

Application for Funding

About this form

This form enables you to make an application for funding under any of the three investment tiers for the Provincial Growth Fund:

- Regional Projects and Capability;
- Sector Investments; and
- Enabling infrastructure projects.

The information you provide will help us to assess and evaluate eligible projects and investment opportunities.

Next steps

We will review your application to further test suitability and risk and to make a decision on suitability for funding. We will be in contact where further information is required and we may provide you advice and support (i.e. from regional advisors) where necessary throughout this next stage of the process.

Instructions

Please complete the 'Application Form' section below, which is compulsory. In addition, please complete the parts of this application form that are relevant to your proposal. If the answer box is not big enough, please attach a document that provides the answer/s when you submit the form.

Please provide as much detail as you are able to, as appropriate to the size and complexity of your proposal. If compulsory or relevant information is missing, this may slow down the application process as we will need to contact you.

You can find the terms and conditions of applying for Provincial Growth Fund investment in **Appendix 1**. You must agree to those terms and conditions as part of submitting this application.

We also attach a copy of the Eligibility and Assessment criteria in **Appendix 2** to provide further context.

Submitting your application

Please email your completed form to PGF@mbie.govt.nz.

A. Application Form (Compulsory section)

1. Proposal Name:

Woodspan PLT Panels – Accelerated Commercialisation

2. Please provide the name of applicant organisation/entity:

Taranaki Sawmills Ltd – trading as Taranakipine

3. What is the physical address of the applicant's organisation?

32 Hudson Road, Bell Block, New Plymouth

4. Please provide the contact details for the applicant's organisation (including a specific person as a point of contact):

Tom Boon, CEO Taranakipine. tboon@taranakipine.co.nz 027 444 7086

5. Please describe the principal role or activity of the applicant organisation.

Taranakipine is a manufacturer and marketer of engineered pine building products based in New Plymouth. We begin with the raw log and manufacture this into a wide range of fingerjointed and laminated finished timber products (engineered wood products). Taranakipine exports approximately ⁹⁽²⁾ containers per month of finished products to Australia, USA and the Netherlands. Exports represent 65% of sales with the remainder being sold to the NZ market.

Taranakipine is a private company with three shareholders, including the CEO. Company No. 1115068. The company employs 170 staff in Taranaki and two in Auckland.

6. Please provide a brief summary description of the project, including its location, purpose and history.

Over the past two years we have been conducting market research and product R&D with a focus on producing factory finished engineered timber panels that can be used for floors and roofs in buildings. The design of the panel has been purposely developed to fit within our main manufacturing capability as well as meet the growing need for off-site/pre-fabricated building components. The product is branded Woodspan PLT Panels (PLT = parallel laminated timber).

Strong market demand has been confirmed for engineered timber panels and our product development work has been successful. Taranakipine is now embarking on the full commercialisation of this project. Support from the Provincial Growth Fund will assist Woodspan in fast tracking from pilot factory stage to full commercialisation by investing in the resources required (people, building, machines, further R&D) to match the market opportunity. Ref: Business Plan

7. Please describe (or re-affirm) which industry or sector/s the proposal is relevant to.

Manufacturing & forestry

8. In what location/region/s is the proposal to be based? What is the name of the relevant District as detailed on the Local Government New Zealand website: <http://www.lgnz.co.nz/nzs-local-government/new-zealands-councils/>

New Plymouth, Taranaki

9. Please provide full names of the project's leadership team, including your chief executive, directors and trustees (as appropriate).

Ref: Business Plan

10. If different from the applicant, who would be the 'contracting party' with the Crown under any successful contract?
Please provide the full name.

11. Are there any other Partners within this project? (i.e construction, design or other significant partners).
If so, please provide their names.

No

12. Is the applicant or the contracting entity insolvent or subject to any insolvency action, administration or other legal proceedings?

No

13. Is any individual involved in the application, the proposed contracting entity or the project an undischarged bankrupt?

No

14. Is any individual under investigation for, or has any individual been convicted of, any offence that has a bearing on the operation of the project?

Comments

No

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15. Conflicts of Interest: Please detail any actual, potential or perceived conflict of interest that the applicant(s) or any of the key personnel have in relation to this project.

"In a small country like ours, conflicts of interest in our working lives are natural and unavoidable. The existence of a conflict of interest does not necessarily mean that someone has done something wrong, and it need not cause problems. It just needs to be identified and managed carefully..."

<https://www.oag.govt.nz/2007/conflicts-public-entities>

Comments
None

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B. Strategic Case and Regional Alignment

1. How does the project propose to act as a catalyst to lift the productivity potential of the region where the project is based?

<p>Taranakipine purchases logs from local forest owners that cost approximately 9(2)(b)(ii). The timber from these logs are used to make Woodspan PLT panels which sell for approximately 9(2)(b)(ii). The 10 manufacturing steps required to take these logs to fully completed panels require significant numbers of Taranaki people, both Taranakipine staff as well as local contracted companies to complete these 10 manufacturing steps. Manufacturing plant and buildings are procured from and maintained by local businesses. The residues from our processes are used for local energy requirements as well as Taranaki farms for bedding or fertiliser.</p> <p>The value between 9(2)(b)(ii) is contained within the region.</p> <p>Our project matches well Taranaki's Tapuae Roa Action Plan, in particular - attracting and retaining talent, enterprise and innovation, investment as also aligns with maori futures</p>
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2. How does the project align with the objectives of the Provincial Growth Fund:
- More permanent jobs;
 - Benefits to the community and different groups in the community;
 - Increased use and returns for Māori from their asset base (where applicable).

The business plan has 7 direct new positions for the Woodspan project and 13 indirect. When sales grow beyond this level staffing levels will increase accordingly. Indirectly the project contributes to the retention of the existing 170 Taranakipine staff in employment. We continue to face subsidised Chinese wood processing manufacturer competition who push into our tradition markets with significantly discounted pricing. This low pricing pushes us out of some markets and we require new business, such as Woodspan" to keep Taranakipine financially viable and continuing to operate in New Plymouth.

