T R A N S C R I P T

LEGISLATIVE COUNCIL ECONOMY AND INFRASTRUCTURE COMMITTEE

Inquiry into the Industrial Hemp Industry in Victoria

Melbourne - Thursday 7 September 2023

MEMBERS

Georgie Purcell – Chair David Davis – Deputy Chair John Berger Katherine Copsey Jacinta Ermacora David Limbrick Bev McArthur Tom McIntosh Evan Mulholland

PARTICIPATING MEMBERS

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

WITNESS

Matthew Lariba-Taing, Solitude Technology.

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 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 welcome any other members of the public watching via the live broadcast.

Before we begin, I will just get committee members to introduce themselves.

Renee HEATH: My name is Renee Heath, and I am a Member for Eastern Victoria Region.

Bev McARTHUR: Bev McArthur, Western Victoria Region.

Sarah MANSFIELD: Sarah Mansfield, Western Victoria Region.

The CHAIR: Georgie Purcell, Northern Victoria Region.

John BERGER: John Berger, Southern Metro.

Rachel PAYNE: Rachel Payne, South-Eastern Metropolitan Region.

The CHAIR: 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, and 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.

Matthew LARIBA-TAING: Yes. My name is Matthew Lariba-Taing, and I am representing Solitude Technology.

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

Matthew LARIBA-TAING: Too easy. I do not speak that much. Hi. As I have already said, my name is Matthew Lariba-Taing, and I am the founder of Solitude Technology. I represent a technology-based solution provider for all stakeholders along the supply chain amongst the agriculture industry, specifically targeting hemp and its development. I thank you for giving me this opportunity to represent like-minded start-ups and new farmers and to discuss the opportunities and tribulations that we hope the Victorian government will help achieve and assist with. I am not an agronomist. I am not a farmer or a person with access to a large amount of capital. I am an ambitious Victorian looking to leverage all of what this state has to offer to bring a strong future to the industry and the state. They are my opening comments.

The CHAIR: Beautiful. We love it. Thank you – plenty of time for questions, then. We will start with Ms Payne.

Rachel PAYNE: Thank you. Matthew, I just want to thank you for your submission, because it was so succinct and clear and it really did lay out the foundations of what you are recommending we as the committee should be considering around the regulation of hemp in Victoria. I am just wondering – you were talking about clarifying and simplifying some of the licensing procedures, which was one of your recommendations – can you tease that out and compare that to how the current system is potentially stalling advancements in this space?

Matthew LARIBA-TAING: Yes, definitely. I guess from my perspective as a start-up, obviously I do not have farmland or a large factory. Essentially it seems like because – actually, I can get the reference for that – hemp is seen as a part IVA under the *Drugs, Poisons and Controlled Substances Act 1981*, it is a controlled drug or scheduled drug, so access to those raw materials is pretty much out of reach for someone like me because essentially I cannot go to a farmer and get raw materials to process it to either build machinery or build products from those raw materials in my house, because obviously that would not satisfy the requirements to get the licensing for that. So if we can look at ways to allow those barriers to be removed, I do believe that it would open up the industry to people who are looking to innovate in the space but just have those barriers to move past, essentially.

Rachel PAYNE: You also talk about, as you just mentioned, differentiating what would be considered cannabis and what would be considered hemp. Is that associated with that limitation in the regulation? Is that what you are implying?

Matthew LARIBA-TAING: Yes, and that is the interesting part from this. It does say in the Act that they do realise that the hemp is less than 1 per cent THC, but it still looks like the rules apply to that, so you have to have the additional security – stuff like access control, CCTV and those items – that would be a large cost to someone who is just working from home, essentially.

Rachel PAYNE: Okay. Thank you. You also talk about some of the varieties of hemp and the constraints around that. Do you mind expanding a little bit more on that for us as a committee?

Matthew LARIBA-TAING: Yes, I guess from my perspective what I have learned coming new into the industry is that the plant is a purpose-built, or purpose-grown, type of item. It is the idea of having access to those specific types of plants to see what more you can develop from them, because you cannot just go out and -I will use some examples, not knowing the technical terms – find the right plant that would be applicable to bioplastics. You would need to select the right type of plant that can grow to get the full benefits of that plant and at the same time not put any disadvantages to anyone within that supply chain.

