SUBMISSION TO VICTORIAN GOVERNMENT INDUSTRIAL HEMP ENQUIRY

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This submission is prepared by Charles Kovess on behalf of Textile & Composite Industries Pty Ltd ("TCI") and the Australian Industrial Hemp Alliance Inc and comprises four parts. Certain parts of the submission are made by TCI, and other parts on behalf of AIHA. However, Charles takes responsibility for all the content herein.

Part 1: 11 Wonderful ways in which industrial hemp can and will save our planet.

Part 2: A Business Plan and Economic Impact analysis for Victoria of committing to the development of the industrial hemp industry.

Part 3: 5 key steps that must be taken by Government and by people to realise the wonderful potential of industrial hemp.

Part 4: Background information about Charles Kovess, Textile & Composite Industries Pty Ltd, and the Australian Industrial Hemp Alliance Inc.

PART 1

11 WONDERFUL WAYS IN WHICH INDUSTRIAL HEMP CAN AND WILL SAVE OUR PLANET

In this first part, I explore the 11 wonderful ways in which Industrial Hemp can and will save our planet provided that governments do not get In the way.

Many politicians do not understand the difference between industrial hemp and high-THC cannabis, and many politicians make decisions about cannabis and hemp whilst being substantially ignorant.

I have been involved with hemp since 2012.

I now consider industrial hemp and the cannabis plant to be the most amazing plant available to humanity.

For readers of this Submission who believe in God, I consider it's the most amazing plant given to humanity by God.

But presently, industrial hemp is a cottage industry globally. In other words, It's a small industry. I am often asked: "if hemp is so good, then how come it's such a small industry? It has less than 300,000 hectares of hemp growing globally".

My simple answer to this question is ignorant politicians, or incompetent politicians, or corrupt politicians or some other descriptor of politicians, together with government interference in the name of "safety" and "protecting the public" that have blocked and continue to block the true potential of hemp.

Governments are also influenced to make poor decisions because they act in the commercial interests of other parties. They make decisions based on the representations of people whose existing business interests will be harmed if they stop blocking new products, new solutions coming on the market. Hemp and cannabis comprise such solutions.

It's now time for inappropriate government interference to be substantially removed.

I hereby call on the removal of that government interference.

I say, "Hemp's Time Is Here".

I will articulate the 11 wonderful ways in which hemp will save our planet, and then, in Part 3 of this Submission, I will share five steps that must be taken by government, by government authorities, by companies and by the people of Victoria to realise the wonderful benefits of hemp for our State.

If these steps are taken, hemp's time will indeed be here.

I love our planet. I want to protect it. I want to rejuvenate it. I want to regenerate it because it's the only planet we have.

I've been involved in organic farming since 1976. I deeply understand regenerative agriculture.

Our planet certainly has a soil emergency problem. It has been chemicalized beyond belief.

Our planet has a waste problem, particularly plastic, waste and plastic pollution.

Our planet has water and air pollution problems.

I do not accept that our planet has a climate emergency or a climate crisis.

Hemp can solve all of the environmental emergencies that Victoria and Australia and the planet are facing.

To keep this Submission at a reasonable length, I do not propose to detail all the bases and evidence that is available and on which this Submission relies.

10 MAJOR CATEGORIES OF PRODUCTS

There are 10 major categories of products and solutions that can be made from industrial hemp and from cannabis as the picture shows.











FOOD

CLOTHING

BUILDING

MEDICINE

FUEL

PACKAGING



COMPOSITE FERTILISER FIBRE







ROPE, TWINE



These 10 categories are:

- food
- clothing
- Shelter, buildings
- medicinal solutions.
- fertilizers
- biofuels
- composite products, such as those used to replace fiberglass,
- body care, products and cosmetics
- ropes and bailing twine
- packaging solutions of all types.

I think this is amazing. That's why I say hemp is the most amazing plant that is available to humanity.

I refer to this picture of a hemp crop below. This crop grew from seed, in 100 days.



Imagine that! A crop up to 4 meters in height, grown from seed over 100 days. That's four centimetres of growth each day.

