to enhance technical properties such as sweat wicking. Accordingly, downstream of factories producing these items, associated water pollution is a huge environmental problem as toxic chemicals, heavy metals and dyes get washed into the waterways.
- Environmental concerns aside, the significant social impact of the clothing industry represents a hidden sustainability cost. Wages often amount to around a third of the local living wage, there is little or no guidance for safety or safeguarding and limited job security. Life working in large clothing factories can ultimately be dangerous and for the 80 million employees across the sector financially unrewarding.

Sustainable solutions

To fully tackle these embedded sustainability issues, we need a top down systematic view across the whole supply chain. Clothing needs to be manufactured with a view to materials circularity, infrastructure needs to be in place to facilitate second life opportunities and procurement pathways need to be developed.

¹ See [Twenty Lessons Learnt from Sustainable Innovation 2021 focused on Accelerating Sustainability in Fashion, Clothing and Apparel](#)

Innovation - More research and investment is needed across the clothing sector to facilitate a move from relying on virgin polyester. Options include using more sustainable natural fibres, such as bamboo or Tencel™, which has the advantage of recovering 99.9% of the water used in production. Alternatively, recycled synthetic materials, made from existing plastics in the waste stream, offer a reduced carbon footprint compared with virgin polyester.

Circularity - Materials and designs need to help facilitate circularity in the sportswear sector. There is a huge amount of stored waste sitting in wardrobes across the world that inevitably will end up in landfill. Investing in community reuse schemes for unwanted sports kit is an easy way to extend the life of these garments, while helping to reduce the cost of access to sports in marginalised communities. The Lord's Taverners charity sports kit recycling scheme is one great example. It helps young people in the UK and across the world to access kit and equipment, which otherwise would have become redundant.

Governance - There is a need for sports rights holders and governing bodies to be more open minded about innovation and change, to enable progress in the sustainability space, especially with relation to technical and specialist kit. While it is essential that personal protective equipment retains all necessary safety properties, regulations need to allow more freedom to explore how this can be achieved sustainably to allow suppliers to drive progress.

Urgency - Action needs to drive the narrative. Now is not just the time for talking about sustainable innovation. Now is the time to leverage our collective position as an entertainment property and become a leader in this space. By empowering sports teams and personalities to 'champion' the sustainability message we can educate a large audience and facilitate change. We see sports stars frequently use social media to appeal directly to fans about societal and sustainability issues. It would be great to get to a point where we see professional athletes expressing their preference for sustainable sportswear as suppliers drive innovation and competition in this area.

BASIS and The Centre for Sustainable Design ® @ UCA Business School for the Creative Industries

Do you want to be part of conversations that are driving transformative change related to sustainability, innovation and cricket equipment and clothing? [BASIS](#) in partnership with [The Centre for Sustainable Design](#) ® will be organising workshops, webinars and research aimed to progress the innovative thinking and action. Access more information on via [PASIC website](#). To discuss any issues in confidence, contact

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