Rachel PAYNE: Okay. Yes, that makes sense. Have I got time for one more?

The CHAIR: Yes.

Rachel PAYNE: Great. I guess just moving to the other side of some of the outcomes there could be of an expanding hemp industry, do you want to talk about some of the opportunities that you envisage going forward in the future?

Matthew LARIBA-TAING: Yes, definitely. I guess it is no real secret where we can go, so with the plant you have got the food, which is obviously going well, but when it comes to the fibre side you have got wovens and non-wovens, so your textiles would be the woven type of applications – high-fibre, low-quality fibre – and then you have non-wovens where you can use low-quality fibre that would not be suitable for the textile industry, to be used as a replacement for – I cannot remember what it is called, but essentially right now they use coconut fibre to put across our local council areas as a matting.

Rachel PAYNE: Bedding.

Matthew LARIBA-TAING: Yes, weed matting, essentially, a replacement for pine chips and stuff like that in playgrounds. You can use low-quality hemp fibres. They are the sorts of items you can get for there. But yes, it is a very versatile plant. I believe the task force even published a nice pictogram of that where it breaks it down into the plant within the subsections and then the categories of that where they can fall into, so I did draw a lot of inspiration from that. Rachel PAYNE: Excellent. Thank you.

The CHAIR: Thanks, Ms Payne. Mr Berger.

John BERGER: Thanks for your appearance today, Matt. You talk about establishing quality controls. Are there any in your mind now that might be in effect that you want to see changed, and how would you bring them up to a level that might appease what you are looking for?

Matthew LARIBA-TAING: Yes, definitely. From that type of control, it is mainly to do with selling the product to the end users, because without the certification and the clarity around what you are actually providing to that end user it is just an ambiguous sell. So without that sort of documentation and the requirements for how that product has got to be, essentially there is no standard to it, and if you cannot have a standard you cannot guarantee that you are going to be providing the same product every single time.

John BERGER: So how would you set that standard if there is not an existing pathway there now? Where is the bar?

Matthew LARIBA-TAING: Essentially – some people might not like this, but an inspiration that I draw from is probably the way that the CSIRO has certified the seeds here for the cotton industry. Doing something similar from that perspective would be one of the foundational items, because once you certify the seed then you have obviously got the plant that grows from that, and then once you have got the plant from that then you have got the steps forward to classify and standardise, essentially.

John BERGER: We have heard in earlier submissions today about the amount of different types of seeds, I suppose, if you like. I suppose the quality control would come into putting them into their respective categories and what it all might mean. Do you see that as a way forward for removing a bit of the things that are attached to it?

Matthew LARIBA-TAING: Yes, definitely, because I guess one of the items that I do see inside the industry are the farmers and the people inside the industry obviously wanting to get the product out to the end users, but the end users themselves do not really see the value in that. So by establishing that you can clearly communicate the value to the end users.

John BERGER: Thanks, Chair.

The CHAIR: Beautiful. Thanks, Mr Berger. We have heard from a few witnesses today who I guess have different perspectives but agree that things need to change in terms of regulation in the hemp industry. If you were responsible for bringing about these changes, tell us what you would do to remove the barriers.

Matthew LARIBA-TAING: I would remove the barriers that allow for the commercial growth of the product. I would keep in certain barriers to maintain the quality of the product as well, because it is all well and good to obviously get it out there, get people growing it and get people invested into it, but if we are starting from the ground up, we might as well do it right rather than have a kneejerk reaction later down the road.

The CHAIR: I note in your submission that you would like to see an industrial hemp Act, a standalone industrial hemp Act. Can you tell us more about that and the reasons why?

Matthew LARIBA-TAING: This is exposing my probably minimal knowledge of politics, but essentially a legislative Act would pass a lot quicker than an Act of Parliament. So if we are able to essentially make those sorts of changes now, then we could obviously kickstart the industry a lot sooner.

