

Department of Climate Change,
Energy, the Environment and Water

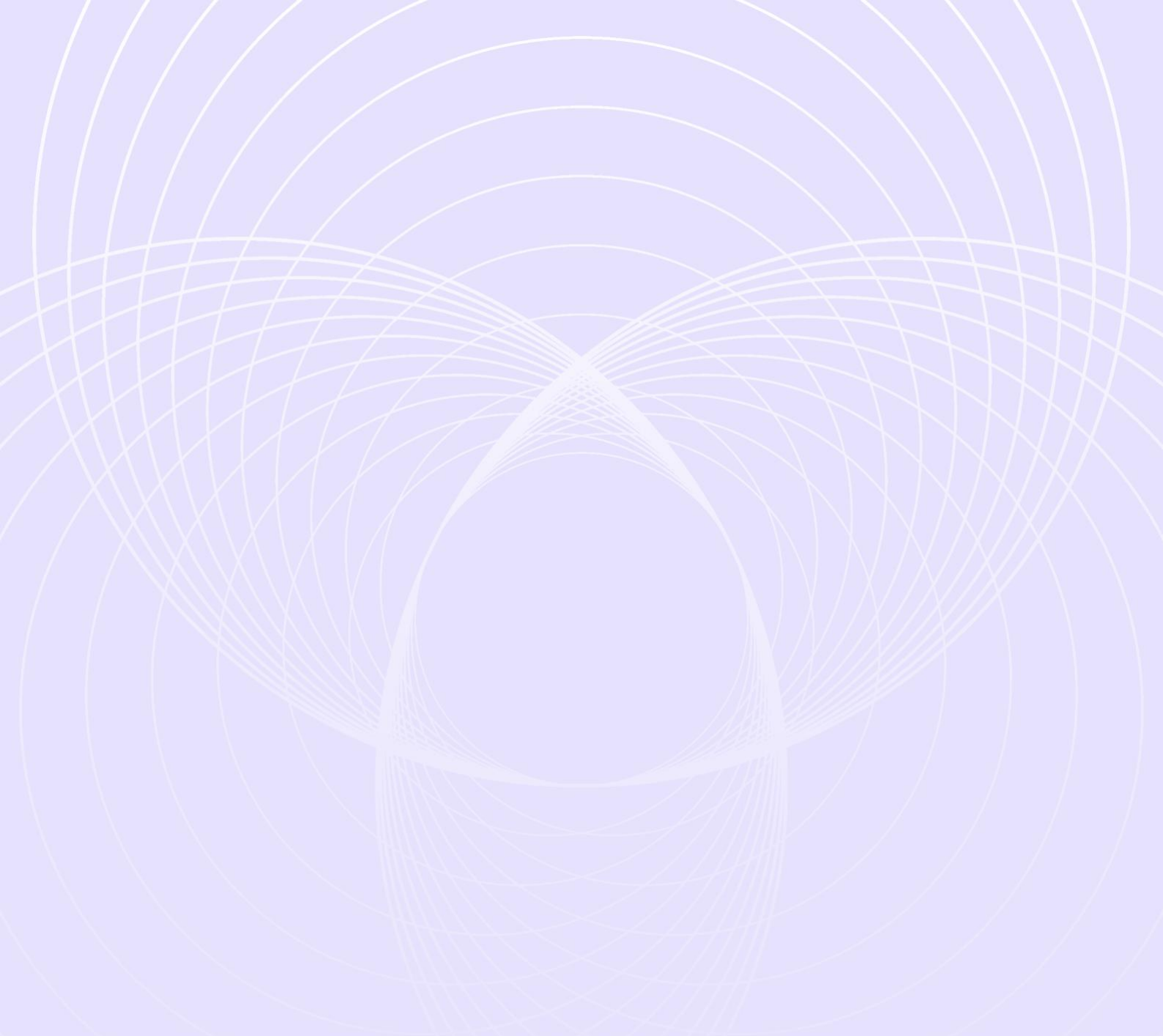
Clean Technology Innovation



Commercial readiness stream
funding guidelines

February 2024





Acknowledgement of Country

The Department of Climate Change, Energy, the Environment and Water acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Clean Technology Innovation, commercial readiness stream funding guidelines

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1. Introduction

1.1 Delivering net zero manufacturing

The NSW Government is committed to achieving net zero emissions by 2050 and this will require supporting industry to decarbonise. Critical to enabling this is the [Net Zero Plan Stage 1: 2020-2030](#) (the Net Zero Plan). The Net Zero plan will fast-track emissions reductions over the next decade to combat climate change, grow the economy, create jobs and attract investment.

