## TRANSCRIPT

# LEGISLATIVE COUNCIL ECONOMY AND INFRASTRUCTURE COMMITTEE

### Inquiry into the Industrial Hemp Industry in Victoria

Melbourne – Monday 11 September 2023

#### **MEMBERS**

Georgie Purcell – Chair

David Limbrick

David Davis – Deputy Chair

Bev McArthur

John Berger

Tom McIntosh

Katherine Copsey

Evan Mulholland

Jacinta Ermacora

#### **PARTICIPATING MEMBERS**

Gaelle Broad Renee Heath
Georgie Crozier Sarah Mansfield
David Ettershank Rachel Payne

#### **WITNESS** (via videoconference)

Emma Hakansson, Founding Director, Collective Fashion Justice.

The CHAIR: I declare open the Legislative Council Economy and Infrastructure Committee's public hearing for the Inquiry into the Industrial Hemp Industry in Victoria. Please ensure that mobile phones have been switched to silent and that background noise is minimised.

I would like to begin this hearing by respectfully acknowledging the Aboriginal peoples, the traditional custodians of the various lands we are gathered on today, and paying my respects to their ancestors, elders and families. I particularly welcome any elders or community members who are here today to impart their knowledge of this issue to the committee or who are watching the broadcast of these proceedings. I also welcome any other members of the public watching via the live broadcast.

Emma, to kick off I will get committee members to introduce themselves to you. We have some online and some in the room. We will start in the room with Dr Heath.

Renee HEATH: Hello. My name is Renee Heath, and I am from the Eastern Victoria Region.

Rachel PAYNE: Hi, Emma. I am Rachel Payne from South-Eastern Metropolitan Region.

Sarah MANSFIELD: Hi. I am Sarah Mansfield from Western Victoria Region.

Jacinta ERMACORA: Hi. I am Jacinta Ermacora, Western Victoria Region.

The CHAIR: Beautiful. And we have just had Bev McArthur, Western Victoria, walk in as well.

Bev McARTHUR: Late.

The CHAIR: Emma, all evidence taken is protected by parliamentary privilege as provided by the *Constitution Act 1975* and further subject to the provisions of the Legislative Council standing orders. Therefore the information you provide during this hearing is protected by law. You are protected against any action for what you say during this hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded. You will be provided with a proof version of the transcript following the hearing. Transcripts will ultimately be made public and posted on the committee's website.

For the Hansard record, can you please state your full name and the organisation you are appearing on behalf of.

**Emma HAKANSSON**: My name is Emma Hakansson. I am appearing on behalf of Collective Fashion Justice, the organisation I am the Founding Director of.

**The CHAIR**: Beautiful. Thank you. We now welcome you to make your opening comments and ask that they are kept to around 10 minutes so we have plenty of time for questions.

#### Visual presentation.

**Emma HAKANSSON**: Thank you to the committee for inviting me to speak about the industrial hemp industry and fashion and how those relate to Victoria's climate targets today. Collective Fashion Justice seeks to support the development of, investment into and just transition towards fashion systems which include fashion's agricultural value chains that have the least negative impact on the planet and life on it. Raw material production, which is a big thing we are talking about today, is associated with 38 per cent of the global fashion industry's greenhouse gas emissions. This is both a problem and a significant opportunity for climate change mitigation.

In our assessment of hemp for this inquiry we compared hemp with other fibres used similarly by the fashion industry. We have looked primarily at the climate impact of these materials, as is most relevant to the inquiry,

but also the land and biodiversity consequences of material production, given the connection between these factors and the climate crisis. Land inefficiency in agriculture is tied to carbon opportunity costs as more efficient systems requiring less land for similar output allow for more native vegetation and soils that can sequester carbon as well as more habitat for wildlife, which is critical considering Victoria's extinction crisis. You will see later on in my talk how relevant that is to hemp and how important it is.