The CHAIR: Okay. Thank you. I will hand over to Dr Mansfield.

Sarah MANSFIELD: Thank you. In your submission you talk about how hemp has a role in water conservation. I am not quite sure if that is relative to other crops or how you see water usage and hemp working together.

Matthew LARIBA-TAING: I guess one of the main items – and John probably put a pin in what I said; he is a lot more knowledgeable than I am – is essentially we grow a lot of cotton, and hemp I believe does use not significantly less but less water.

Sarah MANSFIELD: Yes.

Matthew LARIBA-TAING: Likewise one of the items that I foresee using hemp for is hemp bast, I believe – a replacement for pine pulp. And then, essentially, if you are going to look at the amount of water a hemp farm would use compared to a pine farm – I believe the consumption can be astronomical.

Sarah MANSFIELD: So it is rolling water conservation. It is really relative to other crops that might be used for that particular end purpose.

Matthew LARIBA-TAING: Yes, definitely.

Sarah MANSFIELD: That is helpful to know. Just on water, I guess, given it is a crop that it seems most presenters agree requires irrigation, how do you see that playing out given our changing climate and demands on water for different crops? Where does hemp fit into all of that?

Matthew LARIBA-TAING: It is an interesting question. I guess it is a little bit of a chicken and egg scenario, but it would be one of those items that once you understand where the hemp is actually growing successfully, then you would probably build the pathways to be able to either monitor or manage the water that is going to those areas. Something simple is that you probably would want to try to grow them in areas where the water is readily available or can be routed to them quite easily without massive changes to the environment and everything else around it. That is what I would say.

Sarah MANSFIELD: The other area you touch on – and it has been brought up by almost every person who has made a submission – is hemp's role in carbon sequestration. I would be interested in hearing your views on that and how we could perhaps leverage that more if we did approach the hemp industry differently.

Matthew LARIBA-TAING: Yes, definitely. I guess one of the main things obviously with removing the barriers that are there is it would allow for more green funding from either private sectors or even from the Victorian government. I do know the Victorian government has for commercial buildings the NABERS rating scheme; it is obviously built out of New South Wales, but it is down here in Victoria. Likewise here Victoria has Victorian energy efficiency certificates, which are VEECs. Similar schemes like that I do believe could be placed on top of the hemp industry by just understanding how the plant grows, what it actually sucks out of the environment, and then you have got a kilogram of weight of CO₂ essentially. So enabling those sorts of schemes that are very logical and data driven to provide the outcomes I believe has a benefit for everyone.

Sarah MANSFIELD: The other things that you touch on, just around other aspects of the potential environmental benefits of hemp biodiversity conservation; can you expand on that a little bit more?

Matthew LARIBA-TAING: I guess what I could see with the biodiversity is mainly with the crop cycling. You can use hemp as a filler, or I guess – I am not a farmer, and this is not the right terminology – essentially as a crop that can be used in between crops to help regenerate the soil and then obviously provide the benefits to the next crop that is growing after it.

Sarah MANSFIELD: Okay. That is all. Thank you.

The CHAIR: Thanks, Dr Mansfield. Mrs McArthur.

Bev McARTHUR: Thank you very much. Now, look, we just heard from Dr Wightman, an agriculture scientist, that hemp requires very specific soil types and water rainfall areas to grow. It is actually a difficult crop to grow, he said. Do you not subscribe to that?

Matthew LARIBA-TAING: He is an expert; I am not an expert. But I guess one of the papers that even Dr John Wightman worked on with AgriFutures demonstrates that if you do not actually cull your field correctly after you have harvested it, it will grow back like a weed. Essentially it itself will outcompete. The example that AgriFutures used was a barley crop, and essentially they did not farm the land correctly after they harvested and then the hemp started outgrowing the barley. I do believe CSIRO has done a study out of Christmas Island using hemp on the mines that are out there. The extract shows that there is large potential for it to be the plant that can actually put nutrients back into the ground and regenerate the soil. So I do believe it comes down to the idea that hemp is many types of plants; it is not just the one type of plant, and potentially we are just looking at the wrong seed to do that. **Bev McARTHUR**: You also say one of the benefits is water conservation, but you have told us – and we have heard each time – that it needs irrigation. That is a costly form of farm production to organise the irrigation, but even in terms of water usage. So why would we grow hemp when we could just use crops that use the water from the sky?

