

Confidential

Please be aware that the proposal must be submitted by one of the BPA Partners or a university. Contact us if you would like introductions to any of these parties.

Project Title:

Funding application description: 50 characters max. (e.g. Mussel soup for Japan: proof of concept)

Date:



BPA Partners are not liable in any way for any direct or indirect damage, loss or cost incurred by any Party in this proposal or any other person in respect of the proposal process. Ensure sign off from all organisations involved in the proposal prior to submission:

Organisation	Name	Declaration	Signature
		1. I have read this proposal and consent to its submission 2. Hazards or health and safety risks I am aware of during this project will be identified to potentially impacted parties	
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A. Executive Summary

Project lead organisation:

Project leader's name:

Project leader's email and phone numbers:

Project contributors' names and organisations:

BPA partners: AgResearch, Callaghan Innovation, Plant & Food Research, Scion
Universities/others (researcher organisation, researcher names and contact details):

Industry partners: *(copy and paste if more than 1 partner)*

Organisation name:

Contact person, phone and email address:

Brief description of the organisation and what it does:

Roles: *tick all relevant boxes* produces bioresource stream, stabilises the bioresource,
 makes products from the bioresource, markets, distributes and sells the product(s).

Technology Readiness Levels (TRL) of development this funding application covers:

- TRL 0 **Idea**. Unproven concept, no testing has been performed
- TRL 1 **Basic research**. Principles postulated and observed but no experimental proof available
- TRL 2 **Technology formulation**. Concept and application have been formulated
- TRL 3 **Applied research**. First laboratory tests completed; proof of concept
- TRL 4 **Small scale prototype** built in laboratory environment ('ugly' prototype)
- TRL 5 **Large scale prototype** tested in intended environment
- TRL 6 **Prototype system**. Tested in intended environment close to expected performance
- TRL 7 **Demonstration system** operating in operational environment at pre-commercial scale
- TRL 8 **First of a kind commercial system**. Manufacturing issues solved
- TRL 9 **Full commercial application**. Technology available for consumers

Please justify why the particular TRL has been chosen:

Summary of the project (total development):

In a paragraph, describe the project that this funding application relates to (i.e. the big picture opportunity you are working on).

Funding:

BPA funding requested	
Co-funding: Cash	Provider 1: Provider 2:
Co-funding: In-kind	Provider 1: Provider 2:
Total value (BPA\$+cash+in-kind)	

BPA funding received to date for this project (if applicable): *Include BPA project numbers.*

Anticipated total BPA funding for this project (total development): <\$100k, \$100k-\$250k, \$250k-\$500k, \$500k-\$750k, \$750k-\$1m, >\$1m, I don't know yet

Duration of work under this funding application (months):

List the product(s) the project will develop:

Anticipated year of commercial launch:

Anticipated total development cost to launch: <\$500k, \$500k-\$1m, \$1m-\$3m, >\$3m

Sector: Forestry, Marine, Agriculture, Horticulture, Land-based animal, Microbiological, Other

How will value be added?: *tick relevant boxes* Creating new product for export, Creating product which replaces imports, New or improved processing, improved yields or reduced costs, Improved waste treatment, reduction in disposal cost, volume or hazardous nature, Improving value proposition for NZ's exported goods.

Bioresource Stream:

A	B	C	D	E
Volume of bioresource in NZ	Volume of bioresource used in this opportunity at maturity	Annual volume of product/s from this opportunity at maturity	Value at time of export or NZ sale	Value of opportunity
(t/pa)	(t/pa)	(t/pa)	(\$/kg)	C x 1000 x D = (\$/pa)

B. The Project

Bioresource stream:

Provide information on the target bioresource stream, including origins; locations; volume; characteristics; compositions; current uses; costs/earnings; environmental impact; challenges or uncertainties regarding the bioresource supply. Will there be further leftover waste after processing?

Product/Process/Technology:

What will the product/process/technology do? What is the problem it solves or opportunity it presents? Has feasibility been proven at lab scale? What benefits and value does it present to customers?