In its 2023 budget, the NSW Government announced \$480 million in funding to boost the net zero manufacturing initiative (the Initiative), which is a key part of the Net Zero Plan. The Initiative builds on from the work of the [Net Zero Industry and Innovation Program](#) (NZIIP) released in 2021 which includes Clean Technology Innovation (CTI) as one of 3 key focus areas.

Clean Technology Innovation has allocated \$22.5 million in this round for piloting and demonstrating lab-proven clean technologies to accelerate their commercial readiness.





The Initiative is administered by the Department of Climate Change, Energy, the Environment and Water (the Department). For enquiries or questions related to these guidelines, the Initiative and its streams, please email us at netzeroinnovation@environment.nsw.gov.au



1.2 Objectives of Clean Technology Innovation

In this round, the Clean Technology Innovation commercial readiness stream will provide grants between \$250,000 and \$5 million per project for up to 50% of eligible project costs. Its objectives remain aligned with the Net Zero Plan and are listed in Figure 1.

Figure 1 Objectives of CTI

Reduce industrial emissions Unlock the next wave of low emissions technologies needed for NSW to reach net zero emissions by 2050			
			
<p>1. Repeatedly test the technical and commercial feasibility, viability and or compliance of a product or project.</p>	<p>2. Accelerate and expand the research, development and commercialisation of low emissions technologies that show potential for becoming scalable, replicable and cost-effective.</p>	<p>3. Create an ecosystem that can develop the capability to drive repeated clean technology innovations.</p>	<p>4. Attract world-class clean technology companies and innovations to domestic markets and convert NSW into a clean technology superpower.</p>

1.3 Purpose of these guidelines

These guidelines provide information for applicants seeking to apply for commercial readiness stream funding including:

- key dates and timeframes for this grant opportunity
- how to apply and critical information required to support your application
- eligibility and merit criteria
- the types of projects and costs that can be funded.

These guidelines must be read in conjunction with the [CTI streams supplementary guidance](#) and frequently asked questions (FAQs) published on our [website](#). Our website also has an eligibility checker to help determine which Initiative stream is right for you.

2. Key dates and timelines

The commercial readiness stream follows a 2-stage application and assessment process: an expression of interest (EOI) stage followed by an invitation to a detailed application stage. Only EOIs that demonstrate compliance with the eligibility requirements and satisfy the merit criteria outlined in these guidelines will be invited to submit a detailed application.

Table 1 identifies the indicative timeframes for the commercial readiness stream. These are subject to change at the discretion of the Department.

Table 1 Key dates and timelines

Stage	Timeframe
EOI open	26 February 2024
EOI close	5 April 2024
Notification of assessment outcome	3 June 2024, or as soon as possible after a decision has been made at the Department's discretion.
Detailed applications open	10 June 2024
Detailed applications close	2 August 2024
Notification of detailed application assessment outcome	1 October 2024, or as soon as possible after a decision has been made at the Department's discretion. Successful applicants will be notified and will be required to sign a confidentiality and conflict of interest document, as well as a funding agreement.
Contracting and project commencement	Contract negotiations can commence once the applicant has signed and returned their confidentiality document. The project will commence once both parties have signed the funding agreement.
Project announcement	Public announcement, led by the Department, will occur at any time after the funding agreement signing.
Project completion	Projects must be completed within 3 years of execution of the funding agreement.
Project evaluation	Successful applicants will be required to participate in a fund evaluation after the project has commenced. The evaluation will require applicants to provide evidence of how the project has resulted in measurable benefits consistent with the objectives of the Clean Technology Innovation commercial readiness fund.

Step 3: EOI assessment

The Department will assess the EOIs against the eligibility criteria. Eligible applications will be reviewed by an independent technical assessment committee for merit assessment and recommendations. We expect that these reviews will take 4 – 6 weeks.

Step 4: notification of EOI outcome and invitation for a detailed application

If your application is successful, we will invite you to submit a detailed application. If your application is unsuccessful, we will notify you of the outcome via email and only provide an opportunity for feedback solely at the discretion of the Department.

Step 5: prepare and submit a detailed application

Complete the commercial readiness detailed application form which will be provided by invitation only to shortlisted grantees.