Matthew LARIBA-TAING: I guess from my perspective it is about changing the status quo; just because something is working means we keep going along with it. If we take the time now to invest into the water infrastructure to grow the hemp, then potentially we could start growing the hemp industry and then reducing the amount of water that other agricultural industries use to grow products.

Bev McARTHUR: But the crops you might be replacing do not require irrigation.

Matthew LARIBA-TAING: Yes, that is true.

Bev McARTHUR: So you are suggesting a crop that actually is going to use more water than the existing crops.

Matthew LARIBA-TAING: Potentially.

Bev McARTHUR: Okay. So it is actually not a water conservation crop at all, it is actually a waterintensive crop.

Matthew LARIBA-TAING: Yes.

Bev McARTHUR: Okay.

Matthew LARIBA-TAING: Interesting. Because leading up to here as well -I am obviously new to the industry, and I am not a farmer -a lot of the research that I have read has said that it is a lot more water-effective than everything else

Bev McARTHUR: Yes, well not if it needs irrigation. And did you suggest that – I might have heard you wrong – it is more water conservation inclined than a pine plantation? Was that what you were referring to?

Matthew LARIBA-TAING: Yes, I believe so.

Bev McARTHUR: Well, pine plantations do not have any form of irrigation at all.

Matthew LARIBA-TAING: Oh, okay. Then, no, I recant that, and I will bring that one back. I am happy to learn.

Bev McARTHUR: Okay. So maybe correct that point. You also said its benefit is reduced chemical usage. We just heard that it requires a lot of additives to produce a good crop.

Matthew LARIBA-TAING: I do believe that does come down as well to the lack of crops that we are actually growing. I believe that if we could use a certain type, changing our farming practices and potentially using a different type of hemp plant, that you could probably find you might not need to use as many additives to get there.

Bev McARTHUR: Where is your evidence?

Matthew LARIBA-TAING: Look, it is anecdotal essentially: just talking with farmers and talking with people inside the industry who I guess believe a little bit differently to what has been published.

Bev McARTHUR: So we do need the evidence if you are going to suggest that (a) it will reduce chemical usage and it has water conservation benefits – and yet there is no evidence.

Matthew LARIBA-TAING: I would not say there is no evidence.

Bev McARTHUR: Well, you have actually alluded to the fact that it needs irrigation, not less water.

Matthew LARIBA-TAING: Yes. And likewise I would be happy to provide, I guess, the references and the readings that I found and got my data from as well.

Bev McARTHUR: That would be helpful if you would like to do that.

Matthew LARIBA-TAING: Yes, definitely.

Bev McARTHUR: You say that there are infrastructure limitations. Would you like to expand on that?

Matthew LARIBA-TAING: Yes, and I believe you guys have spoken about this. It is the processing of the plant. So once the plant is grown, it is getting it to the end users in the timely manner that is the issue right now. Talking with farmers and people who can actually work with the product, it is about shipping it from the farm to their factory within the time frame, and then essentially you are just putting it onto big trucks to get it to where it needs to.

Bev McARTHUR: So what are you suggesting?

Matthew LARIBA-TAING: I believe John said it quite well: little hubs, or if not, little areas that are closer to the actual farms themselves that can process the plant and then get the raw materials from that plant that the industry is looking for to then those end users.

Bev McARTHUR: So we will have a sort of multitude of processing plants around the state – is that what you would envisage?

Matthew LARIBA-TAING: Yes, I definitely do. It would be like a supply chain, where you would have multiple hubs in key areas that are within a certain distance of farms that are actually growing the hemp quite frequently, and then just building the channels from who is ordering it – from farm essentially to end user.

Bev McARTHUR: You also said one of the constraints is international competition. What is wrong with international competition?