Such a crop can produce usable biomass of up to 25 tons per hectare, but an average accepted number is 10 tonnes per hectare of usable biomass.

THE 11 WONDERFUL HEMP SOLUTIONS

These 11 hemp solutions that will save Victoria and our planet are not in any particular order of importance and there are many more than just 11 Solutions.

I have distilled the best and most relevant 11 for this Submission for consideration by the Inquiry Committee members.

- 1. Hemp can help every company that chooses to comply with ESG requirements to elegantly fulfill those requirements.
- 2. Hemp can help every company that chooses to comply with Circular Economy requirements to elegantly fulfill those requirements, particularly eliminating plastic waste by replacing plastic with hemp alternatives.
- 3. Australia's greatest security risk is lack of fuel independence and security. Hemp can produce unlimited quantities of ETHANOL from the core of the plant. A true BIO FUEL. This can power most engines, including jet airplanes.

- 4. Hemp can produce unlimited quantities of bio diesel from hemp seed oil. Another TRUE BIO FUEL that will power farm tractors and other large engines.
- 5. Bio fuel from hemp can power EXISTING electricity generating machinery, in place of coal, so that affordable electricity can be available without massive capital infrastructure spending.
- 6. Hempcrete homes are healthier and more energy-efficient than normal homes. Hempcrete homes can be made for high-quality upmarket buildings, as well as low-cost social housing.
- 7. Less wealthy countries (particularly level 1 and 2 countries on the UN scale of 4 levels) can transform their economies with hemp to REPLACE IMPORTS, such as fuel and a wide range of manufactured goods. Countries can literally LIFT THEMSELVES UP BY THEIR BOOTSTRAPS by competently growing vast hemp crops. Each country has different import requirements that can be replaced with hemp, and Victoria can do the same.
- 8 Hemp seed is an excellent food source, particularly of protein. You will be healthier if you eat hemp seed and hemp seed oil.
- 9 Cheap cotton and synthetic textiles are creating massive waste problems that hemp clothing will solve. Hemp clothes are better, healthier, last longer and minimize waste. Also growing with hemp requires less use of pesticides, herbicides, and chemicals than growing cotton. I love that cotton is a natural product and organic cotton is a wonderful natural product, but non-organic cotton is less of a natural product.
- 10 Hemp composite products can replace timber usage in buildings, thereby reducing the need to cut timber for those places where this is relevant.
- 11 New jobs will be created requiring new skills to use hemp in all the wonderful ways that it can be used. And this creation of new jobs and new skills will also lift Victoria's, and Australia's, economic prospects and GDP. The economic impact is set out in Part 2 of this Submission.

Increasing use of hemp can certainly enable any country to achieve net,-zero carbon emissions if it wishes to, although, for the reasons previously expressed, this Submission focuses on solving other emergencies,

I created a mantra for hemp that is shown below.



So how do we make all this happen? I say there are five key steps and I discuss them in Part 3 below.

PART 2

BUSINESS PLAN AND ECONOMIC IMPACT OUTLINE FOR VICTORIA

TO SUPPORT THE DEVELOPMENT OF A GLOBALLY SIGNIFICANT INDUSTRIAL HEMP INDUSTRY

TCI accepts the need to demonstrate the following to the Government, to support the development of a globally significant industrial hemp industry:

- How much economic growth will be generated for Victoria?
- How many jobs will be created in Victoria?
- How many new skills will need to be developed in the workforce?
- What impact will the Proposal have in making Victoria and Australia more environmentally clean and sustainable?

TCI's aim in preparing this Business Plan and Economic Impact Outline is to make it short and clear. Supporting material and background information is available.

VISION

By 2028, Victoria is one of the world's global leaders in the hemp industry, with at least 9 economically significant value-adding hemp industries established in Victoria, and by 2033, Victoria's farmers are growing 200,000 ha of hemp.