Hemp can be utilised as a direct replacement for cotton, wool and fossil fuel based materials like acrylic and polyester. It can be used in the production of knitwear, denim, woven and knitted fabrics as well as as the basis for next-gen leather alternative materials and other more innovative applications. Hemp has a smaller carbon-equivalent footprint than acrylic, polyester, cotton and wool. With both cotton and wool already produced in Victoria, I thought a more specific comparison may be valuable to the committee. So Victorian wool can have an average carbon-equivalent footprint made up primarily of methane that is more than 42 times greater than that of hemp. Australian cotton, which is averaged across the country because there was less specific data for Victoria, has a carbon-equivalent footprint 27 times smaller than wool, which is still very significant but clearly outdone by hemp. To produce 1 kilogram of each of those materials – wool, cotton and tencel – the land footprint varies greatly, as high as 3675 square metres for Australian wool, just shy of 15 square metres for Australian cotton and about 1 to 2 square metres for hemp, and that variation is dependent on if it is a dual-purpose crop for food and fibre or if it is only for fibre.

The Victorian government has committed to cutting the state's emissions by between 75 and 80 per cent by 2035. This really important target requires bold action, and in our submission we note that the two methods outlined by the government – of helping farmers cut emissions and storing carbon in our landscape – can both directly relate to the further development of a Victorian hemp fibre industry. We believe that farmers currently producing wool in Victoria should be offered government support and incentive to choose to move towards producing hemp, reducing their herd sizes and diversifying their output, therefore reducing the amount of methane that is involved and the amount of land that is involved in that fibre production. If these wool producers were supported to reduce their herd sizes while moving to hemp, it would mean that enteric fermentation from ruminant animals that would be slashed, and in moving even partly to a more land-efficient production like hemp, more land would be freed up for farmers to revegetate and rewild, securely capturing carbon while protecting biodiversity and also allowing farmers to do what we know they really care about, which is protecting the environment.

We also know that in Victoria many sheep farmers are already also cropping – they have dual production systems – and that land currently grazed by sheep is often suitable for cropping, including specifically suitable for hemp fibre production. For this to be possible, this option to transition, we believe that the Victorian government needs to eliminate some barriers to the success of the hemp fibre industry here in Victoria by firstly improving grower licence accessibility and investing in onshore fibre processing – we currently have no large-scale fibre processing for wool, cotton or hemp; it is not just a problem with hemp, it is all fibre, unfortunately – and as mentioned, providing funding to support farms who want to transition. It also needs to ensure as a government that hemp is grown as sustainably and transparently as possible, because while hemp is inherently a sustainable farmed fibre, there are ways that it can have negative environmental outputs too, so those do need to be considered. Doing so would also offer Victorian hemp a major competitive advantage over globally produced hemp that is not necessarily done so in the best way.

Fashion consumers are increasingly demanding more sustainable garments and more sustainable materials. We consult internationally with the fashion industry – that is why I am here at New York Fashion Week – and when we consult, we consistently hear from major brands and retailers that they want sustainable materials produced in traceable supply chains. From this consultation experience there are many more brands interested in these kinds of materials, of which Victorian hemp could be a solution, than there is actual supply available. Many brands are also hesitant to invest in hemp at the moment because currently a significant amount of it is grown in China, North Korea and the United States, where labour injustices and labour law issues are hugely problematic and traceability is difficult to impossible, depending on the country. So again, Victoria can be providing a solution here to the industry.

Finally, the global fashion industry is also under increasingly intense regulatory scrutiny across a number of markets. This is particularly true in relation to demanding more accurate environmentally related claims in marketing, material traceability and more positive environmental outcomes, particularly in relation to climate. As such, the demand for a material like sustainable hemp that Victoria could produce is only going to increase

as brands have to change their production practices. Global nations and states that can offer their industries as solutions to brands seeking out these alternative production systems I believe will benefit economically while contributing to the increased sustainability and responsibility of the global fashion industry. We at Collective Fashion Justice would like Victoria to be one of those contributors and to be one of the benefactors of those positive outcomes. Thank you.

