



fermentasmania

FERMENTATION TRANSFORMS ...

Fermentation is the delicious alchemy that transforms milk into cheese, grapes into wine, cabbage into kimchi and barley into beer through the applied use of microbes: yeast, bacteria and fungi... As one of the oldest forms of food preservation, fermentation value adds and makes produce more delicious and more nutritious

26th November 2020

Attn: Mr. Don Challen
Chair PESRAC Committee
Department of Premier and Cabinet
15 Murray Street
Hobart, TAS 7000

Dear Mr Challen and the PESRAC Committee,

Re: Fermentation Hub Incubator Infrastructure project for Covid recovery.

Fermentation Tasmania Ltd (FermenTasmania) is a not-for-profit company limited by guarantee established in 2016 with a Board of highly respected Australian Directors in the fermentation sector. It was formed to create a step change in the agri-food and beverage sector to help double the return of the agribusiness sector, create opportunities for regional Tasmania and Australia over the next decade and create an ongoing centre for job and sustainable business creation. Place based and globally excellent, the Fermentation Hub will be a world first and will drive job creation and build an entrepreneurial culture to combat the devastating impacts of Covid on the economy. Designed around a Cluster economic development model it represents over 400 industry members involved in food and beverage production, research and training institutions around Australia and the globe working closely with UTas and all levels of Government.

SUMMARY OF FERMENTASMANIA

Fermentation transforms...produce, lives, businesses and economies.

To achieve this transformation, FermenTasmania is working with industry, researchers, educators, trainers and all levels of government to:

Build a world-class physical fermentation facility as a regional economic driver, the Fermentation Hub will:

- Facilitate and incubate generations of new fermentation-based businesses and help scale up and grow existing ones through the development of new products in the Hub
- Alongside academia and VET organisations develop training and skills development to provide new career paths and create an entrepreneurial culture, create new income streams and foci for academic institutions and RTO's that speak to a place-based economy, most of this formal training is yet to be offered in Australia.



- Focus on commercially oriented research which will lead to innovation in our agri-food and beverage sector.
- Create engaging agri-tourism and technical tourism experiences through the development and marketing of new, world-class immersive consumer experiences.

Circular Economy-Build an agrifood processing facility, the Fermentation Hub, operating as a world's best which provides a global example to help new and existing industry minimise their carbon footprint and environmental impact and turn waste streams into resources, products and bioenergy and the research surrounding this. Creating a resource from waste streams from the facility through fermentation will also help to capture more value from our agribusinesses and channel into bioenergy and fermented vegetable products.

Health-Create research and product development opportunities around the impact of health and nutraceutical fermented products on the microbiome and resulting improved health, beauty and nutrition outcomes.

Competitive Neutrality-FermenTasmamania will complement and enhance existing structures and organisations and addresses industry gaps only where no other solutions exist.

Place Based with Global Excellence-the build of the Fermentation Hub will also:

- Create a stronger culture of value-adding of our produce before it leaves our shores.
- Transform the way new products are developed by encouraging collaboration and the sparks of innovation, attracting expertise and offering developmental fermentation facilities.
- Create an entrepreneurial culture for regional and rural Australia empowering these communities to create their future themselves.
- Transform the way Australia benefits from international research, by providing a central point for collation, analysis and dissemination of relevant knowledge and information and leadership in the identification, prioritisation and funding of research and development projects.
- Transform the way to build skills and capacity by liaising directly with education and training providers as they design and deliver industry-relevant units and courses and cross training across the sectors to ensure full employment.
- More solutions to important commercial constraints through a vibrant, robust, world-leading partnership between fermenting sectors and R&D providers.
- Transform the way that tourists engage with fermentation businesses by working with industry producers and tourist operators to develop new, fermentation-focussed experiences for the agrifood tourist and the technical tourist to enhance their skill sets or attract them to the industry...and to Tasmania.

FERMENTASMANIA WILL CREATE A STEP CHANGE IN THE TASMANIAN AND AUSTRALIAN AGRIFOOD SECTOR

The independent business case for the Fermentation Hub (FermenTasmania Fermentation Hub Business Case-Jacobs June 2020, attached) pointed out the urgent need for innovation in the Fermentation and wider agri-food sector to address market failure. The lack of significant value adding in the agribusiness sector across Australia has not allowed us to capture the full return from our agribusinesses and create the ecosystem around the agri-food and beverage sectors to grow the businesses, jobs and other opportunities this industry offers. Fermentasmania offers a smart specialisation focussing on fermentation as the catalyst for processing of primary produce into high value end products which while diverse, offer synergies in the production processes which also offer opportunities in new product development, business growth, career and training opportunities.

