



SCIENCE INNOVATION AWARD 2026

Sponsored by Untouched World

Fashion & Textiles New Zealand's Circular Design Innovation Programme challenges designers, scientists and innovators to reimagine fashion as circular and design out waste, creating new value for Aotearoa New Zealand.

Grounded in the principles of people, place and nature, the programme brings together creative thinking, scientific innovation, mātauranga Māori and industry knowledge to explore new ways of keeping textiles in use.

Through practical challenges based on real textile waste streams, participants are encouraged to develop solutions that design out waste and pollution, circulate products and materials, and contribute to a more circular and regenerative future.

The programme culminates in two awards:

- **Design Innovation Award** - recognising creative, design-led solutions that transform textile waste into desirable and functional products.
- **Science Innovation Award** - recognising science-led and technical solutions that address textile waste and advance circular material use.

Both awards challenge entrants to develop innovative solutions with the potential to create lasting value for our fashion and textiles sector.

1. Science Innovation Challenge

Apply science and innovation to transform textile waste into new value.

Develop a science-led or technical solution that addresses a textile waste challenge in Aotearoa New Zealand.

Respond to one of our Challenge Briefs or identify your own textile waste stream, applying scientific knowledge, research or technology to develop a solution that reduces textile waste, recovers valuable resources or enables circular material use.

Your innovation might involve material transformation, fibre recovery, recycling technologies, chemistry, biotechnology, engineering, material testing, data or other applied scientific approaches.

We are looking for original, evidence-based solutions that demonstrate technical feasibility and credible potential to reduce textile waste, minimise environmental impact and create new opportunities for circular material use.

Your entry must include a demonstrated proof of concept, supported by evidence appropriate to the nature and stage of your innovation.



Examples of eligible solutions

Material transformation and development

Creating new fibres, composites, functional materials or other applications from discarded textiles.

Recycling and material recovery

Developing mechanical, chemical, biological or other processes to recover valuable materials from textile waste.

Testing and material science

Developing technical approaches that improve material identification, characterisation, separation, recovery or circular processing.

Data and technology

Developing data-driven, digital or technical solutions that enable textile waste to be identified, sorted, recovered or circulated more effectively. Entries must demonstrate how the solution addresses a specific textile waste challenge and enables a measurable material or waste outcome. Where a solution uses data, entrants should also demonstrate that the data has been obtained and used appropriately, including consideration of ownership, permission, privacy, confidentiality and access rights where relevant.

Process and systems innovation

Developing new or improved technical processes that overcome barriers to textile recycling, recovery or circular material use.

Both direct and enabling solutions are eligible. A direct solution might transform textile waste into a new material or recover fibres for further use. An enabling solution might improve identification, testing, separation, sorting or another process that allows textile waste to be recovered or circulated more effectively. In all cases, entrants must demonstrate a clear connection between the innovation and a meaningful textile waste or circular-material outcome.

2. Award and Commendations

Science Innovation Award

Transform textile waste into new value through science and innovation.

Judges' Commendations

*Awarded at Judges discretion. All entries eligible for additional awards unless stated otherwise.

- Rising Talent Award
- Commercial Potential Award

3. Entry Requirements

To be eligible for the Science Innovation Award, your entry must:



- Be submitted by an individual, collective, business, research team or other organisation based in Aotearoa New Zealand.
- Respond to one of the programme's Challenge Briefs or identify an alternative textile waste stream.
- Address a genuine textile waste challenge involving materials sourced within Aotearoa New Zealand.
- Apply scientific knowledge, research, engineering, technology or another technical approach to develop an innovative circular solution.
- Include a demonstrated proof of concept, supported by appropriate evidence of technical feasibility.
- Demonstrate credible potential to reduce textile waste, retain material value or enable circular material use.
- Identify the solution's current development stage, technical limitations and next steps towards practical application.

Existing research, technologies and innovations are eligible where they are not yet widely deployed or commercially established for the textile waste challenge addressed by the entry, and they meet the Award's proof-of-concept requirements. For clarity, early commercial pilots are acceptable, but established commercial solutions are not.

Where an innovation has been developed through a university, research institution, employer or other organisation, entrants must confirm that they have the necessary approval and authority to submit the work.

Where the solution creates a new material or product, entrants must disclose the proportion of textile waste incorporated and any additional materials or inputs required.

Where the solution involves a process, technology or data application, entrants must identify the textile waste being addressed, the intended material outcomes and any significant residual waste.

There is no fixed minimum textile waste content requirement for this Award. However, the use or recovery of textile waste must be central to the proposed innovation rather than incidental.

Entries may use pre-consumer or post-consumer textile waste, including manufacturing offcuts, unsold or damaged textiles, uniforms, discarded garments and other textile products. A full waste definition is available on our website and in the terms and conditions.