Applications must be submitted prior to the specified closing date and time to be eligible for further assessment.

Step 6: detailed application assessment

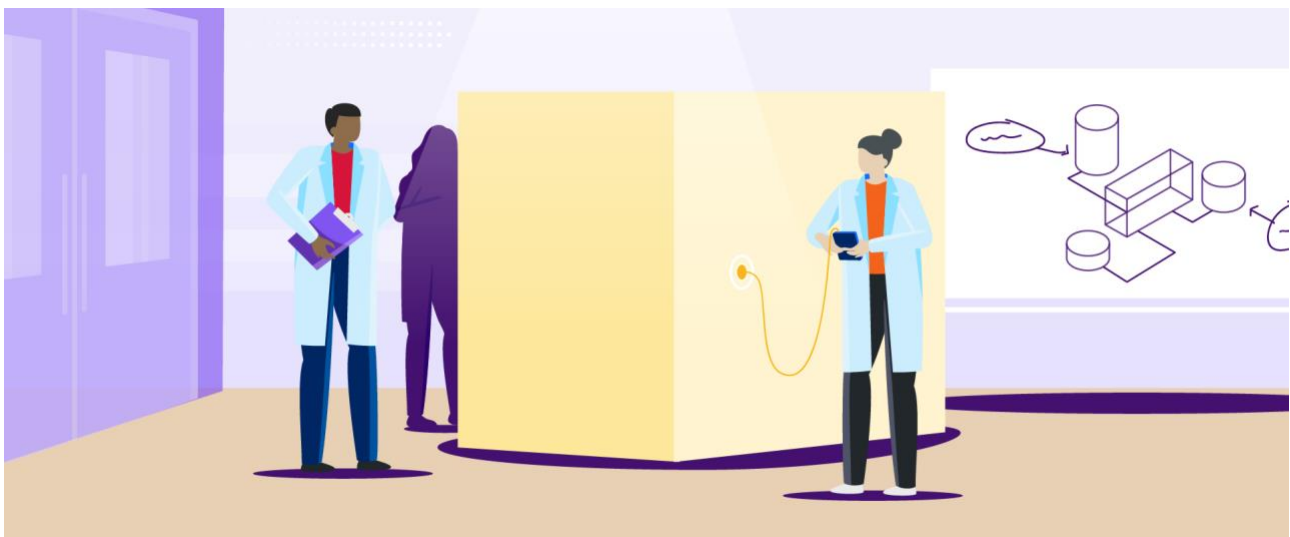
An external independent technical review committee will review your application against merit criteria. We expect that these reviews will take 6 - 10 weeks. Where necessary, the Department might hold meetings with applicants to assist the assessment of applications.

Step 7: notification of assessment and funding agreement

If your application is successful, we will send you a written offer and the funding agreement. If your application is unsuccessful, we will notify you of the outcome via email.

Step 8: project commencement

The project will commence following the signing of the funding agreement.



4. Eligibility criteria

To be eligible for funding, your application must meet all eligibility criteria outlined below.

All applications need a lead applicant. The Department will only enter into a funding agreement with the lead applicant assessed during the application process.

Proposed changes to the lead applicant (during the application process or during the project) must be approved by the Department in writing. The Department reserves the right to determine the proposed lead applicant ineligible if they cannot satisfy the eligibility criteria.

Detailed guidance on the requirements for each eligibility criterion is provided in the [CTI streams supplementary guidance](#).

4.1 Eligibility criteria 1: eligible applicants

To be eligible for funding, applicants must:

- hold an Australian Business Number (ABN)
- be an eligible organisation:
 - an Australian entity duly incorporated under the *Corporations Act 2001* (Cth) and hold and comply with all necessary authorisations that are material to the conduct of the business of the applicant(s)
 - a private or publicly funded research organisation applying through its appropriate commercialisation or technology transfer Department, which will establish a separate entity to commercialise the clean technology (such as a university spin-out)
 - a Commonwealth entity under section 10 of the *Public Governance, Performance and Accountability Act 2013* (Cth)
 - an Australian state- or territory- owned body corporate, or a subsidiary of an Australian state- or territory- owned body corporate
 - an Australian state, territory or local government or council
 - an international non-government organisation seeking to establish an Australian based entity to commercialise a clean technology not yet adopted in NSW.
- be the legal and beneficial owner of, or has all necessary rights to use, any intellectual property necessary to carry out the project
- hold or obtain all insurances required by law, including \$20 million public liability insurance and worker's compensation
- materially comply with all:
 - obligations under employment contracts, industrial agreements and awards
 - codes of conduct and practice relevant to conditions of service and to the relations between the applicant and the employees employed by the applicant
 - applicable Workplace Health and Safety legislation.