When Woodspan reaches it's fifth year sales projections, this will represent ⁹⁽²⁾_{(b)(ii)} of Taranakipine's sales & production.

With regards to Maori, there are two key areas of alignment. The first is employment. Fifty percent of Taranakipine staff are Maori. It is expected that this ratio will likely continue as the Woodspan project roles out. Additionally, the majority of people working n forestry jobs accross Taranaki are Maori. The second alignment is the value that Woodspan and Taranakipine provide trees and the land on which they grow in the region. A reasonable proportion of forested land in Taranaki is on Maori owned land. In particular Te Wera forest.

3. Please provide a detailed description of the project, including the objectives and business need.

Ref: Business plan

4. Please provide a description of how the project aligns to the Government's additionality objective under the Provincial Growth Fund (including infrastructure, Māori assets/development, sustainability, investment tiers and regional development plans).

refer above

5. What benefits will the region get from the Crown's investment?

- New employment and contribution to retention of current Taranakipine staff
- Engineering and maintenance support from local engineering firms for plant and equipment
- New buildings to be constructed by a local building firm
- Ongoing and consistent procurement of logs from the regions forest owners; as well as forest managers and contractors
- Contribution to the regions growth ambitions around talented people and a modern high-value economy

6. Please describe the current state of the proposal, and why the project has not been done before.

The project is underway and operating at a pilot factory stage and low volume market entry (ref: business plan). This project with the support from the Provincial Growth Fund will assist accelerate the fully commercialisation of the project thereby realising all the benefits identified.

The project has not been done before for two reasons:

- it was only in 2016 that we commissioned a new laminating machine that now gives us the production capability to manufacture panels.
- we began our market research on engineered timber construction forms in 2016. It has taken two years to complete this work as well as undertake significant product R&D to be confident of the business opportunity.

7. Please provide a description, and evidence where applicable, of any local support for the project either through existing regional development mechanisms, or another relevant body, such as a council, iwi or other representative group (or reason for any lack of support).

Venture Taranaki has been a long term partner of Taranakipine. There has been constant dialogue between our two organisations for more than 10 years. As a consequence we are aware of Taranaki's future direction, and VT understands well Taranakipine's business as well as our Purpose - The market leader in user-inspired, engineered pine building products. Through VT and their support we have connected into numerous R&D projects with Callaghan Innovation.

9(2)(b)(ii)

Via NZTE's New Plymouth office we have had a long association with NZTE and its various programs. The two most significant NZTE programs have been Better by Design and an International Growth Fund. These programs have led us to PLT panels as a market opportunity.

8. Please provide a description of any consultation required.

None required

9. Please demonstrate how this project will fit in with wider assets or infrastructure, projects and benefits in the region.

In particular it fits with the region (and country) objective of increasing productivity in housing construction and contributing to bringing the cost of building down in NZ. It also contributes towards a low carbon economy by using wood (storing carbon) from a NZ grown renewable tree species (plantation Radiata pine) which absorb carbon during their growth.

10. Has the project been discussed with a regional economic development governance group? If so, what was the outcome of the discussion?

Discussion with the project have taken place with Venture Taranaki and also New Plymouth's Mayor. Favourable and supportive

11. Please provide evidence of Iwi consultation.

N/A

12. Please provide evidence of compliance with international obligations (where relevant).

N/A

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C. Project costs, economics and benefits

1. Please provide details of the wider benefits, over and above those described in the above Strategic Case and Regional Alignment section.

Ref: Business Plan

2. Please provide a detailed breakdown of the benefits that will be enabled by the delivery of this project and the timeframes in which those benefits will be achieved/realised.

Ref: Business Plan

4. Please provide a cost breakdown covering the following:
- Total project cost breakdown (including contingency);
 - Total funding sought from the Provincial Growth Fund;
 - Type of funding sought (i.e grant, loan or other);
 - Description and breakdown of funding sought from elsewhere (approached/approved/declined) and what funding has been committed;
 - Details of ongoing costs and financial viability;
 - Required timing of costs; and
 - Maintenance costs and funding sources

- Refer to Business Plan for full cost breakdown.

- Total funding sought ^{9(2)(b)(ii)} [redacted]

- Including capital expenditure and operating costs, the business require: ^{9(2)(b)(ii)} [redacted] to fund before it starts generating positive cash in ^{9(2)(b)(ii)} [redacted] (Ref: Business Plan). The additional funding required (including stock and debtors) beyond the PGF's ^{9(2)(b)(ii)} [redacted] will be funded by Taranakipine and it's banking facility.

5. Please provide a demonstration of the impact the project will have on the applicant's balance sheet.

Refer attachment with Business Plan

6. Please provide a demonstration of how you will ensure that your project represents good value for money.

Woodspan has been set-up as a separate business unit within Taranakipine. It has its own budget (Ref: 5 year financial plan) for which we can monitor and measure against. At Taranakipine we run a monthly reporting process including all operational KPI's, profit & loss reporting and balance sheet. This information is reported at management and board level. We also hold quarterly board meetings with directors and owners. Woodspan will be tracked in the same manner.

To get to commercialisation, this project has followed a structured stage-gate project process for market research, product development and R&D and feasibility assessment. The commercialisation stage of the project is following a similar process

7. If applicable, is there a financial model, financial forecasts, or a Cost Benefit Analysis which can be provided?
(If so, please attach to this application.)

Ref: 5 year financial model

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D. Project Plan

1. Please provide a project management plan covering the following:

- Delivery methodology
- Roles and responsibilities (including who will be managing/delivering the project and key contractors)
- Timeline
- Procurement
- Constraints and dependencies
- Risks associated with project
- Risk management methodology
- Governance arrangements (including using existing credible local and community input, funding, commercial and non-commercial partners)
- Project delivery gates
- Exit gates and stop/go points.

