****

**NSW Physical Sciences Fund**

**Round 4 2022**

**Preliminary application**

|  |
| --- |
| **PROJECT INFO** |
| **Device or system name** |  |
| **Funding request** |  |
| **APPLICANT INFO** |
| **Contact person** |  |
| **Contact number** |  |
| **Contact email** |  |
| **ORGANISATION INFO** |
| **Organisation** |  |
| **ABN No.** |  |
| **HQ address** |  |
| **Website** |  |

# General instructions

**Preliminary application form and attachments**

* Please answer the questions using the text boxes provided and keep your responses to the specified word limit.
* Please only provide attachments listed in the application checklist. Excess documentation cannot be considered.
* Ensure that the declaration is signed by an authorised representative of your organisation.

**Video**

Please provide a two-minute video with your application. The video should clearly explain:

* the problem the invention solves
* the scientific and technological basis for the device/system (including imagery of the device/system)
* how the device/system works
* how the funding would be used to drive commercialisation

# How to submit your application

You must submit an electronic copy of the application (in PDF format) and video to raap.grants@chiefscientist.nsw.gov.au by **5pm Monday 02 May 2022.**

Preliminary applications must be named following the naming convention of: ‘PSF2022\_organisationname’ and ‘PSF2022\_organisationname\_attachmentname’ for attachments.

# Timeline

**4 March 2022** Preliminary applications open

**02 May 2022** Preliminary applications close

**July 2022** Shortlisted applicants present to the Expert Panel

**August/September 2022** Full applications requested

**October 2022** Shortlisted applicants present to the Expert Panel

**December 2022** Successful applicants announced

Please note dates are subject to change.

**Complete the following checklist:**

**Application checklist**

[ ]  Completed preliminary application form (PDF format)

[ ]  High-resolution image of the device/system (jpg format.). *This could be inserted into the application form.*

[ ]  Audited or Certified Financial statements for FY2020/21

[ ]  Balance sheet and profit-and-loss statements for FY2020/21 and estimate for FY2021/22

[ ]  Evidence of technical feasibility

[ ]  Evidence of commercial feasibility (or how you plan to acquire the evidence)

[ ]  Evidence of intellectual property status (patentability assessment)

[ ]  Video

If you have not submitted any of the requested information above, please provide a justification below:

|  |
| --- |
|  |

**Eligibility Criteria** *(as listed in the PSF Guidelines)***:**

5.1 Are you *(select one of the following)*:

[ ]  a financially viable company or commercial enterprise based in NSW (e.g., location of manufacturing jobs, headquarters based in NSW, NSW investment); have an Australian Business Number (ABN); and is a legal entity

[ ]  an individual who agrees to form such an entity so that the Agency can enter into a legally binding funding agreement

[ ]  a NSW public research organisation applying through its appropriate technology transfer office or the Chief Executive Offer (or equivalent) of the research organisation that will become a separate entity before entering into a legally binding funding agreement with the Agency

5.2 Does the project:

* seek to progress a device or system along the commercialisation pathway?

[ ]  Yes [ ]  No (not eligible for the PSF)

* be innovative (i.e., new to market)

[ ]  Yes [ ]  No (not eligible for the PSF)

* be headquartered in NSW and demonstrate that most of the project activities will take place in NSW

[ ]  Yes [ ]  No (not eligible for the PSF)

* deliver economic, social and/or environmental benefit to NSW

[ ]  Yes [ ]  No (not eligible for the PSF)

5.3 Does the applicant hold the Intellectual Property or the rights to commercialise the device/system?

[ ]  Yes [ ]  No (not eligible for the PSF)

5.4 Is the applicant eligible for and/or who have received funding from the NSW [Medical Devices Fund](https://www.medicalresearch.nsw.gov.au/medical-devices-fund/)?

[ ]  Yes (not eligible for the PSF) [ ]  No

## Preliminary Application Device/system overview (maximum 500 words)

1. Describe the problem you are trying to solve.
2. Describe how your device/system will solve it. *Please attach or paste a diagram or high-resolution image of the device/system in jpg format.*
3. Describe all potential direct and indirect benefits of your device/system to NSW, Australia and the world.

|  |
| --- |
|  |

## Project plan

1. List your top three project goals.
2. Describe the current stage of development of your device/system and describe how the PSF grant would be used to advance commercialisation of your project. You must include a project timeline (assuming expenditure from January 2023) and project costs. (maximum 300 words)

|  |
| --- |
| 1. **Project goals**

**1.****2.****3.** |

1. Estimate the percentage of your project activities that will be conducted in NSW. Briefly list what activities will take place in NSW and those that will be conducted outside NSW (within Australia and/or overseas)

|  |
| --- |
|  **%****Activities in NSW:****Activities outside NSW:** |

1. Fill in the Technology Readiness Level Scale to indicate the current development stage of the device/system and the expected development stage if you receive a PSF grant.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Technology Readiness Level | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** |
| Now |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
| At project end |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

*Refer to Appendix 1 for more information on the Technology Readiness Level Scale to assist with your response.*

