

# Prospectus

Natural Hazards Research Australia





# Prospectus

We are seeking partners to contribute to the establishment of the new national research centre for natural hazard resilience and disaster risk reduction.

The Centre is Australia's leading research centre in natural hazards science, built on a solid foundation of expertise, insights and networks.



## The challenge

The wellbeing and sustainability of our communities, cities and ecosystems depends on their resilience to shocks and stresses caused by natural hazards. Building resilience is about the smart and informed actions we can take now so that the inevitable impact of these hazards are lessened and harm is minimised.

Australians are experiencing natural hazards with increasing frequency and severity, and on a scale beyond our imaginations. The economic, social and environmental impacts of these events is unprecedented and unsustainable. How we understand and contend with this, and how we work to reduce the impact is the challenge we face. With a concerted, collaborative, national effort, we can harness expertise and leadership from research, government, fire and emergency services and industry to find new ways to adapt and respond to disaster risk.

The Australian Government has recognised this important need and has committed \$85 million over the next 10 years to a new national research centre – Natural Hazards Research Australia.

The establishment of Natural Hazards Research Australia on 1 July 2021 continued the coordinated national research effort of two Cooperative Research Centres – the Bushfire CRC and the Bushfire and Natural Hazards CRC – over the last 18 years to address the major challenges arising from recent natural hazards.



# The opportunity

This is your opportunity to invest early and have a say in shaping the remit and programs of this new national centre, to maximise value to your organisations and stakeholders. Your investment will join investments from the country's governments, leading fire and emergency management agencies, and other not-for-profit and private sector partners.

Only a coordinated, independent, multidisciplinary approach can provide new answers to existing and emerging issues and challenges. We must continue to ask the difficult and complex questions and continue to identify what we do not know and provide innovative solutions. That is the role of research, and the mission of this Centre.

## Vision

That communities will be safer, more resilient and sustainable in the face of natural hazards.

## Mission

To work with partners and the community on research that is useful, actionable and supportive of better decision-making to save lives and protect communities.

# The purpose

The Centre is focused on natural hazard resilience and disaster risk reduction to support the needs of communities in preparing for, responding to and recovering from future natural hazard disasters.

The overarching objectives of this Centre are:

Undertake leading research

Create and assist knowledge networks

Create national research data frameworks

Build partnerships

Create a national research capability

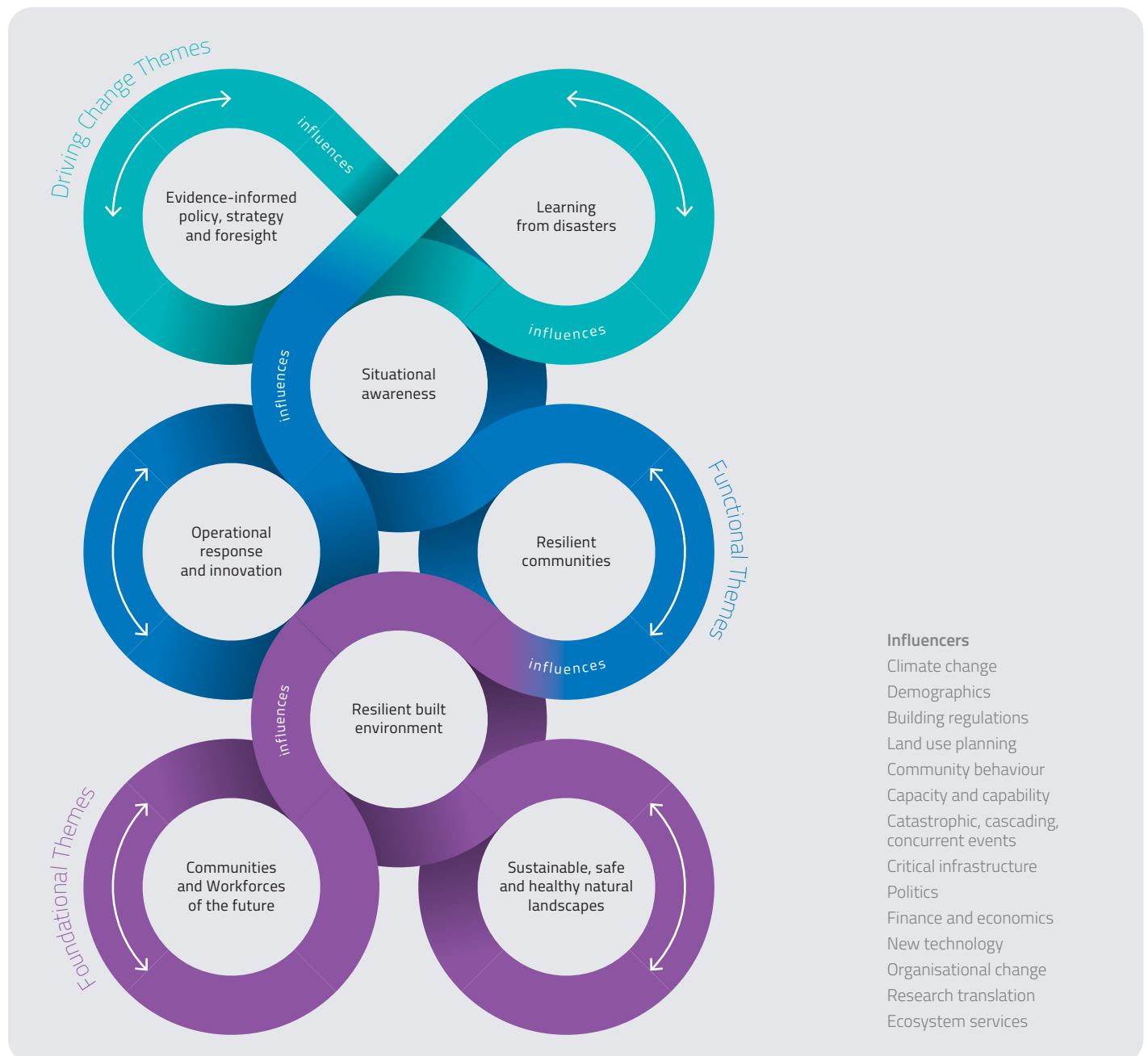
Provide a trusted and independent voice

Translate research into action

# The scope

Eight key research themes cover the initial scope of the Centre. As end-user needs change over time, these may be developed or widened as needed, but will remain focused on natural hazards research.

The themes are influenced by a broader societal-scale set of risks that will further frame and refine the research projects and translation activities as needed.



# How it will operate

The Centre is an aggregator and enabler of research capabilities, insights and projects, delivering the maximum value to investing partners.

As a collaborative research organisation, the focus is on real world problems and the delivery of usable knowledge through products and networks.

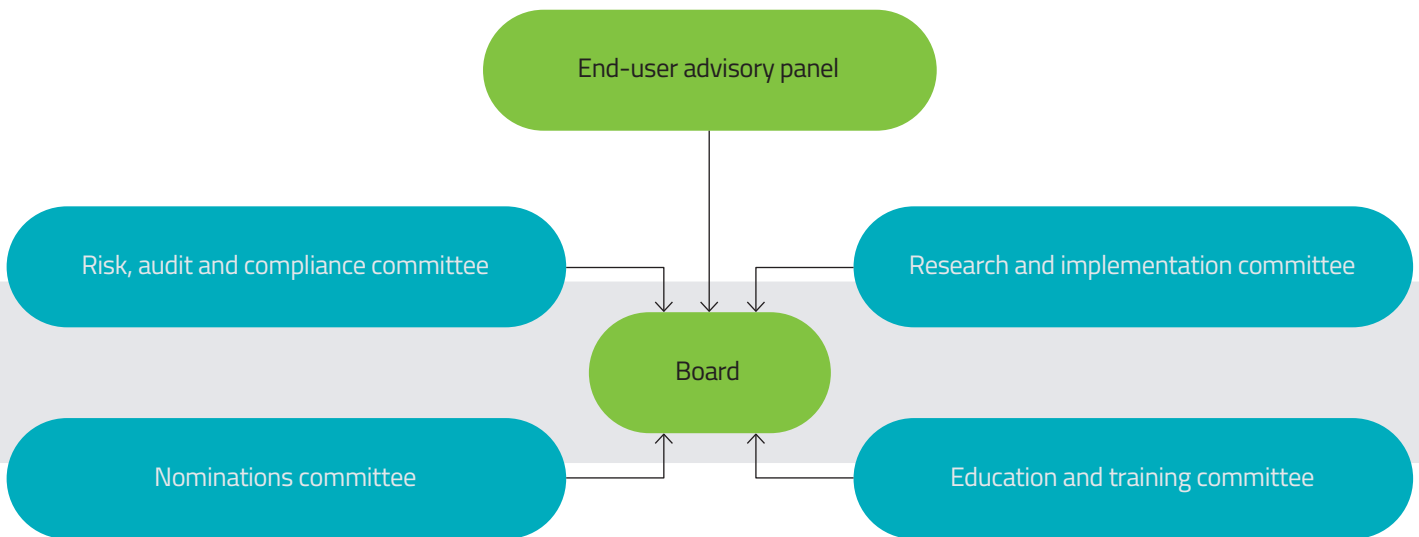
The Centre works in the broad emergency management and disaster resilience sector, with partners drawn from all states and territories, federal, state and local governments, key industry bodies, the private and not-for-profit sectors, and other organisations with a stake in protecting Australian communities. These partners are working with the new centre to co-design research projects that deliver value and meaningful outcomes for the sectors and stakeholders that they represent.

The Centre draws on the science, expertise and networks developed over eight years of the Bushfire and Natural Hazards Cooperative Research Centre and the 10 years of the Bushfire Cooperative Research Centre before that. While much has been learnt, there is still more to do. Research in the new Centre is based around specific themes that are in turn influenced by broader societal influences.

The research program and overall direction is driven by an End-User Advisory Panel, comprising those partners who substantially invest in the Centre.

A small skills-based Board, alongside key research and utilisation committees, drive the importance of collaboration, research use and knowledge transfer.