Ref: Project development project plan

Ref: Project commercialisation plan

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2. Please provide any feasibility assessment which has been conducted for the project.

Ref: Buisness Plan

3. Please provide details of the key risks associated with the project, as well as how they will be managed.

Ref: Buisness Plan

4. Please provide detail of any alternative project delivery options which have been considered and ruled out.

5. Has the project plan been independently tested, or developed with assistance of a project management professional? If so, by whom?

No

E. Commercial Viability

1. Please provide an overview of the applicant's track record in delivering projects of this nature.

Two examples:

In 2009 Taranakipine undertook a major capital project (approx \$9.0 million) introducing scanning grading technology and automation technology to upgrade our remanufacturing operations. This included removing our office (relocating into a temporary building), constructing a new building over the old office for the new factory and also building a new office. We undertook all this simultaneously while continuing our manufacturing operations and meeting customer demand. This also took place during the GFC which was a extremely challenging period for us. The project was very successful.

Our product and market growth strategy has been focused ^{9(2)(b)(ii)} [redacted]. To support this we jointly designed a new laminating machine ^{9(2)(b)(ii)} [redacted]. This machine was successfully installed and commissioned in 2016. It is this machine that has provided us the unique position to now make panels. In 2009 our laminated timber product sales were ^{9(2)(b)(ii)} [redacted]. In 2018 we produced and sold ^{9(2)(b)(ii)} [redacted].

2. Please provide any demand analysis (customers and growth/utilisation forecasts) which has been conducted.

Ref: Business Plan

3. Please describe how the market has been, or will be, tested and engaged (if required) to assist in the delivery of this project.

Ref: Business Plan


4. Please describe what will happen upon delivery of the project, including the maintenance plan and plan for ownership of the asset.

Ref: Business Plan

5. Please describe how the project will be sustainable beyond the term of the Provincial Growth Fund investment.

Ref: Business Plan

6. Please outline why Crown funding is required?

As well as the Woodspan project, Taranakipine has numerous other capital projects underway. The largest two being; relocating operations from one of our two sites to our main Hudson Road site; and significant ^{9(2)(b)(ii)} 

^{9(2)(b)(ii)} 

By receiving funding

via the PGF we can complete all projects simultaneously thereby delivering all the Woodspan project benefits for the region and Taranakipine two to three years sooner. Without PGF funding it will delay Woodspan's commercialisation.

F. Declaration by lead applicant

By completing the details below, the applicant makes the following declaration about its application for PGF funding for the
Woodspan PLT Panels - Accelerated Commercialisation

project ("application"):

- A. I have read, understand and agree to the Terms and Conditions of applying for PGF funding which are attached as Appendix 1;
- B. The statements in the application are true and the information provided is complete and correct and there have been no misleading statements or omissions of any relevant facts nor any misrepresentations made;
- C. I have secured all appropriate authorisations to submit the application, to make the statements and to provide the information in the application;
- D. The applicant warrants that it has no actual, potential or perceived conflict of interest (except any already declared in the application) in submitting the application, or entering into a contract to carry out the project. Where a conflict of interest arises during the application or assessment process, the applicant will report it immediately to the PGF by emailing PGF@mbie.govt.nz; and
- E. I understand that the falsification of information, supplying misleading information or the suppression of material information in this application may result in the application being eliminated from the assessment process and may be grounds for termination of any contract awarded as a result of this application process.

Signature:



Full name:

Tom Roger Boon

Date: 2 0 0 7 2 0 1 8

Title / position:

CEO

Name of applicant organisation:

Taranaki Sawmills Ltd

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Appendix 1 - Terms and Conditions of applying for the Provincial Growth Fund

General

The terms and conditions are non-negotiable and do not require a response. Each applicant that submits a request for Provincial Growth Fund ("PGF") funding (each an "application") will be deemed to have agreed to these terms and conditions without reservation or variation.

The Provincial Growth Fund is a government initiative which is administered by the Provincial Development Unit, a unit within the Ministry of Business, Innovation and Employment. Any reference to the Provincial Development Unit in these terms and conditions, is a reference to MBIE on behalf of the Crown.

Reliance by Provincial Development Unit

The Provincial Development Unit may rely upon all statements made by any applicant in an application and in correspondence or negotiations with the Provincial Development Unit or its representatives. If an application is approved for funding, any such statements may be included in the contract.

Each applicant must ensure all information provided to the Provincial Development Unit is complete and accurate. The Provincial Development Unit is under no obligation to check any application for errors, omissions, or inaccuracies. Each applicant will notify the Provincial Development Unit promptly upon becoming aware of any errors, omissions, or inaccuracies in its application or in any additional information provided by the applicant.

Ownership and intellectual property

Ownership of the intellectual property rights in an application does not pass to the Provincial Development Unit. However, in submitting an application, each applicant grants the Provincial Development Unit a non-exclusive, transferable, perpetual licence to use, disclose, and copy its application for any purpose related to the PGF application process. Any application or documentation supplied by you to the Provincial Development Unit will become the property of the Provincial Development Unit and may not be returned to you.

By submitting an application, each applicant warrants that the provision of that information to the Provincial Development Unit, and the use of it by the Provincial Development Unit for the evaluation of the application and for any resulting negotiation, will not breach any third-party intellectual property rights.

Confidentiality

The Provincial Development Unit is bound by the *Official Information Act 1982* ("OIA"), the *Privacy Act 1993*, parliamentary and constitutional convention and any other obligations imposed by law. While the Provincial Development Unit intends to treat your information as confidential, the information can be requested by third parties and the Provincial Development Unit must provide that information if required by law. If the Provincial Development Unit receives an OIA request that relates to your confidential information, where possible, the Provincial Development Unit will consult with you and may ask you to advise whether the information is considered by you to be confidential or commercially sensitive, and if so, to explain why.