**The CHAIR**: Thanks, Emma. Emma, just for your information, we have had Tom McIntosh join online as well. Beautiful.

Emma HAKANSSON: Thank you.

The CHAIR: We will now open up to questions from the committee, starting down this end of the room, and then will go on to the screen. Just for those on there, I will call you one by one – that might be easiest. We will start with Dr Heath.

**Renee HEATH**: Thank you so much, Emma, for your presentation and your submission. I have got a couple of questions. Where do you currently get hemp fabric from?

**Emma HAKANSSON**: Collective Fashion Justice is a charity that consults the industry. We are not a producer ourselves, so we do not source hemp. The top producers include, as I mentioned, China, North Korea, the United States and some other European countries.

Renee HEATH: Wow, North Korea?

Emma HAKANSSON: Yes.

**Renee HEATH**: That cannot be good, can it? Is there an opportunity, then, to export it within the fashion market?

**Emma HAKANSSON**: Absolutely. We already are a major fibre producer and exporter when we think about things like cotton and wool. There is no reason that we would not be able to do the same for hemp. Even if we did not have the opportunity to set up onshore fibre processing, we would still be able to transport that hemp fibre overseas for processing and further sale, as we currently do with cotton and wool, but ideally we would be able to trace that whole supply system from farm all the way to a finished fabric.

**Renee HEATH**: Right. One of your key points is funding for farms to transition. If you have already got a huge market, is there a need for funding from the state?

**Emma HAKANSSON**: I think that the funding is associated with the up-front cost. The benefit that a farmer is going to get in terms of moving to a production system that has hemp is not necessarily going to happen straightaway. There are benefits in that hemp does not require years to grow compared to something like Tencel lyocell, where you need several years before you are able to produce fibre, but there still is going to be a required land transition and costs associated with that. It would not necessarily be a huge expense that we think the government would need to support, but it would be an added incentive.

Renee HEATH: Great. Cool. Thank you. Thanks, Georgie.

The CHAIR: Thanks, Dr Heath. Mrs McArthur.

**Bev McARTHUR**: Thank you, Emma. Emma, have you ever been a farmer?

**Emma HAKANSSON**: I have not been a farmer, no, but I have been on farms across the country, particularly fibre farms.

**Bev McARTHUR**: Okay. We learnt in our previous day that hemp requires irrigation. Where wool is grown, largely there is no capacity for irrigation, so you cannot suggest that wool growers transition to hemp in a soil area and a rainfall area that would be unsuitable. How do you argue that?

**Emma HAKANSSON**: There are a number of areas in Victoria where the rainfall where wool is currently being produced would allow for hemp to be grown in that place, not in every single instance, but in a significant

number of instances. There is also capacity to grow hemp in a way that requires very minimal water, the same way we have cotton producers across New South Wales and Queensland that are producing rain-fed cotton while others choose to grow it in an irrigated system. Some of that variation is also possible within the hemp industry. Certainly you would not be able to say every single wool producer is able to also invest in becoming a hemp producer, but there is certainly a lot of crossover.

**Bev McARTHUR**: Tell me where you have established that hemp could be grown where there is wool being produced currently.

**Emma HAKANSSON**: I would have to take the question on notice to have specific areas of Victoria, but we do have that information somewhere. I can get back to you on that.

Bev McARTHUR: Good. That would be helpful. If the hemp fibre is such a good product, and I have no doubt it is – I am currently wearing bamboo; I am very happy to wear all sorts of fibres and I like the idea of choice – I think that is fantastic. I am also a fan of the market. If the hemp industry is a viable industry, then it does not need to have government financial support. I will tell you what, the farmers I know will transition to a product where the market is going to avail themselves of profit. That is what will drive them. At the moment the sheep industry is suffering quite a price drop. You might know the price of lambs at the moment has dropped dramatically from what it was. Farmers meet the market. They meet the environmental changes that occur. They are price takers, not price makers. If there is an opportunity for them to enter another market and another opportunity, they are very innovative. Also, they are great conservationists. I deplore this kind of notion that farmers are not conservationists. They are, because if they were not, they would not have a productive farm to run. Don't you accept that the market will sort out whether we are going to be growing hemp or bamboo or wool or cotton or whatever? I totally support the idea that we should move away from synthetics if that is a sort of major issue to the environment, but all these other products are natural products. Why can't you just accept that in the market natural products will be the way to go?