- not be subject to any insolvency event including the subject of an order or resolution for winding up or dissolution (other than for the purposes of reconstruction or amalgamation) or the appointment of a receiver, liquidator, administrator or similar
- not be listed on the Australian Department of Foreign Affairs and Trade [sanctions list](#)
- disclose any legal proceedings or investigations including litigation, arbitration, mediation or conciliation that are taking place, pending or (to the best of the applicant's knowledge, after having made proper enquiry) threatened against the applicant or a related body corporate (as defined in the *Corporations Act 2001* [Cth])
- disclose all Australian state, territory and/or commonwealth government grants applied for in relation to the project including history of grant funding (including both successful and unsuccessful applications)
- each application must have a lead applicant. Should the funding recipient differ from the lead applicant at any point of the application process/grant program, the lead applicant is required to explicitly indicate this in their application.

4.2 Eligibility criteria 2: eligible projects

To be eligible for funding, projects must:

- be based in NSW
- be applying for funding between \$250,000 and \$5 million
- be expected to be complete within 3 years of commencement
- have a [technological readiness level](#) (TRL) of between 6 - 9
- have a [commercial readiness index](#) (CRI) of less than 4
- align to a Decarbonisation Opportunity Cluster as outlined in the Department of Chief Scientist and Engineer's [Decarbonisation Innovation 2023 Study](#)
- have co-contribution funding arrangements of at least 1:1 between grant funding (from this grant) and other sources (e.g. applicant, collaborators, private or other public organisations). Projects that have a cash contribution from potential customers or an institutional investor will be viewed favourably during assessment. Higher cash contributions will also be viewed favourably. In-kind (non-financial) contributions are not eligible.

Explore examples of eligible projects by referring to section 4.4.

4.3 Eligibility criteria 3: eligible pathways

To be eligible for funding, the lead applicant must confirm:

- that the proposed activities will, or has the potential to, advance or progress the clean technology product or solution toward commercialisation. Examples of eligible activities include, but not limited to:
 - technology development
 - construction of specific testing infrastructure
 - prototyping

- product verification
 - demonstration and deployment
 - any other activities that can assist with the commercialisation of a clean technology product or solution.
- Projects may encompass supplementary activities like late-stage feasibility studies, business case development and front-end engineering and design as critical milestones, all contributing significantly to achieving the commercialisation of the product or project.

4.4 Eligible projects

Table 2 provides examples of projects that are eligible for funding under the commercial readiness stream. This is not an exhaustive list of projects. It is designed to give applicants an idea of the type of projects that are eligible and their key benefits.

Table 2 Examples of eligible projects

Example	Project
<p>Example 1</p> <p>Infrastructure: Company C wants to build a research and development laboratory to test an innovative technology in their facility.</p>	<p>Company C will construct a dedicated laboratory to test and evaluate their innovative technology. This laboratory is located within their own facility. By having a dedicated space, Company C can conduct rigorous testing, verification and validation of their technology. It provides them with a controlled industry environment to assess the performance, safety and reliability of their product.</p>
<p>Example 2</p> <p>Demonstration and deployment: Company X has developed a hydrogen electrolyser and they intend to install, test and commission it in a steel manufacturing plant.</p>	<p>Company X will deploy hydrogen electrolyser technology (which sits at a TRL level of 8) at an end user facility by installing, testing and commissioning it in steel manufacturing plant. Due to the specific environment and conditions of a steel manufacturing plant, it is necessary to evaluate the performance and functionality of the hydrogen electrolyser in the field rather than in a laboratory setting.</p> <p>They will monitor its operation, collect data and analyse the results to ensure that the electrolyser meets the required standards and performs optimally within the steel manufacturing plant's context. The successful evaluation of the hydrogen electrolyser in the field will provide Company X with the confidence and necessary data to move forward with its deployment and potential commercialisation.</p>