GOALS TO BE ACHIEVED BY 2028

- 1. 20,000 ha of hemp being grown in Victoria
- 2. Acquire 40 D8 Decorticators from TCI to each process 5000 tonnes of hemp stalk pa. It is essential to acquire the correct decortication processing equipment, to avoid the need for retting.
- 3. Acquire all other necessary agricultural equipment
- 4. Sign contracts for the sale of 50% of the hemp fibre, hurd and seed production prior to planting
- 5. Establish 9 value-adding manufacturing centres that harness the hemp fibre, hurd and seed
- 6. Engage Victorian researchers to build Victoria as a key hemp research centre
- 7. Government to assist to arrange finance for each of the 9 manufacturing centres to be established
- 8. Access relevant research funds for Victorian researchers
- 9. Develop branding strategies that are impactful for Victorian Hemp in global markets
- 10. Reputation of Victoria improves as a global leader in agribusiness
- 11. Facilitate world-class Agribusiness Conferences in Victoria with a focus on hemp
- 12. Facilitate world-class Biocomposite Conferences in Victoria with a focus on natural fibres and hemp
- 13. Tourism increases in the hemp industry and the 9 value-adding manufacturing centres

STRATEGIES TO ACHIEVE THE GOALS AND THE VISION

- 1. Legal, accounting and governance compliance
- 2. Relationships built with major international banks and financial services organisations
- 3. Effective global marketing of hemp fibre, hurd and seed to potential markets
- 4. Effective global marketing of value-added hemp products and their benefits
- 5. Alliances with globally powerful environmental organisations
- 6. Alliances with globally significant food and fibre organisations
- 7. Seek to sign long-term supply agreements for hemp fibre, hurd and seed raw materials and hemp value-added products with reputable and financially-strong buyers.

BUSINESS PLAN ECONOMIC IMPACT OUTLINE

This outline will be provided by answering a series of strategic questions that Government would be likely to ask.

1. How much farmland will be required to be planted with hemp?

20,000 ha by 2028, rising to 200,000 ha by 2033, and increasing significantly thereafter.

2. How much land and area will be required for hemp manufacturing in the 9 centres?

It is envisaged that the 9 hemp value-adding manufacturing centres could be:

- Fibre for composites in Colac
- Textiles for clothing in Geelong
- Textiles for furnishings, carpets and industrial applications in Geelong
- Ethanol fuel and biodiesel production in Geelong
- Motor car bodies and components in Geelong
- Hempcrete for building in Colac
- Building and household products using hemp composite materials in Gippsland
- Grain for food products and cosmetics in Melbourne
- Surf boards, snow skis and snow boards using hemp composites in Torquay
- Ropes, string and twine in Gippsland.

On average, 2500 sq metre factories will be needed, a total of 22,500 sq metres.

The 9 manufacturing centres will all be separately owned by visionaries businesses and investors, who can see the global opportunities inherent in industrial hemp and its potential 25,000 different products.

3. Over what period of time will the factories be established: in one period, or over a number of periods?

TCI considers that all 9 centres can be established by 2028.

4. What investment funds will be required to fulfil this Business Plan, including the establishment of the 9 centres?

The overall strategy is to raise all its funding requirements via lending or equity sources. The quality of supply and sales contracts will ensure the raising of the necessary funding. However, to speed up

this process, Government cooperation and support for the hemp industry will be essential, including giving preferential buying of hemp products for Government purposes.

When one considers that 10,000 ha of hemp grown in Victoria will produce 30,000 tonnes of fibre worth between USD60 million and USD300 million per annum, depending on the manufacturing value that has been added, the funding requirements can be satisfied.

The investment in Australian engineering firms to manufacture the 40 D8 Decorticators and associated agricultural machinery will be an investment of \$20-25 million. The timing of manufacturing will depend on the timing of sewing of the crops. Each D8 can process 5000 tonnes of hemp per annum over the course of a year, at a rate of one tonne per hour. If logistics are installed in the processing, this rate can be increased to two tonnes per hour, enabling each D8 to process 10,000 tonnes per annum.

Government support will enable the availability of resources to commence implementation of the Goals set out above.

