The Textile Institute
Southern Australian Section Inc

4 August 2023

Committee Secretary
Legislative Council Economy and Infrastructure Committee
Parliament House
Spring Street
EAST MELBOURNE VIC 3002
eic.council@parliament.vic.gov.au

Dear Secretary

RE: Inquiry into the industrial hemp industry in Victoria.

The Textile Institute was established in Manchester in 1910 and has since continued to promote professionalism in all areas associated with the textile, clothing and footwear industries (TCF) worldwide. Legally constituted by a Royal Charter in 1925, the Institute accredits chartered professional standing. The Textile Institute Australia Section (TIAUS) represents all segments of the local TCF Industry, ranging from raw materials to advanced industrial products, fashion and uniform apparel, product testing and quality assurance, vocational and higher education, including research. TIAUS members contribute professional expertise on textile and clothing related Australian Standards Committees and are regularly contacted by media to clarify textile and clothing facts and false or misleading claims.

TIAUS members strongly support this inquiry into the industrial hemp industry in Victoria. Hemp has been a sustainable natural fibre textile source since at least the 5th millennium BC, excluding the period of Cannabis prohibition since 1928 in Victoria that is. We welcome the opportunity to help shape the Victorian hemp fibre ecosystem for a more sustainable future.

Over the past 25 years the production of textiles in Australia has diminished through the restructuring of the TCF sector. All secondary manufacturing such as carding, spinning and weaving has been off shored to lower wage sources. Currently, Australia produces textile fibre i.e., wool and cotton for export only. Global hemp fibre production has been significantly hindered by cannabis prohibition, leading to a lack of knowledge and a fragmented supply chain. Synthetic fibres made from fossil fuels such as, polyester, nylon and polypropylene have replaced canvas and rope products made from hemp. The empire of cotton has benefited from the global demise of hemp. Both synthetic and cotton textiles have significant detrimental environmental footprints given the scale of global production. As a domestic textile product, hemp provides an ethical choice for consumers wishing to avoid textiles made from animals or insects, synthetic textiles made from fossil fuel, or cotton products produced through exploited labour. Hemp offers the opportunity to build a sustainable Victorian supply chain through non-woven (felted) hemp textiles.

We endorse the work of the Australian *Industrial Hemp Best Management Practice Manual Working Group*[1]. The need for post-harvest processing and grading of the industrial hemp biomass is a vital step for commercial textile production. To fully realize the benefits of this versatile crop and create a sustainable and thriving hemp industry, it is crucial to address the following knowledge and supply chain gaps:

- **Knowledge Gap: Classification System Implementation**

  There is a pressing need for the development and implementation of a standardised classification system for hemp fibre[2]. Drawing inspiration from successful models in other natural fibre industries, such as cotton (post-harvest processing and classification at the cotton gin) and wool (post-shearing AWTA fibre testing and certification system), the hemp industry can benefit from a similar approach. Establishing a classification system will enable uniformity in quality assessment, grading, and pricing, bolstering confidence among stakeholders and encouraging investment in hemp fibre production.

[1] Gordon, S 2023, Australian industrial hemp best management practice gap analysis [Online]. Available: https://agrifutures.com.au/product/australian-industrial-hemp-best-management-practice-gap-analysis/ [Accessed 30 July 2023].
[2] Ibid, p.5, Table 1. See Biomass

- **Supply Chain Gap: Bridging Primary and Secondary Fibre Production**

To unlock the full potential of hemp, it is vital to bridge the gap between primary and secondary processing within Victoria. By investing in domestic secondary fibre processing facilities based on a co-operative model[3] and located not more than 100-150 kms from the farmgate, the opportunity exists to build a low carbon hemp processing infrastructure.

Through the production of felted (non-woven) textiles rather than traditional woven or knitted (which requires spinning), Victoria can carve out a unique value-added supply chain which has the potential for local job opportunities. Non-woven textile production presents the lowest processing pathway and is combatable with other hemp fibre applications, such as composites and building materials. Hemp can be felted directly without pulping and chemical synthesisation as is the case for bamboo and cotton linter viscose fibre extrusion.

- **Knowledge and Supply Chain Gap: Hemp Products Diversification**

As cotton is not grown in Victoria, the state has an excellent opportunity to capitalise on hemp's versatility by value adding beyond primary production of the fibre. Due to increased environmental consciousness and a preference for low environmental footprint fibres, such products are seeing growing globally demand. Personal care items, such as feminine hygiene products, medical textiles, and wipes are emerging applications for hemp fibre non-woven production. Bridging the knowledge gap in research and development for such products will add value to the Victorian hemp supply chain, open new revenue streams and drive sustainability-focused initiatives.

In conclusion, addressing the knowledge and supply chain gaps in hemp fibre production is vital for the growth and success of the hemp industry in Victoria. Implementing a standardised classification system will enhance quality assurance and market competitiveness. Investing in domestic secondary fibre processing, particularly non-woven, has the potential to create a unique value-add niche to foster local economic development.

[3] Marquardt, S 2023, *Growing Hemp For The Future: A Global Fiber Guide* [Online]. Available: https://textileexchange.org/knowledge-center/reports/growing-hemp-for-the-future-a-global-fiber-guide/ p.23 [Accessed 30 July 2023].

Additionally, expanding hemp applications to include personal care items such as feminine hygiene products, medical textiles and wipes aligns with global trends towards eco-friendly alternatives. By embracing these opportunities, Victoria can leverage its resources and contribute significantly to the development of a thriving and sustainable hemp industry that meets the future global demand for eco-conscious fibres.

We welcome the opportunity to address the committee to discuss the above and present examples of hemp non-woven textile innovations currently being developed by TIAUS members in Victoria.

Yours sincerely,

Dr Saniyat Islam
TIAUS Chairman

Dr Kate Kennedy
TIAUS Hon Secretary