IP Position:

Freedom to operate; have you determined that you are not infringing IP rights of other parties? What restrictions have you identified? Is this project likely to generate new IP or has it been patented? If so, please outline your IP protection and utilisation strategy.

Industrial harvesting/processing/manufacturing capability:

What industrial harvesting/processing/manufacturing capability is currently available to make the product and/or implement the process/technology? What capability is missing and how will these deficiencies be overcome?

Market(s):

Why is this worth doing? Describe the target market for the product/process/technology. What is the total market size and trends? What are the current pricing levels and trends? What are the competing products/processes/technologies (if any)? What are your strengths and weaknesses compared to the alternatives/competitors?

Marketing capability:

What marketing capability and distribution channels are available now? Within the wider project team (i.e. including current industry partner/s), what is the nature of your experience, or your relationships in the target market? What capability is missing and how will these deficiencies be overcome?

Work completed already on the project (total development) – if applicable:

Provide a brief outline, including any BPA funded work

C.Funding application

Objective of the work that will be completed using this funding:

What outcomes will this work achieve?

Scope:

Briefly outline the work that will be done.

Exclusions:

Briefly outline what won't be done.

Deliverables:

List the deliverables, e.g. concept samples, report, etc, provided to whom.

Milestones:

List the key work packages/milestones for this work, who will undertake the work for each work package/milestone and the expected timeframes and costs. Insert any Go/No Go decisions

Work package/Milestone	Responsibility	Duration	Required funding
Sign contracts and mobilise	Led by:		
	Led by: <i>Please be clear on exactly who is doing what work</i>		\$ <i>Please be clear on exactly where all of the money is going</i>
	Collaborators:		
	Led by:		\$
	Collaborators:		
	Led by:		\$
	Collaborators:		
	Led by:		\$
	Collaborators:		
Total duration and funding required			\$
Co-funding: Cash			
Provider 1:			\$
Provider 2:			\$
Co-funding: In-kind			
Provider 1:			\$
Provider 2:			\$
Total BPA funding being applied for			\$

In-kind co-funding description:

For each provider, provide a description of the materials, services and expertise being provided as in-kind co-funding.

Go/No Go decisions:

Outline the basis for each Go/No Go Decision, who will be involved in the decision making and how the BPA will be included.

Gantt Chart:

Shade the relevant cells in the following table or replace this table with a suitable image.

Month														
Work package/Milestone 0														
Work package/Milestone 1														
Work package/Milestone 2														
Work package/Milestone 3														
Work package/Milestone 4														
Go/No Go decision														

D.Supporting information

On the first page, you selected the TRLs of development your application relates to. Please provide the following information:

- For applications for funding for TRLs 0, 1 or 2, no supporting information is required.
- For applications for funding for TRLs 3 and 4, see below.
- For applications for funding for TRLs 5, 6, 7, 8 or 9 see below and attach a copy of your most recent business case. *If you don't have a business case, please contact the BPA for a template.*

Supporting information for applications for funding for TRLs 3 to 9

Financial robustness:

What financial investments are likely to be needed to develop, establish industrial and marketing capabilities and launch this product/process/technology? When do you expect a revenue stream? What is the likely margin? For whom? What is the anticipated rate of return for this investment?

Environmental Performance:

Considering energy, water and materials consumption, and generation of wastes, effluents and emissions, how will your product/process/technology deliver environmental benefits compared to alternatives and to the status quo use of the bioresource stream?

Risks: Health and Safety, Regulatory Compliance, Environmental:

Considering HSNO/OSH, regulatory and environmental risks, outline any risks associated with this opportunity and the potential for any new hazards.

Broader benefits:

If this total development is commercialised successfully, outline the likely outcomes and benefits/impacts (economic, cultural, societal, environmental) to New Zealand and/or the rest of the world.

Risks to project success:

Outline the major risks to the overall project's success and the steps you're taking to treat (avoid, reduce/mitigate, share or accept) these risks.

Critical success factors and ability to deliver:

List the critical success factors (CSF), i.e. those few key things that must go well for this project to succeed, how will they be managed? Are any of the CSFs potential showstoppers - why? Provide a summary of the project team's track record in relevant initiatives. Considering the skills, equipment and other resources required to successfully deliver this project, identify any gaps and outline how they will be overcome.