## Technology of the device or system

1. Please describe the scientific/technological basis of your device/system and state when you started the project (maximum 200 words). Please answer clearly and directly. *Please refer to any evidence of technical and feasibility studies but do not include these documents. Additional documents will be requested if needed.*

|  |
| --- |
|  |

## Commercial case

1. Who is going to pay for your device/system? How big is that market? (maximum 200 words)

|  |
| --- |
|  |

1. How many potential customers have you met? What is their feedback on your device/system? (maximum 200 words)

|  |
| --- |
|  |

1. What is your competitive advantage? (maximum 200 words)

|  |
| --- |
|  |

1. What are the competing technologies/solutions currently available both locally and internationally? (maximum 200 words)

|  |
| --- |
|  |

1. What are the names of your competitors (in the market and other research institutions)? (maximum 200 words)

|  |
| --- |
|  |

1. If you have external partners, please name them and describe how you will work with them on this project. (maximum 200 words)

|  |
| --- |
|  |

1. Describe your business model and proposed distribution channel(s). (maximum 200 words)

|  |
| --- |
|  |

## Financial information

1. Please fill in the following table of financial information for the specific project under consideration:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2020/21****(actual)** | **2021/22 (forecast)** | **2022/23****(forecast)** | **2023/24 (forecast)** |
| Sales Revenue |  |  |  |  |
| Grant/Funding Revenue |  |  |  |  |
| Other Revenue (i.e. R&D Tax Incentive, etc.) |  |  |  |  |
| Cost of Goods Sold |  |  |  |  |
| Gross Profit |  |  |  |  |
| Expenses |  |  |  |  |
| Operating Profit |  |  |  |  |
| Total Assets (as at 30 June) |  |  |  |  |
| Total Current Assets including Cash (as at 30 June) |  |  |  |  |
| Cash (as at 30 June) |  |  |  |  |
| Total Liabilities (as at 30 June) |  |  |  |  |
| Current Liabilities (as at June 30) |  |  |  |  |

***Please attach to this application your balance sheet and profit and loss statements for FY2020/21 and estimate for FY2021/22.***

1. List any external funding (public and/or private) you have received for the project and name the funding parties. (maximum 150 words)

|  |
| --- |
|  |

## IP and Regulatory pathway

1. Describe the key elements of your intellectual property portfolio (e.g. patents, trade secrets, trademarks, etc.) and how you plan to build and protect this portfolio in your key geographical target markets. (maximum 250 words)

|  |
| --- |
|  |

1. Describe any Standards or regulatory requirements your product needs to meet and your plans to adhere to them in your key geographical target markets. (maximum 250 words)

|  |
| --- |
|  |

## Project personnel

1. Who are the key members of your project team, where are they based and what is their relevant experience? (maximum 300 words)

|  |
| --- |
|  |

## References

Please provide the details for two **independent** referees (e.g., academics or industry representatives) who can provide information on the relevance of your device/system.

*If your referees are contacted, all information provided to the Office of the NSW Chief Scientist & Engineer and the PSF Expert Panel will maintain strictly confidential and used solely to verify the strength of the application.*

**Referee 1:**

|  |  |
| --- | --- |
| **Name:** |  |
| **Position:** |  |
| **Organisation:** |  |
| **Phone number:** |  |
| **Email:** |  |

**Referee 2:**

|  |  |
| --- | --- |
| **Name:** |  |
| **Position:** |  |
| **Organisation:** |  |
| **Phone number:** |  |
| **Email:** |  |

# CEO/Vice Chancellor/Director’s Declaration

I \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Name of CEO/Vice Chancellor/Director or delegate) from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (name of applicant organisation) declare that the information provided in this application form is true and correct. I understand that this application may be circulated to third parties as required by the secretariat or the PSF Expert Panel. I provide consent for the primary contact details and lay description of the device or system (non-commercial in confidence), along with a brief summary of the project to be forwarded to third parties so they may make contact if they can assist.

Position: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Appendix 1 – Technology Readiness Level Scale

|  |  |  |
| --- | --- | --- |
| **TRL** | **TRL description** | **Evidence of achievement** |
| 1 | Basic principles observed and reported | Published research that identifies the principles that underlie this technology |
| 2 | Technical Device/System concept formulated | Practical applications (e.g., devices) of the basic principles of the invention |
| 3 | Technical proof of concept demonstration | The basic performance of the invention is demonstrated in a laboratory setting |
| 4 | Alpha prototype: Component and/or process validation in laboratory environment | Design, development and lab testing of components/ processes. Results provide evidence that performance targets may be attainable based on projected or modelled systems |
| 5 | Laboratory-scale (or similar) system validation in relevant environment | Basic technological components and/or process validation is achieved in a relevant environment |
| 6 | Beta prototype: System/sub-system model or prototype demonstration in operational environment | Engineering-scale models or prototypes are tested in relevant environment |
| 7 | System prototype demonstration in operational environment | Actual system prototype demonstrated in an operational environment  |
| 8 | Actual system completed and qualified through test and demonstration | Actual system/process completed and qualified through test and demonstration (pre-commercial demonstration) |
| 9 | System proven and ready for commercial deployment | The technology is in its final form and proven through successful operations in operating environment, and ready for full commercial deployment |