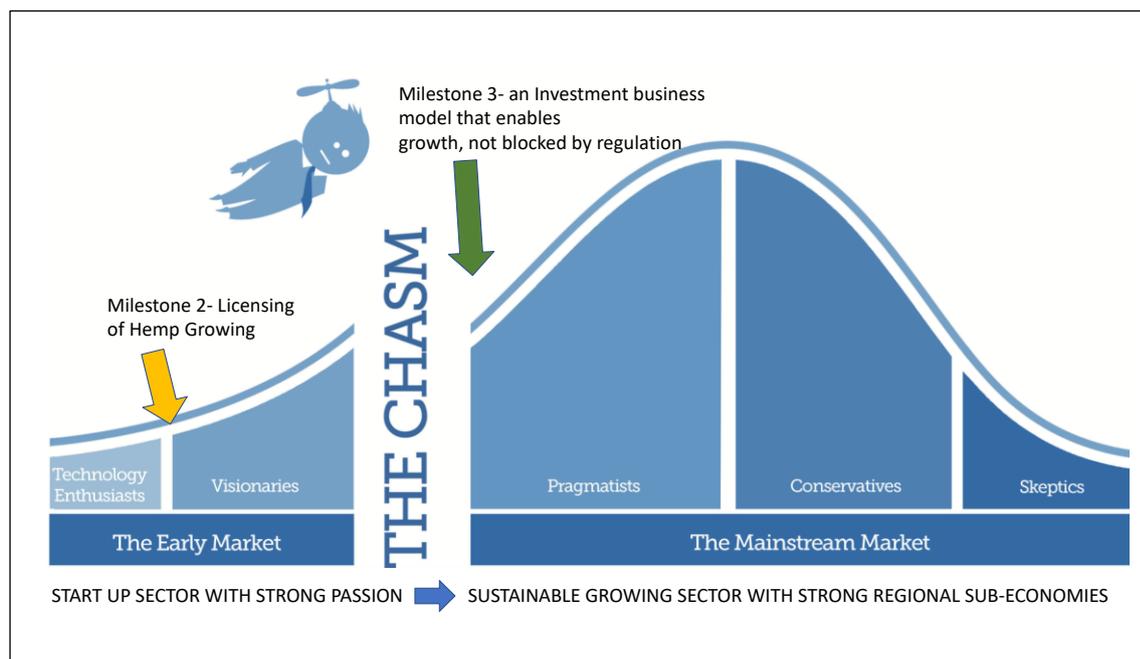


## THE SUMMIT- 'CROSSING THE CHASM'- HOW THE HEMP INDUSTRY CAN BE ANOTHER SUCCESS STORY LIKE WINE- WITH COMPELLING ECONOMIC, HEALTH, AND ENVIRONMENTAL BENEFITS FOR NZ

There have been two major milestones in the history of the Industrial Hemp sector in the NZ economy. But this Summit marks the development of the **3<sup>rd</sup> milestone– An investment model to drive fast growth**. We will explore in this Summit how we can collectively “cross the chasm” of a new emerging industry from Milestone 2- passionate enthusiasm- to Milestone 3- A sustainable investment and business model that can achieve a best-case growth scenario for NZ Inc. The chasm is all about having a sustainable business model that is sufficiently attractive to bring in the large investment required for infrastructure to support a major export sector.



### ***Milestone 1- 1997 -2006 - forming a passionate group for Hemp to drive research and advocacy for Government to allow Hemp to be grown in NZ***

The development of an Industrial Hemp sector in NZ has been a pre-occupation of a core group of growers and researchers who formed the NZ Hemp Industries Association in 1997. For the last 20 years the inclusion of iHemp under the aegis of the Misuse of Drugs Act has significantly blocked the birth of this new industry both in NZ, Australia, and the states of USA. This has been achieved by successful politically motivated campaigns to confuse the public over the labels of marijuana, hemp, and cannabis.

The term 'cannabis' is generally accepted by the average person as meaning Marijuana- a high THC plant which has psychotropic effects. However educated people understand that the term Cannabis refers to two separate plants, based on THC concentration. Low THC "industrial hemp" and higher THC varieties commonly known as "marijuana"

Canada has bucked this trend by refusing to continue the restrictions imposed by the Federal Drug Agency in the USA, and in consequence has developed not just a major iHemp industry, but also a major Marijuana industry.

### ***Milestone 2- De-Regulation to enable a legal Hemp Industry***

In 2006 The Misuse of Drugs Act (Industrial Hemp) Regulations, allowed the licenced growing of low THC iHemp and the manufacture of hemp products. In 2017-18 the handbrake on iHemp seed foods was loosened. And after 20 years of struggle against disinformation we were finally allowed hemp seed for human consumption, which has allowed the grain industry to scale up.