**Emma HAKANSSON**: There are a number of points that I would like to make to answer that question. The first is we do not actually in the fashion system produce fashion in a genuinely and totally free market. For example, the wool industry does receive dollar-to-dollar funding for things like research and development. The hemp industry in Victoria does not currently. There are also, as I mentioned, a number of barriers to beginning to produce hemp. So potentially if there were similar incentives in terms of funding and in terms of those barriers being removed, we might actually see more farmers making a choice. And as I mentioned, you know, it is their opportunity. It is something that farmers are able to choose to do; it is not something that is being forced upon them.

I would also say that something we are increasingly seeing being discussed in fashion conferences, discussions, particularly around regulation is the greenwashing around the notion of the term 'natural'. Just because the material is natural it does not necessitate that it is a sustainable fibre. There are also a lot of ways in which natural materials can be processed that renders them no longer natural. For example, in Australia and in a lot of countries that we export our wool to, we scour and process the wool with APEOs. That can sometimes actually render the wool no longer effectively biodegradable, which is really unfortunate. So there are a lot of aspects to fashion that we need to consider. But ultimately, yes, I would just say that fashion is not a totally free market, and if we can at least balance out so there is equal opportunity for farmers regardless of the type of fibre they want to produce, that would be of great benefit.

**Bev McARTHUR**: Well, I am all for removing the barriers to entry. I think governments create the problems in these areas, totally. Perhaps you would like to also take on notice all the regulations that you would like amended so that we can make the recommendations.

The CHAIR: Mrs McArthur, I have been very generous with your time. We need to move on.

Thank you, Emma. You have obviously been working in the fashion space for some time in various capacities. Could you just explain to us the trend that you have seen in that time towards the desire for brands and producers to take on sustainable products like hemp?

**Emma HAKANSSON**: Yes. I have been involved in the fashion industry for several years now. I have been consulting for over five years specifically on the topic of sustainable fashion, and we have seen a really significant increase not only in consumer interest – and there are a few studies that I have cited in the

submission in relation to how that consumer interest has piqued – but there is also a really significant increase in regulation, as I mentioned. So whether or not brands are currently providing the sustainable fibres that people want, soon they will have to in order to meet their legal requirements, and a lot of brands are not yet actually sure how to do it. So I think the marketing also with Victorian hemp to explain why it is of benefit to those brands would also be really important.

The CHAIR: Thank you. I also want to touch on the wool issue as well. I know you briefly spoke about this in your opening remarks and a little bit before to Mrs McArthur, but can you please explain to us how hemp compares to a product like wool in an environmental sense from start to finish of production?

**Emma HAKANSSON**: Yes. As I mentioned earlier, the average footprint when you are looking at a carbon equivalent, so including methane and other greenhouse gas emissions, for hemp is 42 times smaller than that of Victorian wool. The impact on climate of wool can vary and become even more significant than that depending on the production system. And then when you look at land, which has a major impact on biodiversity, there is also a huge difference of about 3670 square metres more being required for the same amount of wool. That is something that is increasingly being talked about in fashion – how important it is for us to be land-efficient. Hemp is also able to last in a really hardy way, in a similar way to wool. Some of the qualities of wool that people find not able to be replaced by something like a synthetic or a cotton can be replaced by hemp, and longevity is really important for sustainability too.

**The CHAIR**: Thanks, Emma. My next question was about durability, but you just answered it then. We are quite tight on time, so I am going to hand over to Ms Payne.

**Rachel PAYNE**: Thank you, Emma, and thank you for your submission. I found it really interesting and really informative. I guess, in your presentation you talked about factors that could see hemp cultivated responsibly. Can you talk us through that a little bit because I think that there is more to discuss there.