Example	Project
<p>Example 3 Technology development: Company A has completed the research, development and has a lab proven technology sitting at TRL 6 and CRI 2.</p>	<p>Company A will validate and verify the feasibility of the technology to demonstrate the functionality. This will progress their technology on the TRL and CRI scale.</p>
<p>Example 4 Prototyping: Company Y has developed a machine that can convert waste material into bricks. The technology is deemed ready but to showcase its functionality and validate its capabilities Company Y requires to proceed with building a prototype.</p>	<p>Company Y will build the prototype, which involves using their innovative machine to construct a house using waste material as the raw material for the bricks. The purpose of this prototype is to demonstrate the effectiveness and feasibility of the technology in a real-world application. If the prototype construction is successful and meets the desired outcomes, it provides validation and verification of the machine's functionality and performance. This success paves the way for Company Y to multiply their prototypes or transfer their technology to the manufacturing stage, where they can begin producing the machine on a larger scale for commercial use.</p>
<p>Example 5 Product verification + feasibility study: Company Q has developed a carbon neutral concrete that sits at TRL 6. The product is lab-tested but needs further testing and compliance. The company also wants to trial the technology but would like to take a feasibility study to ensure they understand the trial requirements.</p>	<p>Stage 1: Product verification Company Q will carry out compliance verification to ensure that the carbon-negative concrete meets relevant standards, codes and regulations for the construction industry. This may require comprehensive testing to assess concrete's durability, strength and other key characteristics. These tests help ensure the product is verified and is now a refinement from lab testing. The next stage for this product can be trials to evaluate the product.</p> <p>Stage 2: Late feasibility study Company Q is interested in conducting trials of its carbon negative concrete but wants to ensure that it understands the trial requirements, costs analysis, risks and potential outcomes of these trials.</p> <p>The combination of product verification and a well-structured feasibility study will help Company Q ensure that its carbon negative concrete product is not only technically sound but also economically viable and well prepared for market trials.</p>

5. Merit criteria

This section outlines the merit criteria that your application will be assessed against during the EOI and detailed application stages.

5.1 Stage 1: EOI

Eligible applications will be assessed against 5 merit criteria during the EOI stage. Table 3 lists EOI merit criteria.

Table 3 EOI merit criteria

1	Technical deliverability and advancement
	<ul style="list-style-type: none"> Clearly define the proposed technology's technical functionality, novelty and prospects including the project scope's aim, objectives and deliverables/outputs. Pathway/s of your clean technology to progress on the TRL scale are identified.
2	Capacity and capability to deliver
	<ul style="list-style-type: none"> Capability and capacity to deliver the project as demonstrated through past performance in delivering similar projects or appropriate expertise available i.e. external subject matter experts, project partners identified for both project design and project delivery.
3	Financial and commercial feasibility
	<ul style="list-style-type: none"> Pathway/s of your clean technology to progress on the CRI scale along with the ability to demonstrate commercial feasibility are identified. Pathway/s to co-contribution funding arrangements of at least 1:1 between grant funding and other sources. Project represent/s value for money.
4	Project delivery and challenges
	<ul style="list-style-type: none"> Project risks have been identified and strategies are in place to manage them. Project timelines have been identified and strategies are in place to achieve them.
5	Alignment with NSW Government strategic objectives
	<ul style="list-style-type: none"> Alignment with objectives and priority areas identified in the NSW Department of Chief Scientist and Engineer's Decarbonisation Innovation 2023 Study. The project will result in economic, environmental and/or social benefits to NSW businesses, communities, industries and regions.

5.2 Stage 2: detailed application (by invitation only)

Eligible applications will be assessed against 5 merit criteria during the detailed application stage. Table 4 lists the detailed application merit criteria.

Table 4 Detailed application merit criteria

1 Technical deliverability and advancement
<ul style="list-style-type: none"> • Details of proposed technology’s technical functionality, novelty and prospects including the project scope’s aim, objectives and deliverables/outputs evidenced by supporting documents such as engineering design, methodology and delivery plans. • Demonstrate methodology for advancement of your clean technology on the TRL scale. • Provide a forecast emissions abatement within the project’s target sector if successfully commercialised and deployed. • Evidence of completed research, development, testing and other supporting documents required to validate the technical feasibility.
2 Capacity and capability to deliver
<ul style="list-style-type: none"> • Demonstrate capacity and capability of applicant, proposed contractors and project partners to undertake the project on time and budget including track record of similar projects. • Suitability of staff or arrangements to deliver the project. Evidence with resumes of nominated project team including external contractors and consultants. • Governance arrangements in place to manage the project including the roles and responsibilities of project partners (project oversight or advisory boards). • Evidence with letters of support from industry partners or private investors.
3 Financial and commercial feasibility
<ul style="list-style-type: none"> • Outline your business model including the proposed revenue model. Provide evidence of why customers will want to buy your clean technology such as the results of any market research or economic analysis that validates your value proposition. • Provide details of your target market including intended customers, market size, market structure and your current position in the market. Include details of your most likely competitors and your competitive advantage. • Provide a high-level outline of the funding required to deliver the project (from this grant and all other sources) including an initial estimate of the capital and operating components of the budget.