Matthew LARIBA-TAING: Well, essentially they are a lot more further along than we are. So what that means is they are able to potentially process the plant a lot more effectively, and then essentially we are costed out.

Bev McARTHUR: But if this is an industry that entrepreneurs and self-starters want to get going, surely that is their problem to overcome, isn't it?

Matthew LARIBA-TAING: Definitely, and that is where it is about communicating the value back to, I guess, the end users who are looking to use the product. But I guess at the end of the day an end user will not change their ways unless it is, one, going to make them money, or they have got some sort of environmental KPI to meet.

The CHAIR: One more question.

Bev McARTHUR: So it is up to the entrepreneurs who want to get involved in the industry to educate us all and sort out their problems with international competition.

Matthew LARIBA-TAING: No, I do believe the state has its part in there to assist with, I guess, the advocacy of the product itself, building awareness.

Bev McARTHUR: So the state government via the taxpayer is going to become a marketing operation.

Matthew LARIBA-TAING: Not a marketing -

The CHAIR: Mrs McArthur, we will move on to the next question if that is okay. Dr Heath.

Renee HEATH: Thank you. Thank you so much for your submission and your presentation. I have got a couple of questions. On the first page under 'The environmental benefits and costs', you said:

Overall, the environmental benefits of expanding the industrial hemp sector outweigh the associated costs ...

What are those associated costs?

Matthew LARIBA-TAING: I guess, like, setting up the irrigation, setting up the processing hubs, setting up the infrastructure to obviously have a booming industry.

Renee HEATH: Right. Yes, wonderful. I asked a very similar question to the last witness as well – I know that food is something you speak about quite a bit in here. There was a risk assessment done for Health Canada, and it said new food products and cosmetics made from hemp pose an unacceptable risk to the health of consumers. It talks about how even very small trace amounts of THC can cause developmental issues with children, and even exposure through breastmilk or in utero can cause that. Do you know of any research that suggests otherwise and that it is safe?

Matthew LARIBA-TAING: Not off the top of my head, no.

Renee HEATH: Okay.

Matthew LARIBA-TAING: And I guess my response to that would be, like any sort of product that is coming about, as long as we understand what it clearly does, then we can advise the public that, yes, it may be beneficial to others but not beneficial for everyone.

Renee HEATH: Yes, so maybe not safe for developing brains, and that is something that we would have to regulate around.

Matthew LARIBA-TAING: Yes, definitely. Something like alcohol – obviously alcohol can be consumed by adults, but it is clearly stated, you know, people who are pregnant or breastfeeding to stay away from those sorts of items.

Renee HEATH: And you would see some rules like that in your ideal world?

Matthew LARIBA-TAING: Yes, and that is why, back to what I was saying to John, we need to remove the barriers in legislation, but at the same time it still needs to be regulated so everyone knows what is in it.

Renee HEATH: Okay, good. The other question I have is: you talk about how the Victorian government should consider implementing supportive policies and providing financial incentives. What sort of policies would you like to see implemented and what financial incentives?

Matthew LARIBA-TAING: Similar to what we said before – and I have got the names of them here – the VEEC scheme that we have got here in Victoria and also the Victorian carbon farming program. That is where the Victorian government is going out to pay private landowners to plant trees. So a scheme like that for farmers to start growing hemp essentially incentivises them to grow the hemp even without a clear end user or end person to sell it to.

Renee HEATH: Do you think there is a stigma around hemp?

Matthew LARIBA-TAING: I would not say there is a stigma. There is a misunderstanding of hemp. Obviously the comments on a hempcrete house – 'Can I smoke it?' There is stuff like that. I do not believe it is as demonised as it was in the past, and I do believe the public has come a long way. I do not believe it is as bad as people think. It is just the misunderstanding of what it is.

Renee HEATH: Okay, and last question: do you think there are any dangers associated with it?

Matthew LARIBA-TAING: Yes, I guess there would be. Off the top of my head I could not really list any, but I would be naive to say that there are not.

Renee HEATH: Thank you so much.

The CHAIR: Thanks, Dr Heath. We have time for more questions, so I will go back to Ms Payne.