The Provincial Development Unit may disclose any application and any related documents or information provided by the applicant, to any person who is directly involved in the PGF application and assessment process on its behalf including the Independent Advisory Panel ("IAP"), officers, employees, consultants, contractors and professional advisors of the Provincial Development Unit or of any government agency. The disclosed information will only be used for the purpose of participating in the PGF application and assessment process, which will include carrying out due diligence.

Limitation of Advice

Any advice given by the Provincial Development Unit, any other government agency, their officers, employees, advisers, other representatives, or the IAP about the content of your application does not commit the decision maker (it may be Senior Regional Officials, Ministers or Cabinet depending on the level of funding requested and the nature of the project) to make a decision about your application.

This limitation includes individual members of the IAP. The IAP's recommendations and advice are made by the IAP in its formal sessions and any views expressed by individual members of the IAP outside of these do not commit the IAP to make any recommendation.

No contractual obligations created

No contract or other legal obligations arise between the Provincial Development Unit and any applicant out of, or in relation to, the application and assessment process, until a formal written contract (if any) is signed by both the Provincial Development Unit and a successful applicant.

No process contract

The PGF application and assessment process does not legally oblige or otherwise commit the Provincial Development Unit to proceed with that process or to assess any particular applicant's application or enter into any negotiations or contractual arrangements with any applicant. For the avoidance of doubt, this application and assessment process does not give rise to a process contract.

Costs and expenses

The Provincial Development Unit is not responsible for any costs or expenses incurred by you in the preparation of an application.

Exclusion of liability

Neither the Provincial Development Unit or any other government agency, nor their officers, employees, advisers or other representatives, nor the IAP or its members will be liable (in contract or tort, including negligence, or otherwise) for any direct or indirect damage, expense, loss or cost (including legal costs) incurred or suffered by any applicant, its affiliates or other person in connection with this application and assessment process, including without limitation:

- a) the assessment process
- b) the preparation of any application
- c) any investigations of or by any applicant
- d) concluding any contract
- e) the acceptance or rejection of any application, or
- g) any information given or not given to any applicant(s).

By participating in this application and assessment process, each applicant waives any rights that it may have to make any claim against the Provincial Development Unit. To the extent that legal relations between the Provincial Development Unit and any applicant cannot be excluded as a matter of law, the liability of the Provincial Development Unit is limited to \$1.

Nothing contained or implied in or arising out of the PGF documentation or any other communications to any applicant shall be construed as legal, financial, or other advice of any kind.

Inducements

You must not directly or indirectly provide any form of inducement or reward to any IAP member, officer, employee, advisor, or other representative of the Provincial Development Unit or any other government agency in connection with this application and assessment process.

Governing law and jurisdiction

The PGF application and assessment process will be construed according to, and governed by, New Zealand law and you agree to submit to the exclusive jurisdiction of New Zealand courts in any dispute concerning your application.

Public statements

The Provincial Development Unit or any other government agency, or any relevant Minister, may make public the following information:

- the name of the applicant(s)
- the application title
- a high-level description of the proposed project/activity
- the total amount of funding and the period of time for which funding has been approved
- the region and/or sector to which the project relates

The Provincial Development Unit asks applicants not to release any media statement or other information relating to the submission or approval of any application to any public medium without prior agreement of the Provincial Development Unit.

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Appendix 2 - Proposed operational criteria for all tiers of the Fund

Link to Fund and government outcomes

- Demonstrate the ways in which the project will contribute to lifting the productivity potential of the region
- Demonstrate how the project contributes to the Fund's objectives of:
 - more permanent jobs
 - benefits to the community and different groups in the community
 - increased utilisation and returns for Māori from their asset base (where applicable)
 - sustainability of natural assets (e.g. water, soil integrity, the health and ecological functioning of natural habitats)
 - mitigating or adapting to climate change effects, including transitioning to a low emissions economy
- Clear evidence of public benefits (i.e. benefits other than increased profitability for the applicant)
- Are in a Government priority region or sector

Additionality

- Project is not already underway, does not involve maintenance of core infrastructure or assets (except for rail and transport resilience initiatives), and does not cover activities the applicant is already funded for (funding could be considered to increase the scale of existing projects or re-start stalled projects)
- Demonstrated benefit of central Government investment or support
- Detail of any supporting third party funding (and any funding sought unsuccessfully)
- Acts as a catalyst to unlock a region's productivity potential
- Demonstrated links to other tiers of the Fund and related projects, to maximise value of Government investment

Connected to regional stakeholders and frameworks

- Evidence of relevant regional and local support, either through existing regional development mechanisms, or through another relevant body such as a council, iwi or other representative group (or reasons for any lack of local support)
- Has been raised and discussed with the region's economic development governance group
- Alignment with, or support for the outcomes of, any relevant regional development plan, Māori development strategy or similar document (whether regional or national)
- Demonstrated improvement in regional connectedness (within and between regions)
- Leverage credible local and community input, funding, commercial and non-commercial partners
- Utilise existing local, regional or iwi/Māori governance mechanisms

Governance, risk management and project execution

- Evidence of robust project governance, risk identification/management and decision-making systems and an implementation plan appropriate to the size, scale and nature of the project
- Future ownership options for capital projects, including responsibility for maintenance, further development, and other relevant matters
- Benefits and risks clearly identified and quantified, depending on the scale of the initiative
- Evidence of potential exit gates and stop/go points, and a clear exit strategy
- Clearly identifies whole of life costs (capital and operating)
- Dependencies with other related projects are identified
- Evidence of sustainability after conclusion of PGF funding
- Adequacy of asset management capability (for capital projects)
- Compliance with international obligations (where relevant)

**Business plan for
Taranakipine
Laminated PLT Panels
Business**

Date: 19 July 2018

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Executive summary

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Business background

Taranakipine is a manufacturer and marketer of engineered pine building products based in New Plymouth. We begin with the raw log and manufacture this into a wide range of fingerjointed, laminated, treated and pre-primed exterior finished timber building products. Taranakipine exports approximately 45 containers of finished products per month to Australia, USA and the Netherlands. We sell a similar product range directly to building merchants throughout the North Island, New Zealand.