5. How many jobs will be created? Over what periods of time will such jobs be created?

TCI will reply to this question firstly with a time frame of 5 years, because the goals above are 5 year goals.

Agricultural jobs:

20,000 ha will require 2 jobs per 100 ha to grow, a total of 400 agricultural jobs

20,000 ha in Australia to decorticate will require 40 decorticators operating with 4 jobs each, a full time equivalent of 160 semi-skilled jobs

Manufacturing and research jobs:

Research work will require 3 jobs full time

Each manufacturing centre will require 20 jobs, so by 2020 with 9 centres established, there will be 180 jobs.

TOTAL JOBS: 743 jobs by 2028.

By 2033, in 10 years, with the 9 manufacturing centres established and 200,000 ha of hemp planted in Victoria, the following jobs will be created:

Agricultural jobs:

200,000 ha will require 2 jobs per 100 ha to grow, a total of 4000 agricultural jobs

200,000 ha in Australia to decorticate will require 400 decorticators operating with 4 jobs, a full time equivalent of 1600 jobs

Manufacturing and research jobs:

Research work will require 6 jobs full time

Each manufacturing centre will require 20 jobs, so by 2033 with 9 centres established, there will be 180 jobs.

TOTAL JOBS: 5786 jobs by 2033.

It is important to note that 200,000 ha of hemp being planted through this Plan will produce 600,000 tonnes pa of hemp fibre and 1,400,000 tonnes of hurd. This fibre compares to the current global cotton harvest of 29 million tonnes pa and the global annual consumption of textiles of 90 million tonnes pa: in other words, it would be a very small proportion of global fibre sales and usage!

In relation to hurd, each hectare of hemp crop produces 7 tonnes of hurd, enough to build a 300 sq.metre home. Thus, in simple terms, 200,000 ha of production each year would enable the building of 200,000 hempcrete homes!

6. How much tax revenue will the Government earn?

It is considered that Government is entirely capable of calculating this.

7. What is the anticipated overall economic impact of the implementation of this Business Plan?

The best way to answer this is to consider the impact of growing 1000 ha of hemp.

Agricultural stage:

1000 ha requires 2 x decorticators and ancillary equipment	= \$1 million
1000 ha of hemp produces 3000 tonnes of fibre worth \$2500 per tonne	= \$7.5 million
And produces 7000 tonnes of hurd worth \$1000 per tonne	= \$7 million
And produces 1000 tonnes of hemp seed worth \$3000 per tonne	= \$3 million

Plus

Manufacturing stage

Converting 3000 tonnes of fibre to yarn costs \$10,000 per tonne	= \$30 million
Converting 7000 tonnes of hurd to building materials costs \$1000 per tonne	= \$7 million
Converting 1000 tonnes of seed to foods & cosmetics costs \$5000 per tonne	= \$5 million
Plus	

Sales stage

Selling 3000 tonnes of textiles for \$35,000 per tonne	= \$105 million
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Selling 7000 tonnes of building products for \$4000 per tonne	= \$28 million
Selling 1000 tonnes of seed & cosmetics for \$10000 per tonne	= \$10 million.

If the area grown is extrapolated, the economic impact is significant.

Further, with less direct economic impact, but nevertheless potentially large, are the following economic benefits:

- Increased tourism generated by the hemp industry
- Increased tourism and conference events focussing on hemp and biocomposites
- Increased value-adding in the regions of Australia by residents who apply their own Australian genius to the remarkable qualities of the hemp fibre, hurd, and seed
- Commercialisation of the hemp research results into high value manufactures
- Improvement of Victoria's global reputation in agribusiness leading to new opportunities.

8. What is the environmental impact of expanding hemp production in Victoria and globally?

Only positive! There are no known deleterious impacts of growing hemp. It requires little pesticides, herbicides, fertilizers. It sequesters large volumes of carbon dioxide in the soil. It builds the farms that grow hemp.

PART 3: FIVE KEY STEPS RECOMMENDED TO BE TAKEN BY GOVERNMENT AND BY PEOPLE TO REALISE THE WONDERFUL POTENTIAL OF INDUSTRIAL HEMP.