Meanwhile in the USA the 2018 Farm Bill, also allowed the licensed growing of iHemp. However whilst the legislation apparently made it legal for hemp growers to utilise the whole plant for manufacture there has been a clawback both in the USA and NZ /Australia at the Federal level whereby the Ministry of Health regime is orientated to control of the licensing process under a medical model which makes the assumption that the molecular components of the plant, the cannabinoids, are a 'drug' which must be controlled under the medical model.

This ignores the reality of naturally occurring substances being present in iHemp and hemp products and is an impediment to the development of the health and wellness industrial uses of iHemp

### ***Milestone 3- – An investment and returns business model that can drive fast growth - which is enabled not blocked by regulation.***

NZ can be the best in the world at growing & using hemp. This summit will provide NZ companies, farmers, scientists, funders and regulators with the information they need to collaboratively develop the NZ industrial hemp economy. The summit will share local and international knowledge on hemp, identify the local and export opportunities available to companies entering the industry, highlight the barriers to success within the market and develop strategies and relationships that will help the industry to overcome them.

#### ***We will explore:***

1. **Cannabis 201- Disentangling the confusion- what are the moving parts of the Cannabis sector?**

2. **What is the present state of play in Industrial Hemp?** - along the Hemp Value Chain from cultivars and business models for end products, in New Zealand and around the world:
  - a. Fibre
  - b. Seeds and Health foods
  - c. Nutraceuticals
3. **What is a best-case Scenario for Hemp?** What the NZ Hemp sector could look like in 5, and 10 years- what are the benefits for investors, government, regional economies, our environment, and job creation for our young people - What can be our international competitive advantage for a high value export sector, driven by consumer demand?
4. **What are the regulatory barriers we still have to smash through to achieve the best-case scenario? How shall we do it?**

## 1. Cannabis 201 - Disentangling the cannabis confusion

What are the moving parts, and the connections between their business models?:

- Licensed Industrial Hemp
- Licensed Medicinal Marijuana
- Unlicensed Marijuana- recreational and green fairies health solutions

## 2. What is happening globally in the hemp boom?

- A brief look at the history and the products that are manufactured around the world
- Overview of the opportunities for hemp in NZ based on the experiences of other countries.
- Products that can be made right now where there are ready markets.
- Using hemp and hemp products to build and support communities.
- Using hemp to improve the land.
- NZ perspective on the future value of the hemp industry to NZ.

## 3. What are the key success factors in agriculture and plant science?

- Moving to hemp – what is the national and international experience of converting land and existing farms to the production of hemp?
- Where will hemp grow? How to grow hemp within NZ conditions – making the most of the experience that already exists within NZ on variety selection, soil conditions, irrigation
- How to grow & harvest hemp for fibre, seeds and cannabinoids. What can we learn from experience in NZ and overseas?
- Plant variety selection for food, fibre and medicine – which of the available cultivars are best for your region?
- What is the latest in hemp breeding in NZ? Which organisations are active and how can growers engage with the research organisations

- Is pursuing dual crops (fibre & seed or seed, fibre and cannabinoids) false economy?
- Can hemp be used to remove heavy metals from soils? What does the science show?

#### 4. What investment is happening in our regions – what competitive advantages might we have over other small states?

- What does the industry supply chain currently look like, where are the gaps that need to be filled, what are likely to be the growth areas and what could the impact be on the NZ economy?
- What are the economics of hemp production? What are the likely returns for farmers growing hemp for food, fibre and health?
- What export opportunities exist for food, fibre and health? Can these be quantified?
- What advantages could NZ have over other countries? How sustainable would these be?
- How will the growth of hemp industries across the world affect NZ? Will NZ be able to compete?
- What are the risks for companies & farmers entering the market?

#### 5. What is the latest information on the legal, regulatory and intellectual property challenges we face?

- Update on the Medicinal Cannabis Scheme - Case Studies:
  - Helius
  - Hikurangi
  - Cannasouth
  - etc
- Which varieties of hemp are legally available within NZ and how is this likely to change?
- Review of the regulations - which foods can be produced and sold in New Zealand within NZ regulations?
- What is the regulatory frame work for natural health products, nutraceuticals, dietary supplements and cosmetics?
- Latest information on which building products containing hemp fibres can be used within NZ.
- Latest information on the legality of growing and extracting cannabinoids within NZ and on selling these locally & internationally.
- What intellectual property protection is necessary and available? How should this be best used? How can NZ companies licence in IP from overseas?
- How to licence and protect the agri-tech innovations coming out of New Zealand, what areas are of interest? Does NZ have a competitive advantage in these areas of future interest, how can the R&D required be funded and developed?