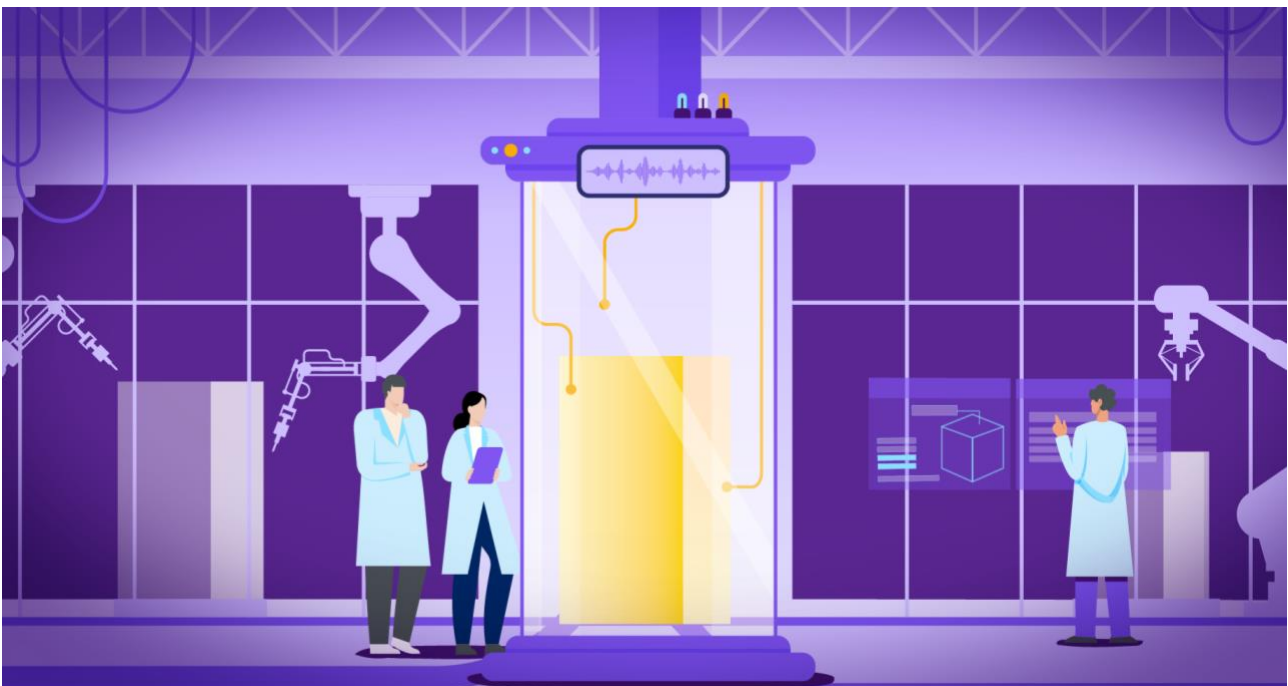
- Provide details of your intellectual property (IP) strategy including any management and protection mechanisms that may be employed (e.g. future protection strategies, patent insurance, trademarks, etc).
- If applicable, provide details of your manufacturing strategy if the clean technology is successfully commercialised and deployed.

4 Project delivery and challenges

- Provide a detailed project plan including key activities required to meet the objectives, measures of success, timelines and how the project will be evaluated.
- Provide a risk management plan outlining technical, delivery and market challenges (e.g. government regulation, market inertia, timing imperatives, manufacturing capability or capacity) and your proposed mitigation strategies.

5 Alignment with NSW Government strategic objectives

- Alignment with commercial readiness objectives and priority areas identified in the NSW Department of Chief Scientist and Engineer's [Decarbonisation Innovation 2023 Study](#).
- Provide a preliminary forecast of social and economic benefits to NSW if the clean technology is successfully commercialised and deployed including potential savings for households and businesses, job creation, productivity improvements and national or international competitiveness.
- Provide brief details of the proposed commitment and approach to sharing learnings from the project with the NSW Government and broader community.