Taranakipine employs 170 staff and specialises in producing laminated timber products from the 15 loads of logs purchased each day from Taranaki region forest owners. More recently this has been extended to also selling premium grade timber from Prune logs

The company has been operating in New Plymouth for 30 years starting as a relatively traditional sawmilling business supplying the local construction market. Over the past ten years we have taken purposeful steps towards being a market leader in user-inspired engineered building products. We have undertaken the NZTE Better by Design program and invested more than \$15 million in advanced manufacturing technology over the past 8 years.

Manufacturing and marketing laminated products is Taranakipine's key strategic focus. Over the past five years laminated product volumes have grown from 9,000m³ per annum to 18,000m³. With the installation of a new laminating line in 2016, this has provided us with the ability to manufacture laminated panels in addition to laminated posts, beams and wide boards.

Led by our stated Purpose; "The market leader in user-inspired engineered building products", we have purposely set out to find a market position within the rapid rise in popularity in constructing buildings using engineered timber. We have been careful to identify products and market opportunities that fit within our present manufacturing capability in order to benefit from our existing competitive advantages in laminated products. This also reduces the capex and working capital requirement in introducing new products. Parallel laminated timber (PLT) panels for floors and roofs are the first targeted products

A move into engineered timber products for buildings for Taranakipine is a logical progressive move for the business. It is also an important necessary step as more of our existing product lines reach a mature market state along with subsidised Chinese competitors entering the market with discounted product. Price competition will result as soon as there is a market slowdown.

Taranakipine - goal/mission

- +/- \$49 million Total Revenue
 - >48% Materials Margin
 - >18% Gross Margin
 - >6.0% NPBT
 - **Achieved consistently**
 - Grow laminated sales by 3,000m³ pa within three years.
 - By 2022 2,000m³ of this volume is PLT panels >25% gross profit
 - All laminated sales achieving >20% gross profit
-

Our strategy

Key steps or jobs to do in achieving our goal/mission

1	Market research (include developing customer network)	✓
2	Business Concept – refer A3 appendix 1	✓
3	Check our panel manufacturing and panel performance capability	✓
4	Produce & install prototype floor in-factory. Check performance ok	✓
5	Invest in Stage 1 (pilot factory) panel finishing manufacturing capability	✓
6	Prototype floor installed in actual house. Check performance ok	✓
7	Determine costs and revenue estimates. Develop 5 year financial model	✓
8	Develop brand. Register in NZ & Australian markets	✓
9	Develop business go forward plan – Stage gate sign-off	
10	Set-up as separate business unit – structure, tracking & reporting	
11	Recruit specialist sales manager	✓
12	Stage 1 manufacturing operational	✓
13	Stage 2 (full capacity) manufacturing capability identified & ready to invest (buildings, plant & people)	
14	PLT panels design and install guide published	

15	Marketing and sales program launched	
16	Go to market	
17	Check & Adjust	
18	Expand flooring & roofing product range – new product development	

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Project Team

Mentors, consultants, advisors and other outside help

Name	Role/Job title
Johann Betz - Offsitedesign	Specialist engineered wood structural engineer
David Reid	Specialist engineered wood structural engineer. Works alongside Johann Betz
Chris Bell – CBC Construction	Builder – developing in factory joinery work and installation method
Russell Harrison – BTW Engineers	Panel span tables development – test protocols, testing & calculations
Glen Brebner – BGBB Architects	Design buildings using panels as main structural material
Jono Murdoch – BGBB Architects	Prototype house designer. Future projects designer
Robin Jack – XLAM founder	Project start mentor.
Richard Jack – WR Jacks	Panel processing machinery advisor
Andy Van Haute – CGW Consulting Enginners	Peer review PLT panels design guide

Project team

Team member	Key responsibilities
Tom Boon	Project leader & owner
Blair Thomson	Market development & product development
John Sanders	Manufacturing machinery & product development
Andrew Croad	Business structure & reporting. Product costing and pricing model

John Wilkinson	5 year financial model, Director/Shareholder representation
Daryll O'Leary	Order to delivery process
Wayne Loveridge	Panel manufacturing
Tim McDonald	PLT technical sales manager
Baron Maxwell	PLT production coordination

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Market analysis

Market research

Blair Thomson published in September 2016 a new business opportunity development report reviewing a wide range of engineered timber products and markets Taranakipine could potentially pursue. This year long study ranged from individual components such as stairs, through to finished prefabricated buildings. Blair's market research approach included internet search of published material, but mostly face to face discussions in NZ, Australia and USA with people directly involved in the building industry. These discussions were with property developers, construction company managers, architects and engineers.

Prior to this Tom Boon was part of a study tour in 2013 lead by Robin Jack looking at CLT and glulam facilities in Europe.

An NZTE International Growth Fund along with NZTE introductions to companies in the US has been a major contributor in completing our market research and defining the opportunity.

Market opportunity

The direction chosen was to focus on building components rather than finished buildings. Taranakipine is a manufacturer of engineered timber building products, not engineered timber buildings. Focusing on components keeps us within our Purpose and does not conflict with our core business.

The market opportunity decided on was laminated timber panels. From here they will be referred to PLT (parallel laminated timber) panels to reflect the technical name we have given this product.

PLT panels look and perform very similar to CLT (cross laminated timber) panels. CLT panels have been used extensively in construction in Europe and North America for both residential and commercial buildings for decades. The interest in building with engineered wood has intensified world-wide now that key benefits of building in wood are better understood. This phenomenon has carried over to New Zealand and Australia which has resulted in an explosion in demand for the likes of CLT panels, LVL (laminated veneer lumber) and glue laminated posts and beams. Availability of CLT in particular is in short supply with just one plant in NZ and one in Australia. Both CLT and LVL is being imported from Europe and North America into NZ and Australia to meet growing demand.