Emma HAKANSSON: Yes. So one of the key reports that we referenced in relation to this is from Textile Exchange. They recently released an entire report on this topic that would be worth considering. One of the really important things to be aware of is that hemp is a nitrophile crop, so it thrives off of nitrogen. That means that you could either get that nitrogen through putting on chemical nitrogen, which is not necessarily beneficial to the environment because of the impacts around eutrophication or you can be choosing to use hemp as a rotational crop where you have nitrogen-fixing legumes, plant proteins like that, which would be able to store nitrogen in the soil. So that is just one example, but there are a lot of ways that the way you produce hemp benefits the environment or does so less.

**Rachel PAYNE**: Thank you. And another thing that you brought up and discussed in your submission was that we are already a major exporter of fibre, but we are currently exporting for processing. Why is there a lack of processing of materials to fabric here in Australia? Is it something that has moved offshore fairly recently, or has it always been the case here in Victoria especially?

**Emma HAKANSSON**: It was several decades ago that we offshored all of our processing. We used to have a really significant amount of both cotton and wool processing here in Victoria, and it was essentially just offshored mostly to China because of a decision around cost. But it also means we lost a lot of jobs.

Bev McARTHUR: Labour costs.

**Emma HAKANSSON**: Yes. So we lost a lot of jobs here in Victoria, and we lost the ability to say that our fibre is completely Victorian grown and produced. So it is a real missed opportunity.

**Rachel PAYNE**: And I think you have sort of discussed this previously with the changing nature of the consumer and moving towards a more conscious and sustainable mode of living, but you mentioned the traceable fashion footprint. Is that sort of idea of farm to plate or farm to fibre –

Emma HAKANSSON: Farm to hanger is what we say.

**Rachel PAYNE**: Farm to hanger – excellent. Do you mind talking us through that a little bit more too, please?

**Emma HAKANSSON**: Yes. At the moment the Fashion Transparency Index says that of the 250 biggest global brands, only 12 per cent of them are able to trace even some of their raw materials, so where it actually comes from on the farm. That is a huge problem because it means we do not understand any of the environmental, human or animal impacts. A lot of the legislation coming through is demanding more transparency and the capacity to ensure certain things, like that deforestation is not involved and certain environmental practices are not involved. If we can have a hemp industry where that traceability is possible, we will have a really significant kind of opportunity to give those brands what they need.

Rachel PAYNE: Excellent. Thank you. Thanks, Emma.

**The CHAIR**: Thanks, Ms Payne. I will go to the screen. I cannot see any members, but I think you are all there. Mr McIntosh.

**Tom McINTOSH**: Hi there. Hi Emma. Thanks for the comprehensive report you are providing. There is a lot of knowledge there. I would also like to thank Mrs McArthur for identifying how important environment is to farmers. Definitely the farmers I talk to in the region I cover of Eastern Victoria understand that the environment does not end at the farm gate, given that we are in a global environment and how important climate change is and hence why the National Farmers Federation support action on climate change and not to mention the farmer-led groups like Farmers for Climate Action. So I think it is good we are having these holistic conversations and having robust conversations about opportunities.

We have talked a little bit about production with material, so what are our export opportunities with this product do you think?

**Emma HAKANSSON**: In terms of brands in the global fashion industry, not many of them are Australian, so if we are wanting to find a home to sell our fibre to, it is going to be overseas. In Europe, in the United States and in the United Kingdom is where a lot of this environmental fashion regulation is coming in, so I would say that those markets are where there is going to be an increasingly large interest in a fibre like hemp.

**Tom McINTOSH**: And is that the end product ending up in those countries? Obviously Bangladesh and others are major textile manufacturers. It was only just this year, midyear, when we were having a commemoration of workers lost in Australia, and we had Bangladeshi textile workers come out and talk about their conditions and how we are getting improvements. So do you think the product would generally be being put together where the majority of our textile manufacturing is, and are they geared up to work with a different product as opposed to working with cotton or others?