FermenTasmania recognises the **biggest hurdle** to setting up businesses in the fermentation sector is the capital cost of the physical facility and equipment needed to produce fermented products alongside the lack of formal training



(outside the wine sector); in brewing, cider, sourdough, fermented vegetables/pickling, distilling, cheesemaking and other dairy products including yoghurt and new fermented products like kefir and kombucha, biofuel, etc...

NEED FOR A FERMENTATION HUB-a physical incubator facility

The need for a physical fermentation facility and overarching organisation was first identified in 2013 when the consultants' report developed in consultation with industry (Strategic Economic Solutions 'Food Innovation Factory Network Feasibility Study 2013') for the Centre for Food Innovation (a collaboration between UTas, DSTO and CSIRO) was released. This report highlights the need for these facilities to encourage the agri-business sector to create new and branded products from our primary agricultural produce and to increase the return to growers and producers.

JOBS

A Work-skills survey of industry found that in the next 3 years there will need to be 350 new jobs (100 management, 100 specialist and 150 operational) needing trained workers for the current size and scope of the industry. With the build of the Fermentation Hub there would be an additional ongoing 180 direct jobs (540 indirect) being created over that same period with ongoing jobs, businesses and career paths growing with each and every year of operation.

The people required to fill these roles will need 'hands on' training beyond the theory and practice of fermentation – training that can only be provided through access to a dedicated 'real-world' operational facility. The establishment of the Fermentation Hub incubator will enable this training to be provided within Tasmania, also increasing the opportunity for local staff to be trained and retained in the regions where they are needed. This will also offer cross training opportunities across the different fermentation sectors to ensure full employment.

The Skills Impact project to revise national qualifications, units of competency and skill sets covering artisan brewing, distilling, cheese making and fermenting has highlighted the need for an independent facility in which students from across Australia can obtain and demonstrate practical, workplace-relevant competencies against unit requirements. Fermenting sector stakeholders providing input to the Skills Impact project have identified the FermenTasmania Factory as being ideal for this purpose.

<https://www.skillsimpact.com.au/food-beverage-and-pharmaceutical/training-package-projects/artisanal-food-beverage-project/>

WHY GOVERNMENT SUPPORT

As noted in the report by Jacobs consultant Luke Curtain, (Jacobs 2020, attached) there is market failure in our agri-food production sector, for the full potential of this sector to be realized there needs to be Government assistance. Also noted in this report is the cost of building and kitting out a facility as well as guidance to achieve full compliance in this sector is beyond the reach of small start-ups and the opportunity to scale up from a micro to small or a small to a medium business and bridge that yawning 'valley of death' needs support.

To grow, industry needs people with the skills and training to do the work. Tasmania and Australia need to create more career opportunities and businesses in rural and regional areas, FermenTasmania can create help create these. It can also help Tasmania and Australia to become recognized as a global leader in the food sector as a specialist in premium fermented food and beverage products as well as bio-fuels, health and beauty products. Being place based and highly brand aligned, FermenTasmania will also help create new agri-tourism experiences designed to not only delight visitors but be an attraction to increase visitation.

While it might seem attractive to encourage industry to invest in such a facility, the larger multinational operations would use the facility as a feeder for their own product 'house brands' as opposed to creating a culture of



entrepreneurialism and skills and training opportunities for the future of the State and the Country. This is why we need Government support for the capital works to get the facility built. This incubator will also enable the FermenTasmania Cluster to be completely self-funding once operational.

The financial contribution being requested from each level of Government and Industry is located in the independent business case (Jacobs 2020, attached) or easily noted in the **FermenTasmania One Pager of infographics for the Fermentation Hub**, attached. This is only a suggested carving up of contributions and some, like the donation of the land and some of the equipment, have already been made.

THE ASK-\$14.9m with a return on investment between 1:3 and 1:7

Australian Government contribution \$6.4 million (43% costs)

Local Government contribution \$3.5 million (23% costs)

Tasmanian Government contribution \$3.4 million (23% costs)

Private – Industry and investor contribution \$1.6 million (11% costs) plus in kind

PARTNERS, SUPPORTERS AND STAKEHOLDERS

As a true triple helix collaboration, the following organisations have been essential in our success to date:

Northern Tasmanian Development Corp.-supported the first industry survey and are a regional champion for the project.

Tasmanian State Government- supported FermenTasmania through financial support for a number of scoping studies and a work-skills needs assessment for the fermentation sector. Financial support for the build of the Fermentation Hub at a State level is currently being sought through the Department of Premier and Cabinet through Minister Ferguson and the Premiers Advisor Tony Mayell and through the Office of the Coordinator General through Catherine Murdoch and John Perry and the Department of State Growth through Secretary Kim Evans.