Rachel PAYNE: Thank you. You talk about some of the suggestions you would like to see in a hemp industry plan for Victoria. Do you want to expand on that and give us a bit of an idea as to what you would see as the process there for the state if there was any involvement of the state?

Matthew LARIBA-TAING: It is an interesting question. From a state perspective you would probably want to see – sorry, I am trying to think of this on the spot at the same time. I do believe so, because like any sort of industry it needs to have the involvement of the government and collaboration between private stakeholders and industry bodies. They need to work together to have an understanding of where they want to get the industry to. At the same time, if the industry wants to get the industry to a certain benchmark, they will need the government to help them get there, and then the government themselves will need to know why they are trying to get there and what they look to achieve once they get there. It is a massive collaboration between all stakeholders, essentially.

Rachel PAYNE: Have I got time for one more?

The CHAIR: Yes.

Rachel PAYNE: Considering that you are the founder of a startup, I am really curious to know what sort of interest there is from the private sector in moving forward with the hemp industry. To the best of your knowledge, is there a lot of interest out there from the private sector, and is it potentially that the regulations are just mooting that point? I would love to know your thoughts.

Matthew LARIBA-TAING: From the private sector I do believe there is massive interest, especially since the general public now is pushing for a more green and sustainable future and also they are looking for more sustainable products. Obviously it is not uncommon to know that hemp can be made into bioplastics, and single-use plastic is obviously one of the biggest detriments to our environment. So that is where I do see the massive opportunity and where the private sector can get involved, because obviously if you are the first people to develop something you have got the market share.

Rachel PAYNE: Great. Thank you.

The CHAIR: Any more questions?

Bev McARTHUR: Yes. I was fascinated before. You said when you commented that the government needs to get involved and give grants to people -I might have heard you wrong, so please correct me - and that effectively a taxpayer subsidy via the state could be used to grow a product even when there is no end user.

Matthew LARIBA-TAING: It is not to say there is no end user. Right now there is just a massive question mark for the farmers that I have spoken to on who is actually buying their product, because one thing I guess I could see from their perspective is they are quite proud in making sure they want to deliver the right quality product to the end user, and then essentially the end users do not know what to ask for so they do not know what to grow. So there is just a little bit of a limbo situation right now. But essentially if you could get them to start growing it, get a better understanding of the plant and its applications and then build the standards and the certification around those products, you could then find the end users to buy it, and they will get the product that they are looking for.

Bev McARTHUR: So what happens if there is no end user – the state has subsidised the growing of a product that nobody wants to buy? Surely if there is an industry out there and there are entrepreneurs out there, they will have worked out the end use of a product, and they will be ensuring that the farmers grow it for them, won't they?

Matthew LARIBA-TAING: Definitely, and I guess this is why we are having this conversation now, because one of those barriers is that an entrepreneur like me cannot go out and get raw material from a farmer to try to process and build those items.

Bev McARTHUR: Yes. So surely you are not suggesting that we need government involved to potentially subsidise a farmer to grow something that at the moment there is no market for?

Matthew LARIBA-TAING: I would agree with that term, but I would not say it is to subsidise farmers for no end user.

Bev McARTHUR: Well, it is. If it is taxpayer money being used, it is a subsidy, right?

Matthew LARIBA-TAING: Yes. That is true. But I would like to see, I guess, the scheme or that initiative built by the government so it is recognised by the government that even private entities can get involved with it as well.

Bev McARTHUR: But it still would be taxpayers money being used to support a commercial industry that has a profit base at the end of it, and you think the taxpayer should get involved in helping to get an industry off the ground that there may be no market for.

Matthew LARIBA-TAING: I do not believe that there is no market for it.

Bev McARTHUR: Well, then you will not need government involvement, will you? If there is a market out there, it will be all good.

Matthew LARIBA-TAING: I guess from that perspective, potentially.

Bev McARTHUR: Fine, thank you.

The CHAIR: Thanks, Mrs McArthur. We have no more questions. Thanks very much for coming along today and for your submission, and all broadcast and Hansard equipment can now be turned off.

Witness withdrew.