**Emma HAKANSSON**: It really depends on the brand, where they are producing. Generally, where a fibre is turned into a usable material is different from where material is turned into a finished garment, and finished garment is where Bangladesh and China are leading producers. There are a number of places around the world that are already totally equipped to turn hemp fibre into a usable material. There are also increasingly more and more producers. We see in France and Italy, for example, places that are setting up their factories to produce hemp materials in a way that is even softer and more luxurious, so the opportunity to get that material ethically and responsibly turned into a material for fashion will continue to increase, and it does not necessarily have to be associated with unjust labour practices.

Tom McINTOSH: And we do not currently have that capacity in Australia to refine the material?

**Emma HAKANSSON**: At the moment not at the scale that you would want to have, particularly in terms of making the hemp into a single-filament fibre that can then be woven into a material – that is totally lacking across all of our fibre in Australia at the moment. We do have some capacity, though, to bring that yarn back and then turn that yarn into a material, but there are further emissions associated with sending it away and bringing it back.

**Tom McIntosh**: Yes, because in past years I have visited workers here manufacturing textiles still in Australia, which is good to see. All right, so the product would need to be exported and then brought back at this point.

Emma HAKANSSON: Correct.

Tom McINTOSH: All right. Thank you very much.

**The CHAIR**: Thanks, Mr McIntosh. Do we have Ms Ermacora on the screen? We have all of you. We will start with Ms Ermacora. Thank you.

Jacinta ERMACORA: Hello, and thank you, Emma. It is very, very interesting. I am really enjoying hearing about this. I think we have got a lot to learn – I certainly have a lot to learn about this – and it sounds like hemp has got this contribution, potentially, to make around our journey to carbon neutrality. It looks like a great economic opportunity for our state too. Look, I might be asking an economic question, Emma, so just let me know: I know that the wool industry was massively subsidised when it was established 230 years ago here on this land. The squatters were given free land, basically, to get their sheep farms up and running, so it is not a particularly new mechanism for government – or in that case the Crown and in this case the government – to play a role in getting a new industry up and running in a place. So do you have any proposals or work done on any economic mechanisms that you would say would assist – you know, temporary mechanisms that might be in place for a few years or a decade – to get it going?

**Emma HAKANSSON**: I can only answer that question with a fairly vague response rather than any specific amount that a particular farm would require for that transition, but we have seen in other countries, particularly in Europe and the UK, grants that have been provided to farmers for particular projects that would help their climate mitigation efforts, so I would suggest that Victoria look into something like that.

**Jacinta ERMACORA**: It is a little bit like 10 or 15 years ago when the state was subsidising solar panels. They were what we would now describe as outrageously expensive, and potentially there was no business case for them when the government was subsidising them. Now that the economy of scale has emerged in the production of solar panels, they are much, much cheaper, and I presume eventually that subsidy would slow down a bit. Is that the kind of thinking?

**Emma HAKANSSON**: Yes, I think economy of scale is certainly going to be important here, and the suggestion of funding to farmers is not that it would just be a continuous thing but that it would be to assist with set-up costs. I also think that it could be explored in the same way that there is a dollar-to-dollar levy for a bale of something like wool or cotton that supports research and development. That is ongoing funding that is provided to those industries, so I think it would be really valuable to look at that thing in the same way for hemp.

**Jacinta ERMACORA**: Yes. Thanks, Emma. I think that research space is where all this will probably start. Thank you.

The CHAIR: Thanks, Ms Ermacora. Dr Mansfield.

**Sarah MANSFIELD**: Thank you, and thank you, Emma. It has been really interesting hearing from you this morning, and thank you for your submission as well. I was interested in a couple of the comments you made. You talked about the relative carbon footprint of hemp versus other fibres being different, depending on whether there were multiple purposes for the crop or a single purpose. When it comes to hemp, can you explain that a bit more?