All entrants must also meet the programme's [general terms and conditions](#).

How developed does your innovation need to be?

You do not need to have a commercially ready product, established business model or fully validated technology to enter.

The minimum requirement is a **demonstrated proof of concept**. Entries will be assessed relative to their stage of development, and judges will consider both what has already been demonstrated and the credibility of the proposed pathway for further development.



We welcome entries from researchers, students, businesses, multidisciplinary teams and independent innovators.

Understanding your waste stream

Entrants should provide the best available evidence about the textile waste stream their innovation addresses, including its source, composition, characteristics and approximate quantity where these are known. If the waste is sourced from a Challenge Brief, use the information supplied with the brief.

We recognise that some textile waste streams are variable, mixed or difficult to quantify. Where precise data is unavailable, entrants should explain what is known, how the waste stream has been characterised or sampled, any assumptions made, and any limitations or uncertainties in the available information.

Judges will consider the quality and appropriateness of the evidence relative to the nature of the waste stream and the stage of the innovation.

What is a proof of concept?

A proof of concept is an initial demonstration that the proposed solution works in a relevant application.

Depending on the nature of your innovation, this could include a laboratory experiment, material sample, preliminary test result, demonstrated technical process, functional technology prototype or validated data-based application.

Minimum acceptable proof of concept

Innovation type	Example evidence
New material or fibre	Sample plus test data demonstrating the claimed property
Recycling or recovery process	Demonstrated process using relevant textile waste, with material output evidence
Data or digital solution	Working prototype or validated application using relevant data
Laboratory or biological approach	Experimental results showing the central mechanism
System or process innovation	Demonstrated process, pilot or documented trial

Quality of evidence

Evidence should be appropriate to the nature and stage of the innovation and sufficient for specialist judges to understand what has been demonstrated.



Strong evidence will clearly identify:

- what was tested or demonstrated;
- the method or approach used;
- the resulting observations or results;
- the basis for any claims made; and
- any significant limitations, assumptions or areas requiring further validation.

Evidence does not need to be peer reviewed or generated through a commercial laboratory unless this is necessary for the claim being made. Entrants should distinguish clearly between **demonstrated results**, **reasonable projections** and **future potential**.

Your evidence should demonstrate the central function of the innovation and its relevance to the textile waste challenge, not simply describe how it might work.

A finished commercial product is not required. However, a concept supported only by an idea, theoretical explanation or proposed future research is not eligible.

4. Entry Process and Key Dates

Stage	Date
1 Register to enter Complete the Entry Form and pay the entry fee by the closing date.	Tuesday 6th October - Sunday 1st November
2 Develop your innovation Choose a challenge brief or identify your own waste stream. Participate in relevant programme workshops where available. Develop, test and refine your science-led solution and prepare your proof-of-concept evidence.	October - January
3 Submit your Entry Final submissions close.	5pm, 31st January 2027
4 Assessment and Judging Entries assessed, Finalists selected.	1st February - 19th February 2027
5 Showcase & Award finale Circular Design Award finale event in Auckland. Finalists are exhibited and Award winners announced.	9th March 2027 (tbc)

5. What to Submit

Final submissions must be uploaded to the Google Drive link provided to entrants before the submission deadline.

Your final submission must include:

1. Your Innovation summary



Submit a **digital PDF** (maximum 3 A4 pages, 750 words), a **video** (maximum 3 minutes), or both, presenting your innovation, technical approach and demonstrated proof-of-concept.

Your submission must address:

- The textile waste challenge and the problem your innovation addresses.
- Your proposed solution, how it works and what makes it innovative.
- Your demonstrated proof of concept and the scientific or technical evidence supporting it.
- How your solution could reduce textile waste, retain material value or enable circular material use, including significant resource inputs, residual waste and potential environmental trade-offs.
- The intended application, future development potential and next steps required to validate or scale your innovation.

2. Supporting evidence

Provide evidence demonstrating your proof of concept, such as test results, technical data, photographs, diagrams or evidence of a functioning process or technology.

Supporting documentation (maximum 2 A4 pages) must be submitted as an appendix to your innovation summary PDF or as a separate PDF if submitting a video.

Physical samples or prototypes may be requested from shortlisted entrants where relevant and do not need to be submitted with the initial entry.

3. Entrant information

Provide a short biography (maximum 50 words), identify all team members and relevant organisations, and state the current development stage of your innovation through the final submission form.

If submitting an existing research project or technology, briefly identify the previous work undertaken and your contribution to its development.

6. Judging Criteria

Entries will be assessed by our specialist judges relative to their stage of development.