6. Contact details

6.1 Contact information

Frequently asked questions and other resources to assist with applications can be found on our [website](#).

Department staff are available to assist with any questions during the application process. Please note that the Department is not able to assist applicants with the preparation of their application.

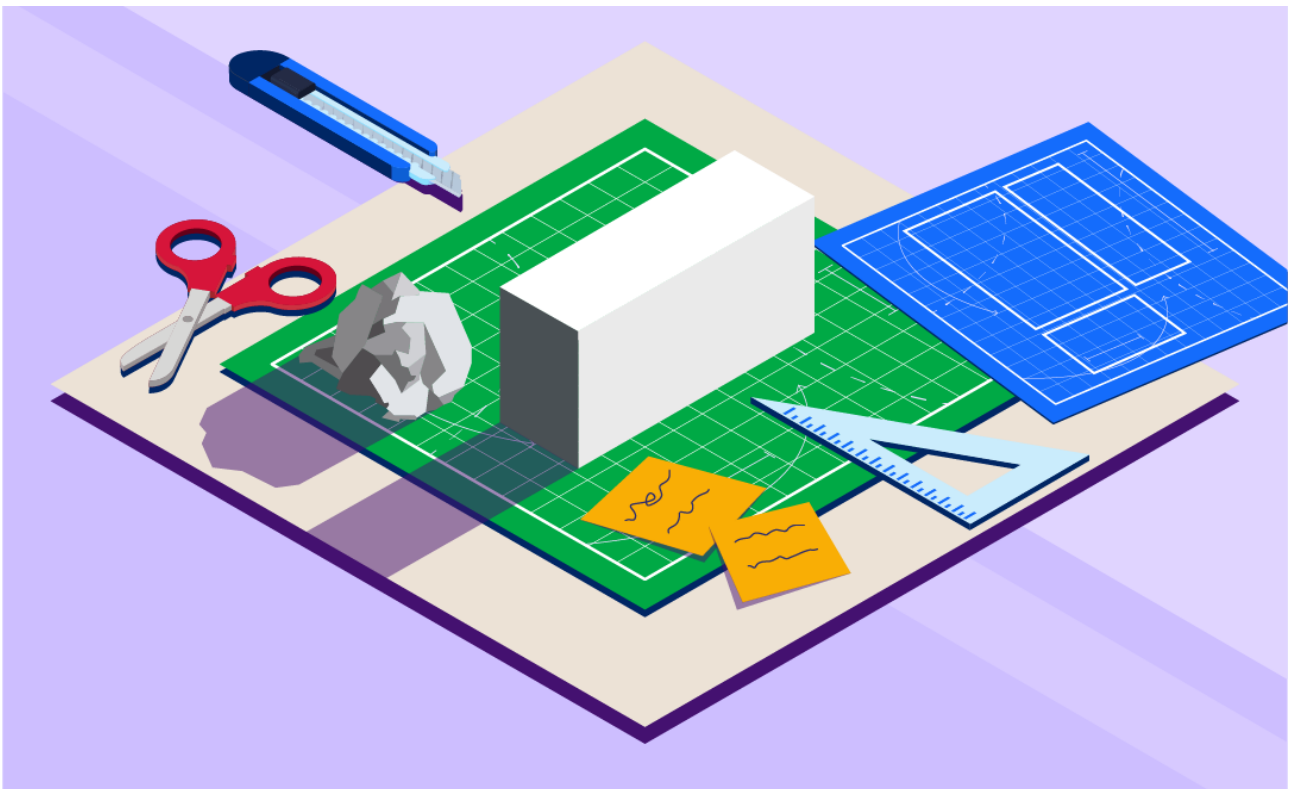
The Department's relevant project team can be contacted by emailing netzeroinnovation@environment.nsw.gov.au

The Department will use its best endeavours to respond to all emailed questions within 3 business days.

6.2 Complaints

Any concerns about the Initiative and Clean Technology Innovation commercial readiness stream should be submitted in writing to netzeroinnovation@environment.nsw.gov.au

If you disagree with the way the Department has handled the issue, you may contact the NSW Ombudsman via www.ombo.nsw.gov.au





For more information

For more information about the Net Zero Manufacturing Initiative grants please visit our website or contact us via the email below.

www.energy.nsw.gov.au/net-zero-manufacturing-initiative |
netzeroinnovation@environment.nsw.gov.au