**Emma HAKANSSON**: Yes. Hemp is – basically if you have a longer fibre, you are going to have a higher quality fibre that is considered more luxurious. If you are growing a dual-purpose crop that has seed or grain that can be produced for food purposes, then you are not going to have as tall a crop, because as it grows taller it will flower and then there is no seed. You certainly can get hemp that can be used for fashion from a dual-purpose crop, but particularly if we want to be able to get into a luxury fashion market where there is more money for fibre that is of high quality, then we would want to be able to have long, fibre-specific crops as well. It is not necessarily single purpose, because hemp can be used and utilised in a really wide variety of ways, so the waste product of a fibre-first plant would still be able to go into something like hemp concrete and other uses.

**Sarah MANSFIELD:** Great. The other thing: you referred a number of times to sustainable hemp. I guess I am interested in understanding this. We heard from a few different people last week about different production methods. How important is the, I guess, growing method and the production method when it comes to

producing the different materials from hemp in ensuring that it has that better environmental footprint? Is there a way of producing hemp unsustainably, and how important is that?

**Emma HAKANSSON**: There is always going to be a kind of spectrum of more or less sustainable for any fibre. Hemp is generally still going to be a more sustainable option than most other fibres. However, there is a lot of opportunity for us to learn from other fibre production in Australia. For example, in the last decade cotton farmers here have reduced their pesticide use by about 92 per cent, so we do not need to start our understanding of how we would eliminate that kind of environmental issue. And hemp is also more likely to not need pesticides as much. But things like pesticide, how much water we use, the kind of fertiliser we use and if we have intercropping and long holistic management practices on the farm rather than straight monoculture will all impact the overall sustainability of the farm.

**Sarah MANSFIELD**: You mentioned that we can learn from other industries and, I guess, the journey that they have been on to become more sustainable. Are there things that could be done from a government perspective to ensure that it is more sustainable from the get-go?

**Emma HAKANSSON**: Yes. The Textile Exchange report that I mentioned earlier – one of its recommendations is that governments actually set out outlines and both recommendations and requirements for hemp producers so that they are immediately going to best practice. I think that would be a really important thing for the government to do. It is also something that organisations like Collective Fashion Justice would be really happy to support the creation of.

**Sarah MANSFIELD:** Great. The other thing I am interested in – you were talking about how most of our hemp fibres are imported. What would it mean for the sustainability of hemp if we were to produce it locally? I am thinking about the carbon footprint of importing hemp materials. And where are there opportunities to reduce that carbon footprint with Australian production?

**Emma HAKANSSON**: Just to confirm, do you mean considering that we will have to export rather than import the fibre for processing?

**Sarah MANSFIELD**: Potentially, yes.

**Emma HAKANSSON**: Yes. When we look at the impact of an average fashion supply chain, the vast majority of the climate impact is in the raw material production. We ideally want to be able to produce the whole supply chain locally to minimise the amount of transport emissions. Just having the right fibre and the right fibre produced well is going to be the most important thing in terms of our contribution to a more sustainable, climate-friendly fashion industry.

Sarah MANSFIELD: Thank you.

**The CHAIR**: Thanks, Dr Mansfield. I think that is perfect timing for us to wrap up, then. Thanks very much for appearing before us today, Emma, and for your very valuable contribution here and in your submission.

**Bev McARTHUR**: Chair, can I just ask a question?

The CHAIR: Yes.

**Bev McARTHUR**: Could you ask Emma: she quoted some figures – 42 times smaller than wool et cetera. Could she just give us the reference?

**The CHAIR**: Yes. Emma, I am not sure if you heard Mrs McArthur then, but are you happy to provide that information on notice?

Emma HAKANSSON: I do not need to on notice. It is actually in the submission – there are footnotes.

Bev McARTHUR: Okay.

The CHAIR: Beautiful. Thanks, Emma.

Emma HAKANSSON: Thank you.

**The CHAIR**: The committee staff will reach out to you for the questions you did agree to take on notice. Thanks very much.

Emma HAKANSSON: Great. Thank you.

Witness withdrew.