Science Innovation Award Judging Criteria	Weighting
<p>Scientific and Technical Innovation</p> <p>The originality and technical merit of the solution supported by a demonstrated proof of concept and credible scientific or technical evidence.</p> <p>Judges consider all of the following:</p> <ul style="list-style-type: none"> • the innovations underlying principles; • originality; • scientific or technical quality; and • supporting evidence; 	30%



<p>Circular and Environmental Impact</p> <p>The potential to reduce textile waste, recover or retain material value, and support circular material use.</p> <p>Judges consider the intended material outcomes, resource requirements, environmental impacts, residual waste and potential trade-offs, including the resulting material's future use and end-of-life pathway where relevant.</p>	30%
<p>Feasibility and Development Potential</p> <p>The potential for the demonstrated solution to progress towards practical application.</p> <p>Judges consider the solution's technical limitations, potential applications, opportunities for repeatability or scaling, and the next steps required for further development, validation or implementation. This could include, for example:</p> <ul style="list-style-type: none"> • availability and reliability of the waste feedstock • resource and energy requirements • technical reproducibility, health and safety • regulatory or compliance requirements, where relevant, for example hazardous substances, product safety or traceability requirements • infrastructure or equipment needs, or • the need for behaviour change as part of the solution 	25%
<p>Connection to Place and Industry Relevance</p> <p>The relevance of the innovation to a genuine textile waste challenge in Aotearoa New Zealand.</p> <p>Judges consider the understanding of the local waste stream, relevance to industry needs, engagement with appropriate knowledge or partners, and potential to create value for New Zealand's fashion and textiles sector.</p>	15%

7. Assessment Process

- 1. Eligibility check** FTNZ will review submissions to confirm they meet the Award's entry requirements and include all required materials.
- 2. Expert judging** Eligible entries will be assessed by a panel of scientific, technical and circular economy specialists.

The panel will first assess the submitted proof-of-concept evidence to confirm that the entry meets the Award's minimum technical requirements. Entries meeting this requirement will then be assessed against the published judging criteria.

The panel may seek clarification or additional supporting evidence where an entry presents a credible proof of concept but aspects of the evidence are incomplete or require further



explanation. Applicants will not be permitted to introduce a substantially new solution after the submission deadline.

3. **Finalist selection** The judging panel will select finalists. Finalists will be notified prior to the Award finale.
4. **Award selection** Winners will be determined by the judging panel and announced at the Circular Design Award finale.

8. Finalists and Award Showcase

Finalists will be notified following judging and invited to showcase their innovation at the Circular Design Award finale.

FTNZ will work with Science Innovation finalists to determine a suitable way to communicate and exhibit their solution. This may include physical samples, prototypes, technical diagrams, video demonstrations or other visual material, depending on the nature of the innovation.

Finalists will be provided with further details about exhibition requirements and participation in the awards event.

Any queries?

Email: circulardesignaward@fashiontextilesnz.org

<https://fashiontextilesnz.org/circular-design-award/2026-award>



Checklist for Science Innovation Applicants

Before you enter

- ☐ I have identified the textile waste stream my innovation addresses and can provide reasonable information about its source, composition and quantity where known.
- ☐ If the waste stream is variable or difficult to quantify, I can explain what is known, what is uncertain, how I have characterised or sampled it, and any assumptions I have made.
- ☐ I have demonstrated a proof of concept appropriate to my type and stage of innovation.
- ☐ I can distinguish demonstrated results from anticipated benefits and identify what still needs to be tested or validated.
- ☐ I have considered key inputs and trade-offs, including energy, water, chemicals, additional materials, residual waste and health or safety issues where relevant.
- ☐ I can explain the intended material or waste outcome, including for data, testing, sorting or other enabling innovations.
- ☐ I have permission to enter the work, including any required approval from my employer, university, research institution, collaborators or other rights holders.
- ☐ I have identified any confidential or commercially sensitive information and considered whether public disclosure could affect patent or other IP protection.
- ☐ If my solution uses data, I can explain the source of the data, my right to use it and any relevant privacy, confidentiality or access considerations.
- ☐ My innovation is not already commercially established or widely deployed for the textile waste challenge being entered.

Your final submission

An “Innovation summary” outlining your solution. Either a digital PDF (maximum 3 A4 pages, 750 words); or a video (maximum 3 minutes), or both. Your Innovation Summary should include:

- ☐ The textile waste challenge and the problem your innovation addresses.
- ☐ Your proposed solution, how it works and what makes it innovative.
- ☐ How your solution could reduce textile waste, retain material value or enable circular material use.
- ☐ Any significant resource inputs, residual waste and potential environmental trade-offs.
- ☐ Your demonstrated proof of concept and the scientific or technical evidence supporting it, such as test results, technical data, photographs, diagrams or evidence of a functioning process or technology.
- ☐ The intended application, future development potential and next steps required to validate or scale your innovation.