#### 6. Who are the Customers and what are the markets for hemp seed food?

- NZ Companies- what companies are in the market, how are hemp seeds being used ?
- Who are the customers and what are the key trends driving their behaviour?
  - People with health issues seeking natural solutions

- Light greens- Families wanting to maximise children's health, and do something for the environment - flexitarians
- Dark greens- passionate people who want to make an impact on their own health but also on the environment- vegans, vegetarians, etc
- People seeking the highest performance from their bodies – professional sports and non- professionals wanting to be healthy and improve their wellbeing
- Case Study profiles, of NZ companies - Hemp Farm, Hemp Connect and Kanapu
- What foods can be made with hemp seeds? Given their complete amino acid profile and other potential health benefits, what are the high value opportunities for products manufactured in NZ?
- What is the perspective of food product manufacturers? What are the barriers to their use of hemp seeds & oils and how could these be overcome?
- What are the trends happening overseas
- What are the priorities for R&D in NZ from the market's perspective?
- Update on the animal food issue

## 7. What are the potential markets for fibre based products?

- What companies are operating in NZ?
  - Case studies- Hemp NZ and NZ Yarns
- What is the infrastructure in NZ for transporting and processing hemp fibre?
- What are the properties of hemp fibres and what opportunities does this present?
- How to maximise production of high quality fibres – what processes, equipment and skills are required?
- What low-tech products can be manufactured from fibre and where are the markets?
- Which building products containing hemp can and can't be used in NZ? What is the process for getting products approved for use?
- What high-tech products have been developed, or are in development, using hemp fibres? Can we economically make plastics, high strength composites, batteries and high-tech clothing from hemp?
- Which researchers in NZ are working on hemp fibre product development and what opportunities exist with NZ companies to engage with the NZ science base?
- What is the perspective of end users of fibre? What are the barriers to their use of hemp fibres and how could these be overcome?
- What are the priorities for R&D in NZ from the market's perspective?, How to manage supply and demand whilst scaling up
- End user specification, the economics and the effect on the value chain

## 8. What are the potential markets for cannabinoids and nutraceuticals?

- Case Study- Nutraceutical companies (natural health products) vs medical cannabis companies
- What is the latest science on the use and efficacy of cannabinoids? What trials are underway or planned within NZ and how can NZ growers support these?
- What is the experience of the first legal growers of hemp for medicine in NZ?

- Growing indoors versus in greenhouses vs outdoors. What are the advantages and disadvantages of each?
- What are the most effective extraction techniques and what support is available within NZ to develop extraction and purification capabilities?
- Given the evidence of the efficacy of naturally occurring cannabinoids, terpenes and flavonoids, which products will be in demand in the future and can NZ take advantage?
- World wide consumer driven demand , how to access this export market for wellness product, high value branded products sold to global niche markets

## 9. What are our commercial and farming skills gaps and how to overcome them?

- As a new industry there will be significant skills gaps. Where can farmers and companies new to hemp find practical information on growing hemp? What training services are available?
- How to grow and harvest hemp, varieties, equipment and resources required to ensure the product ex farm gate is fit for purpose and meets the buyer's specification.
- Matching scale with supply & demand, what are the economics of this new crop?
- What training/education services would the industry like to see being made available?
- What are the health and safety issues relating to growing and manufacturing with hemp? What new liabilities will farmers be taking on? What training is needed to overcome these?
- Other risks for staff, environment and the economy – pests and diseases

## 10. What is the investment attraction of this Industry? - Investment funds, corporates, shareholders, iwi, entrepreneurs, government agencies, Local EDA's

- What funding, support and advice is available from regional and central government (and government agencies) to develop the hemp economy?
- What are private and venture capital investors interested in within the hemp economy? Is there funding available, what information do they need and when will this be available?
- Will banks invest in hemp? How can companies find investors, the investor eco system

## 11. What is the best case scenario for NZ Inc?

- The NZ Hemp sector in 2025- scale, global markets, fibre, food, nutraceuticals, products, jobs, :
- The Stories of each Region:
  - a. Nelson/Marlborough/West Coast
  - b. Mid Canterbury and the grain belt
  - c. Southland
  - d. Wanganui/Manawatu
  - e. Waikato and BOP/Hawkes bay
  - f. Northland

- How can growers and companies in the NZ hemp supply chain collaborate effectively to build the NZ hemp economy and develop export markets?
  - How to Grow the pie so everyone gets a bigger slice?
  - Industry Collaboration & Co-opetition - Could effective collaboration provide a competitive advantage for NZ?
- What successful business models could the industry adopt, what can we learn from other industries. The success of the Wine/Kiwifruit industries and the problems of the honey industry.
- What role can industry and government organisations play in supporting the development of the hemp economy? What does the industry need? How should this be funded?

12. What is the regulatory barrier we still have to smash through to achieve the best case scenario? How shall we do it?