So how do we make all this happen?

I recommend the following 5 key steps to be considered by the Inquiry Committee members.

- 1. Governments all around the world must do everything they can to remove any unnecessary impediments to the use of industrial hemp. Even today, the Australian Pesticides and Veterinary Medicines Authority is wrongly attacking hemp food for animals! It is wrong, it is unacceptable, it is ignorant, and it is all being done in the name of SAFETY.
- 2. Large companies need to educate themselves on the hemp solutions in this Submission and the information on the websites I have referred to and then take steps to invest serious funds to create the solutions for their business activities. Most companies practise GREEN WASHING: they SAY they are keen on reducing harms to our planet, but they DO NOTHING if it costs them more money than their current practices. I call on companies to stop greenwashing. I am delighted that stock exchanges around the world are now checking up on proclamations by companies that say they're interested in minimal, harms, or ESG matters, but actually don't do anything.
- 3. Large investment funds, superannuation funds and investors that wish to save our planet from the emergencies I have mentioned above need to be willing to put money into hemp, to convert it from a cottage industry that is unnecessarily blocked by governments and red tape into one of the world's major industries.
- 4. Local government authorities and most government authorities are risk averse and are unwilling to do anything new without incontrovertible proof. Such authorities must shift that attitude and give preference to hemp solutions. I'll give you one example that I submit

should be adopted. The Victorian government should specify hemp textiles for all uniforms for government employees and particularly first responders such as police, fire and ambulance staff. First responders hate synthetic textiles uniforms because after half a day their perspiration smells on those uniforms. If you wear hemp textiles, you can wear clothing for weeks without washing and it won't smell because it's natural antibacterial and antimicrobial.

5. The people of Victoria and Australia need to demand hemp products and solutions from large companies, from suppliers, from retail outlets, so that the demand will drive everincreasing levels of investment and ever-increasing supply that will be a mutually supportive, circular economic growth machine. Educating the public on these solutions is clearly part of this fifth step.

Industrial hemp can save our planet and it will!

The only question is how quickly this will happen.

It's up to us!

Let's make it happen.

I want to see it happen, quickly. It's up to us and there are people who work in government, who can play a crucial role in implementing these five steps to use these 11 Hemp Solutions.

Please request any further information or resources arising from the ideas that are proposed in this Submission.

I am confident about the importance, the value of industrial hemp. I'm confident that hemp can solve many of the emergencies that face us. I'm confident that hemp can save and will save our planet. I'm confident that if people speak up enough against government interference that interference to the development and growth of hemp will reduce.

I am happy to make myself available for appearing personally at any meetings or discussions.

And I hope that the Victorian Government's Inquiry into Industrial Hemp will prove to be a pivotal step in helping Victoria realise the enormous beneficial potential of hemp.

PART 4: ABOUT CHARLES KOVESS, TCI AND AIHA

Charles Kovess is the Chief Executive Officer of TCI. He started Consulting to this company in October 2012, almost 11 years ago, and became the CEO when the founder of the company, Adrian Clarke, died in October, 2015. Adrian commenced his vision for hemp in 1994, and TCI carries that vision today.

TCI invented, manufactures (in Geelong) and supplies the world's best hemp decorticator, a machine for processing hemp, all around the world. A picture of that decorticator is shown below. The website for the company is <u>www.textilecomposite.industries</u>

Charles Kovess is also the Secretary of the Australian Industrial Hemp Alliance, Australia's Peak National body for industrial hemp that was established in 2015. He became Secretary in 2017. Its website is <u>www.hempalliance.org.au</u>.

Charles is also on the Executive Board of the Federation of international hemp organizations. There are nine directors globally of FIHO. Its website is <u>www.fiho.org</u>

Further information about Charles is available on his websites <u>www.kovess.com</u> and <u>www.charleskovess.com</u>



SUBMITTED TO INQUIRY COMMITTEE ON 18 AUGUST 2023



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