University of Tasmania-Financially supported the international scoping trip and resulting research and report FermenTasmania conducted in 2018. A formal MOU has been signed between UTas and FermenTasmania to work together including FermenTasmania delivering some of the training, assisting with attracting students and channelling research opportunities for the university and are already collaborating with the University College on an international collaboration with the Institute of Brewers and Distillers to deliver this internationally recognised industry training through the Applied Science associate degree in Fermentation which we are assisting with the delivery of. We are also assisting with the agritech sector in the Lab 4.0 project UTas is driving amongst other projects.

TasTAFE Drysdale-Preliminary discussions have been had regarding the added depth to their cookery course through a collaboration with FermenTasmania to diversify their training into fermented products to be able to take these skills into hospitality operations or enable them to seek employment in the Agri-food sector, essential diversity of skills in these uncertain times.

Food Innovation Australia Ltd.-in 2018 FermenTasmania secured a federal Cluster Development Grant of \$840,000 of matched funding over 3 years for operational support which has allowed us to hire a CEO and commence our industry support. Essential over these last few months.



West Tamar Council-has donated 9000sqm of land in a new light industrial subdivision to build the Fermentation Hub, an MOU has been signed and earth works on the new subdivision is underway, all part of their contribution.

TasGas has donated an anaerobic biodigester to enable the fermentation hub to turn waste streams into bioenergy and show other food processing facilities how to do this.

City of Launceston-Through GM Michael Stretton the CoL is willing to pull the Fermentation Hub into their City Deal ensuring collaboration at all levels of Government.

Food Agility CRC-Have pledged two projects to work with FermentTasmania on the chain of custody assurance and brand storytelling to \$2.5m of matched funding and are looking at the myriad of projects we can run to test the provenance technology they are developing.

Community members-A number of community members have been donating a few thousand dollars, unrequested, as they believe in the Fermentation Hub and want to see it built and operational and become this catalyst of growth for the agrifood and beverage sector.

The ‘cloud’ of industry experts, just a sample of who have been alongside FermentTasmania to help guide and assist the project to date listed below.

Name	Specialisation
Allison Clark	Systems innovation
Anna Carew	Workforce consultant
Anton Kriz	Smart specialisation
Belinda Chapman	Microbial physiology, food and health
Corey Baker	Cider making; Facility design
Dooley Crighton	Kombucha making; Product design
Fiona Kerslake	Wine and cider fermentation
Gina Dal Santo	Cheese making; Facility design
Greg Hudson	Business development
Hazel MacTavish-West	Product development
Jay Patey	Sourdough; Facility design
Leanne Stellmaker	Fermentation production
Maree Gerke	Skills and training
Ngairé Hobbins	Nutrition
Nathan Calman	Brewing
Nick Haddow	Cheese making; Brewing; Facility design
Richard Fisher	Facility design (director)
Robin Johnson	Cheese making; Facility design (director)
Saul Eslake	Economics
Simon Brooke-Taylor	Brewing; Training
Stephen Nelsen	Brewing; Facility design
Tim Gadischke	Cheese making; Facility design
Tim Jones	Cider maker; Facility design
Todd Henderson	Architecture; Facility design
Tom Ross	Food safety and microbial physiology
FermentTasmania Board	Range of fermentation production and business skills

Please NOTE: Reports from all of the scoping and work mentioned above is available on request

Letters of Support:

Please see a link to a few of the letters of support from Federal Senators Askew and Duniam and federal MP Bridget Archer supporting our seeking the federal financial support and industry members keen to see the Fermentation Hub built and in operation to help their businesses grow:



TIMELINE

Using local architectural design team Cumulus, the Development Application has been submitted and is being processed by the West Tamar Council and the Fermentation Hub can be shovel ready by the end of 2020. An abbreviated timeline for the development of the Fermentation Hub can be found on the FermentTasmania ONE PAGER of infographics, see attached.

From there we anticipate below:

November 2020 - Development Application for the Fermentation Hub submitted

February 2021 – Food Agility CRC projects commence

Once funding is secured the project can then finalise building plans

January 2021 - Engineered building plans commenced

Mid 2021 - Building commencement

This is exactly the kind of infrastructure projects needed to help build our way out of the economic crisis that Covid 19 has inflicted on Australia and the world, not only is there stimulus in the build of the Fermentation Hub there will be ongoing development of new jobs, businesses and careers once the building has finished. In this Covid impacted world the Fermentation Hub would be able to operate under a number of shut down levels and social distancing measures ensuring production levels could be kept up and the industry productive.

Above is a brief summary of the last five years of extensive industry consultation and scoping reports, workshops, international scoping and initial as well as the new independent business case work which we would be delighted to share with you if you need more information. I hope you will look favorably on this proposal and if you have any queries or need clarification please contact us:

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Sincerely,

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