E. References

F. Score Card

Based on the information in this document, please score your project and record your score in the right hand column

Category	Attributes	Scoring Guidelines					Your Score
		0	0-1	2-4	5-7	8-10	
1. Value opportunity	- Feedstock situation; - Value proposition for customer; - Strategic fit	Not assessed	-Feedstock supply small or uncertain; current use profitable - Value & benefits small or not adequately defined; -Not well aligned with BPA goals	-Modest Feedstock supply; current use/disposal cost neutral - Modest value & benefits; - Fair alignment with BPA goals	-Large feedstock supply; current use/ disposal costly or cost neutral - Significant value & benefits; - Well aligned with BPA goals	-Large feedstock supply; current disposal costly - Huge value & benefits; -Strategically important for BPA	
2. Market potential	- Market size & growth -International opportunities - Profit margins -Strengths against alternatives - Competitive advantage	Not assessed	- Market small / declining - No international opportunities - Profitability low or uncertain - No clear advantage compared to competition	- Market modest / mature; -Some international opportunities - Modest profitability - Small advantage compared to competition	- Market large/growing; -Good international opportunities - Good profitability -Significant advantage compared to competition	- Market large / rapidly growing; -Major international opportunities - Excellent profitability - Major new benefits, unique and highly superior product/process	
3. Technical readiness	- Feasibility at lab scale -Manufacturing complexity -Technical challenges/barriers/risk	Not assessed	- Technical feasibility inferred; - Major uncertainties regarding manufacturability, potentially high barriers - Large technical barriers; High risk	- Technical feasibility indicated; - Some uncertainty regarding manufacturing feasibility, some barriers -Considerable barriers; moderate risk	-Technical feasibility demonstrated; - Manufacturing feasible, minor barriers - Small technical barriers; Low risk	- Technical feasibility proven; -Manufacturing easy to implement, no barriers - Very small technical barriers; negligible risk	
4. IP position	FTO and strength of IP position	Not assessed	Major restrictions; very weak IP position	Minor restrictions; weak IP position	Full freedom to operate and IP position available	Full freedom to operate and strategy to strengthen IP position in place	
5.Value chain integration & partner relationships	-Bioresource supply and product distribution channels - Partners	Not assessed	-Major uncertainties regarding bioresource supply or distribution channels - Major barriers to overcome -No potential commercial partners identified	-Some uncertainty regarding bioresource supply or distribution channels - Some barriers to overcome - Potential partners identified	-Bioresource supply and distribution channels reasonably well established - Feasible to overcome barriers -Initial contact to potential partners made	-Secure bioresource supply, existing distribution channels -No significant barriers expected -Potential partner has expressed strong interest	
6.Financial robustness	- Level of investment vs. returns; - Time to revenue	Not assessed	-Very high investment required; Returns small / unknown; - Long time to revenue	-Significant investment required; Moderate returns; - Medium time to revenue	-Moderate investment required; Good returns; - Short time to revenue likely	-Small investment required; significant returns expected; - Short time to revenue highly likely	

7.Environmental performance	-Expected benefit compared to alternatives/status quo - Improvement potential	Not assessed	-No benefit compared to alternatives or status quo -Improving environmental performance has not been considered	- Small environmental benefit compared to alternatives or status quo -Hypothetical improvement potential indicated;	-Significant environmental benefit compared to alternatives or status quo -Environmental improvement options indicated;	-Major environmental benefit compared to alternatives or status quo -Environmental improvement options identified, will be considered in further development	
8.Health & safety, Regulatory compliance, Environmental risks	- Risks, hazards - Mitigation plan - Compliance costs	Not assessed	- High risk - High compliance cost	- Moderate risk - Moderate compliance cost	- Low risk - Low compliance cost	- Negligible risk - Negligible compliance cost	
9. Broader benefits	Benefits outside the business; spill-overs	Not assessed	No benefits outside the business expected	Some benefits for other businesses expected	Benefits for other businesses and NZ expected	Significant benefits for NZ expected	
Total Score							