The opportunity for Taranakipine is to introduce a product to market that can be used in the same applications CLT can be used. The market has been established as well as the design and engineering capability expanding within the construction industry. With PLT panel properties being similar to CLT it is not difficult for designers and engineers to work their projects using the technical properties of PLT panels.

PLT panels are a structural product that can be used for floors, walls and roofs. Through our market research we have determined that engineered wood panels are most cost effective for the construction industry in floors and roofs and this is where we are focusing our attention; floors in particular. This product is particularly suited to mid-rise multi-unit residential buildings. We have started connecting into the NZ Government KiwiBuild initiative through direct contact with KiwiBuild and Housing NZ, as well as indirectly through larger construction companies.

Market structure

New Zealand – we will be supplying direct to the construction industry offering a finished product ready to be installed into a building. Our customers will likely be construction companies; however the channel to these customers will be via specifiers. Our PLT panels need to be designed into the building from the project onset.

Australia – At this early stage it is difficult to see us supplying fully finished PLT panels directly to construction projects. It is not impossible it just requires another level of logistics concerns to take into account. The initial market entry will be targeted at supplying larger construction firms that have their own panelisation factory capability with semi-finished PLT panels.

Target market size and outlook

NZ market size

- In 2016 the NZ detached residential multi-story housing market was estimated at \$3.7 billion.
- In 2016 the multi-unit under 3 stories market was estimated at \$2.3 billion. Total \$6.0 billion
- This represents 240,000m² of floor area (assuming average 205m² per home)
- Assume 100m² per home for mid-floor(s), total NZ market size is 120,000m²
- At a sale value of \$200/m², total market size is \$24 million p.a.
- This value excludes any sales into the commercial building market or first level floors
- KiwiBuild program – 10,000 dwellings per annum
- LVL use in NZ has grown an estimated 85% since 2014
- CLT has grown from a base of zero in 2012 to an estimated 18,000m³ in 2017

Target market size

- The target market is NZ multi-level residential buildings, both detached and multi-units.
- This market size is estimated at \$24 million p.a.
- The second target market is Australian property developers that control their own panel finishing facilities, i.e. Lend Lease, Strongbuild
- If assuming the Australian housing market is 9 times the size of the NZ housing market, then the market size is estimated at \$200 million p.a.

Other market opportunities

- Once the target market is established then Taranakipine intends to extend its product offering into the same market with:
 - Laminated timber roofs & walls for houses
 - Exterior panel walls and fencing

- Estimates for the residential flooring market in NZ give engineered timber products such as LVL a 20-25% market share against traditional solid timber joists. With the continued scarcity of supply of solid wide structural timber (particularly in the 240 and 300mm depth) within NZ, this represents a significant opportunity for PLT Panels as an alternative solution. In comparison the Australian market share for engineered timber within the residential flooring market is estimated to be 85-90%.
- Mass Timber is in: There is a buzz around engineered timber in NZ (and worldwide) and demand is only going to grow. With climate change becoming more of an understood issue and people (and hopefully governments) becoming more discerning with regards to the building products they use, the environmental and societal (www.makeitwood.org/benefits) benefits that using timber brings is of increasing relevance in today's construction market.

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Competitor analysis

Light timber framed floors

Strengths	Weaknesses
Common and well understood	Requires high labour content to build
Large, established network of supplier	No innovation
Merchants able to leverage ability to sell just part pf the product - package	Merchant struggle to communicate value proposition beyond price
	Varying quality of material
	Fibre supply issues
	Span restricted

Concrete floors

Strengths	Weaknesses
Understood & known	High H&S concerns - weight
Good thermal/fire/acoustic/structural performance	Heavy – requires greater foundations
	Energy intensive
	Supply constraints
	Additional trades on site
	Very weather dependant

LVL/Timber framed cassette floors

Strengths	Weaknesses
On site speed of build	Not widely available in NZ
H&S – less trucks, less waste, less noise	Pricing not accurate/can vary
Easy to fabricate – (highly specialised equipment not required)	Services/penetrations through joist can be an issue
Sustainable	Hard to quantify labour savings (builder may get

	paid set rate for mid-floor)
Accurate	
Good spanning capabilities	
Lightweight material	
Synergy with frame & trust plants	

Cross laminated timber floors

Strengths	Weaknesses
On site speed of build	Not widely available in NZ
H&S – less trucks, less waste, less noise	Span/layout constraints (compared to PLT)
Sustainable – less waste/ timber CO2 storage	Hard to import due to treatment constraints
Product accuracy	Lead-time on supply
Lightweight material	High capital outlay required to set-up
Well marketed in NZ	Hard to quantify labour savings
Thermal performance of mass timber	Suspended ceilings required (generally)
Aesthetics “warmth” of timber	Less aesthetically pleasing compared to PLT

Panel Supply Void

- With regards to imported product from Europe this is more relevant with respect to the Australian market. Construction companies have been importing panel product from Europe for example; Strongbuild: Use Binderholz a European manufacturer of engineered mass timber based in Austria, Germany and Finland. Lendlease: Use KLH Massivholz an Austrian engineered mass timber manufacturer.
- It is not just a 'panel supply' void that is being filled but a supply void in engineered timber. Australia imports thousands of m3 of LVL into the Australian market each year with the main distributors using NZ, European and American manufacturers. This is relevant to Woodspan® PLT panels because our panels can potentially be used in situations where LVL would be used – thus there is opportunity.

- Within NZ there is a panel supply void. There are a couple of reasons for this;
 - 1) NZ is a relatively new market (but a growing one) for panel based mass timber products.
 - 2) There is only one supplier currently in NZ based out of Nelson which has limited volume capacity.
 - 3) NZ's unique regulatory framework has meant it is difficult to import mass timber panel product 'fit for purpose' to suit the NZ market.

(Note: Xlam recently commissioned a Melbourne plant with the intent to produce 60,000m³ of CLT into Australia.)

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SWOT – Internal and external forces

Internal forces – Strengths

Strengths	What we'll do
PLT panel developed within current manufacturing capability	We can immediately take advantage of the cost competitiveness Taranakipine has in making laminated products. New capital is minimal to get business started. The project can be cashflow positive from a very early stage
Make to order	The new business order to delivery structure is not dissimilar to our regular laminated products processes. Up to laminating stage manufacturing steps are similar. Minimal disruption
Treated/durable panel options	NZ treatment standards are changing and untreated wood is likely to be banned in structural applications. We can produce H3.1 to H4 panels cost effectively
High quality visual appearance grade	With our product being faced glued, this leaves the attractive vertical grained edge exposed on both panel faces. In the right application either surface can be used for the floor without a topping or an exposed ceiling
High panel stiffness	PLT panel laminates are working on their edge (like a joist) which is the strongest form (compared to on its flat). This provides greater span compared to CLT
Lower cost solid wood panels – "potential"	Trials are underway to prove the performance of solid wood panels compared to fingerjointed panels. If successful it will significantly lower the installed cost of PLT panels
Lightweight panels – greater on-site flexibility	PLT panels are lighter than CLT panels due to their smaller cross-section. This makes them easier to maneuver on the building site. And much lighter than concrete which can potentially result foundation cost savings. Also hi-ab truck can be used to place panels on building structure rather than a more expensive crane
Taranakipine known for its experience in manufacturing laminated wood products	While new to laminated panels, Taranakipine has a 20 plus year reputation of making building standards compliant structural laminated wood products
Timber – a sustainable low carbon building material	Leverage sustainability through highlighting environmental benefits in product marketing
NZ made	Utilise our passionate & experienced team to reverse the trend of logs being processed offshore and build ongoing sustainable demand for PLT products

Internal forces – Weaknesses

Weaknesses	What we'll do
Limited panel performance history	We have installed three prototype floors (one in-factory, two houses) to date. While there have been minimal issues we need to gain more learnings through further projects. The bigger concern is panel performance during construction while exposed to rain. Further trials underway. Refer to Wall - issues
Human resources – skilled and time availability	Taking the business plan into full commercialisation is a full time role. Refer to Wall – tasks. We also require a person to lead the commercialisation who has the skills and experience to cross between architects, structural engineers, builders & wood processors. Employing this person is our next critical step (<i>Note: completed July 2018</i>)
Smoothing out PLT manufacturing without impacting “normal” production	We expect it will take a number of actual PLT panel orders to fully understand how to best manufacture finished panels. There is also a concern that space to do the panel carpentry work in the laminating building without impacting normal laminating production may be an issue. Short-term building rental options are being investigated.
PLT panel size (for LTF multi-level)	Explore options to enable joining 2/3 panels in factory prior to site delivery

External forces – Opportunities

Opportunities	What we'll do
PLT panels fit within NZ/Aus building codes & standards	
Wide range of flooring options	
Expand product range into roofs and possibly walls	
Be first to NZ & Australia market	
Potentially an easy switch from light timber frame systems to panelisation option for builders	Provide comprehensive design and installation guides available to the specification community
Kiwibuild/AUP changes	Engage with Housing NZ, partner with major GHB's

External forces – Threats

Threats	What we'll do
PLT panels an unknown product in NZ/Aus	
Potential for product performance issues impacting our reputation & potential liabilities	
Installed PLT panel cost not cost effective enough compared to competition	We need a product that not just performs for the converted engineered wood customers, but also the mass market. Delivered installed cost and product performance needs to equal or better to alternative products
Leverage on CLT/Mass Timber market buzz	Be easy to deal with. Have a customer centric approach to build reputation

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Marketing strategy and budget

Launch strategy and budget

Area of spend	Cost (\$)
Promotional video - <i>done</i>	
Register brand - <i>done</i>	
Website & builders apps - <i>in design</i>	
Social media - <i>underway</i>	
Design & installation guide - near complete	
Marketing collateral	
Conference attendance & sponsorship - <i>sponsor Changing Perceptions</i>	
Direct marketing - email, face to face, phone	
Building industry associations & sponsorship - <i>sponsor PrefabNZ</i>	
Print advertising	
Total	\$60,000

Ongoing marketing strategy and budget

Area of spend	Monthly cost (\$)
Maintain current website and marketing collateral	
Conference attendance & sponsorship	
Direct marketing - email, face to face, phone	
Print advertising	
Total	\$60,000 pa

Assets held and planned

Business premises

Asset	Replacement / maintenance strategy
Stage 1 – 1/3 of laminating building	Pilot factory to get started
Stage 2 – New separate building on Hudson Road site	Full commercial factory. Space for growth and CNC capability

Computers and IT

Asset	Requirements
Stage 1 – nothing extra of significance	Our PLT panels business unit leader will need to be able to converse in the same technical language as architects, structural engineers and builders. They also need to be familiar with various industry design & engineering software packages used. Timbersmart interface
Stage 2 – CNC technology	We will require both a computer software and technically capable person who can upload various design software into CNC machinery and ensure product output is produced to specification. Timbersmart interface

Equipment

Asset	Requirements
Stage 1 – pilot factory (all within laminating building)	Panel surfacer & extraction system (<i>complete May 2018</i>). Assorted carpentry hand-tools (<i>complete May 2018</i>). Waterproof coating hand held spraying unit. Racking system for panel sorting. Shared forklift with laminating.
Stage 2 – full separate factory	5 or 6 axis CNC post, beam, panel processing machine. Relocate surfacer system, coating system, hand tools, racks. Overhead gantry for panels handling. 2 x forklifts Build a new factory building on Hudson Road site

Stock

Asset	Requirements
Panels	This is a make to order business model therefore it is unlikely that semi-finished panels will be held in stock. There will be a requirement to hold completed orders for up to a month prior to delivery dates.
Laminates	Lead times from price tendering, tender acceptance and order delivery is as yet unknown. There may be a requirement to hold treated laminates in stock in order to shorten finished panel production time as well as minimize impact on both fingerjointing and laminating.

Intellectual property

[Explain your intellectual property situation, as background before listing specific IP assets.]

Asset	Comment
Woodspan brand name and logo	The Woodspan brand name, logo and URL's have been trade mark registered in New Zealand and Australia
No obvious patentable product IP (at this stage)	Our PLT panels, while new to New Zealand, are not uncommon in North America or Europe. There is some uniqueness associated to our Radiata pine timber species used. This is not unique to Taranakipine within NZ. We will copyright register Woodspan products
Taranakipine laminating process	Hard to replicate
Taranakipine make to order process	Hard to replicate. Especially by offshore competitors
Woodspan PLT Panel design & installation guides	We need to provide architects, engineers and builders the information they require to undertake their work. We will keep the workings behind this information (e.e. span tables) in-house.

Financial plan

Cost forecast – money out

Capital Expenditure	First year (\$)	Second year (\$)	Third year (\$)
Wide-bed surfacer system - complete	\$250,000		
Carpentry hand tools - complete	\$40,000		
Panel handling equipment	\$50,000		
Coating applicator	\$10,000		
CNC Processing machine		\$900,000	\$900,000
Panel handling equipment			\$350,000
Factory building & yard development		\$600,000	\$600,000
Total	\$350,000	\$1,500,000	\$1,850,000

Operating Expenditure	First year (\$)	Second year (\$)	Third year (\$)	Fourth year (\$)	Fifth year (\$)
Direct labour (variable years 1 & 2)	\$20,000	\$153,000	\$280,000	\$280,000	\$280,000
Indirect labour (90% fixed)	\$270,000	\$355,000	\$400,000	\$400,000	\$400,000
Panel cost (variable)	\$309,000	\$871,000	\$1,550,000	\$2,420,000	\$3,390,000
Other direct costs (variable)	\$9,000	\$25,000	\$44,500	\$69,500	\$97,000
Equipment hire (fixed)	\$10,000	\$40,000	\$80,000	\$80,000	\$80,000
Marketing (fixed)	\$32,000	\$60,000	\$60,000	\$60,000	\$60,000
Rent (fixed)		\$100,000	\$100,000	\$100,000	\$100,000
Total	\$650,000	\$1,604,000	\$2,514,000	\$3,410,000	\$4,407,000

Revenue forecast – money in

Type of Revenue	First year (\$)	Second year (\$)	Third year (\$)	Forth year (\$)	Fifth year (\$)
FJ PLT panels	\$260,000	\$699,000	\$1,243,000	\$1,940,000	\$2,719,000
Solid timber PLT panels	\$218,000	\$654,000	\$1,163,000	\$1,818,000	\$2,545,000
Total	\$478,000	\$1,353,000	\$2,406,000	\$3,758,000	\$5,264,000

Profit and loss forecast

Type of Revenue	First year (\$)	Second year (\$)	Third year (\$)	Forth year (\$)	Fifth year (\$)
Estimated revenue	\$478,000	\$1,353,000	\$2,406,000	\$3,758,000	\$5,564,000
Estimated costs	\$650,000	\$1,604,000	\$2,514,000	\$3,410,000	\$4,407,000
Estimated EBITD	-\$172,000	-\$251,000	-\$108,000	\$348,000	\$857,000

Cashflow forecast

Type of Cashflow	Year Zero	First year (\$)	Second year (\$)	Third year (\$)	Forth year (\$)	Fifth year (\$)
EBITD	\$7,000	-\$172,000	-\$251,000	-\$108,000	\$348,000	\$857,000
Machinery Capex	-\$348,000	-\$640,000	-\$1,510,000			
Building Capex			-\$1,200,000			
Cashflow	-\$341,000	-\$812,000	-\$2,961,000	-\$108,000	\$348,000	\$857,000

Balance sheet forecast

	Year Zero	First year (\$)	Second year (\$)	Third year (\$)	Forth year (\$)	Fifth year (\$)
Retained Earnings/Losses	\$6,000	-\$169,000	-\$440,000	-\$565,000	-\$232,000	\$608,000
Current Assets – stock & debtors	\$18,000	\$148,000	\$246,000	\$394,000	\$616,000	\$862,000
Fixed assets	\$348,000	\$985,000	\$3,674,000	\$3,653,000	\$3,632,000	\$3,611,000
Total assets	\$366,000	\$1,133,000	\$3,920,000	\$4,047,000	\$4,248,000	\$4,474,000
Current liabilities						
Borrowings	\$353,000	\$1,250,000	\$4,275,000	\$4,478,000	\$4,274,000	\$3,578,000
Creditors	\$6,000	\$52,000	\$86,000	\$134,000	\$206,000	\$287,000
Net assets	\$6,000	-\$169,000	-\$440,000	-\$565,000	-\$232,000	\$608,000

Business continuity planning

Risk	Systems, policies or tools to mitigate risk or deal with
Product failure in-market	There is minimal risk in terms product failure causing life or limb injury (on basis install guide followed). There is potential for the product to fail in use, such as delamination or floor sagging. Remedy work will be expensive. Product liability insurance to be taken
Product offer not competitive enough – low demand	Stage 1 – pilot factory has reduced the initial capital outlay to get the business started and proven. Operating expenditure is variable and can be moderated accordingly. Large expenditure is in Stage 2 – building and CNC machine. The building can be rented if not required. The CNC machine can be utilized on other products (e.g. posts, beams, doors) or sold

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Business structure

Separate business unit	A separate business unit for the PLT panels business will be established and will operate at arm's length from Taranakipine to ensure we clearly track the performance of this new business. Setting up as a separate company is being considered. The company name, Woodspan Ltd has been registered

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