The Centre will establish active nodes in most jurisdictions around Australia, to support the utilisation and translation of local and national research, to harness the research and implementation capabilities within those jurisdictions.



# What it will deliver

Natural hazards resilience and disaster risk reduction involves many different stakeholders with a range of strategic and operational needs. The research of the Centre will deliver:



Strategic foresight by improving capabilities in developing and assessing options for forward planning and future-proofing of organisations.



Improved intelligence from multiple sources, to enable more integrated, sophisticated and faster decisions by governments and private companies.



Better oversight and awareness of key initiatives across all levels of government and private enterprise that support disaster resilience – locally, state-wide and nationally.



Evidence to support a rebalancing of investment towards mitigation and away from a bias towards response.



Tools to better prepare for concurrent, catastrophic and unprecedented cascading events, to avoid being prepared only for predictable and contained events.



Improved forecasting of hazard impacts.

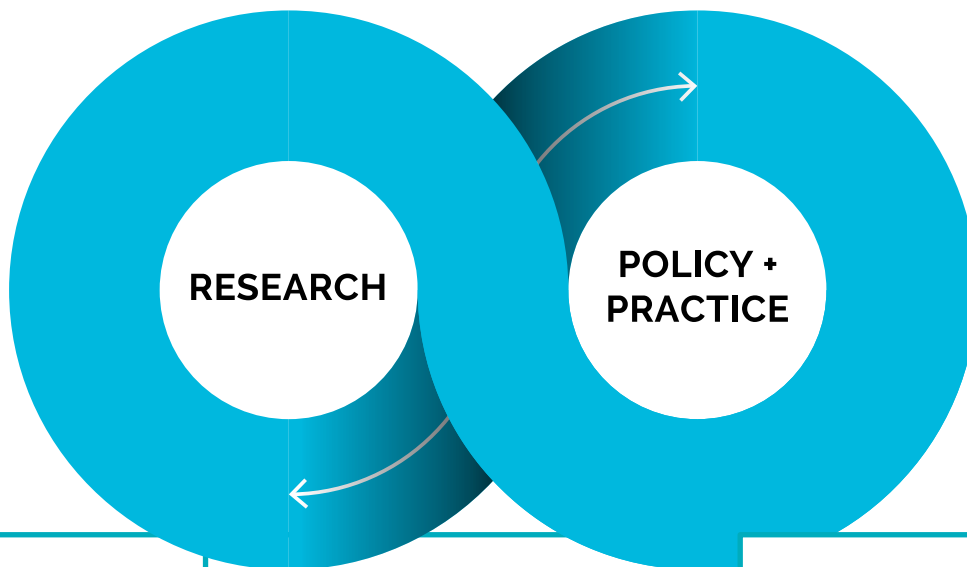


Innovative approaches and solutions to areas such as planning, building, construction, finance and insurance barriers to community safety.



# Designed for success

The Centre is based on a proven model for high quality, end-user inspired, applied research.



## Collective strength

Like its predecessors, the Centre is all about being a cooperative; a network of local, national and international projects and experts with a pool of ideas and resources. It's strength is in leveraging its multidisciplinary research and end-user partners.

## A forum for knowledge

The Centre is an independent 'space' for learning, discussion and development of hazards science and disaster resilience in Australia through regular publications and other activities, including conferences seminars and workshops.

## Research loop

The Centre is focused on delivering research that informs operations, strategy and policy, with a strong feedback loop to inform new research. This makes the Centre dynamic and responsive, with all partners an essential part of that research loop.

## Capacity for the sector

With the creation of new knowledge through research, the Centre develops the skills and knowledge of partners, researchers, students, and the community. This will ensure that Australia can meet the challenges of the future and ensure that the Australian community is kept safe from the ravages of disasters.

## Research in use

This is the final step – when the Centre harnesses its formidable collective strength, creates a forum for knowledge, and manages the research feedback loop, then it will have developed a capacity in its people (both researchers and end users) to deliver research that is relevant, accessible and used for the ultimate protection and resilience of Australian communities.

No other national organisation exists that can marshal the knowledge, the expertise, the people and the networks of the nation to affect substantial change to solve the wicked problems associated with disaster management.



# A leveraged business model

Core to the Centre's business model is the building of intellectual capital to leverage income sources.

The Centre:

- conducts a core research program funded for the combined good of all partners.
- co-invests with partners in tailored research.
- contracts tailored research as a response to specific partner requests, and further research with potential new partners.
- delivers research utilisation activities as part of its core program, plus a range of fee-for-service activities.
- actively engages in national and international initiatives that require access to a range of expertise and research partner links.
- generates income through the sales and marketing of intellectual property and leverage of its intellectual capital:
  - offering business development opportunities to customers and partners through a research informed advisory service.
  - pursuing research grants, bids and tender opportunities.

The Centre operates a research management model to generate the highest quality research outputs. It maintains relationships with a wide network of researchers, purchasing services on a 'fit for purpose' basis. In this way, it builds a mixed pool of the best research skills, methods and capacity, offering a critical and valuable asset to partners and other customers.

## Natural Hazards Research Australia

The best use of national resources to ensure the highest quality research is produced to address partner needs.

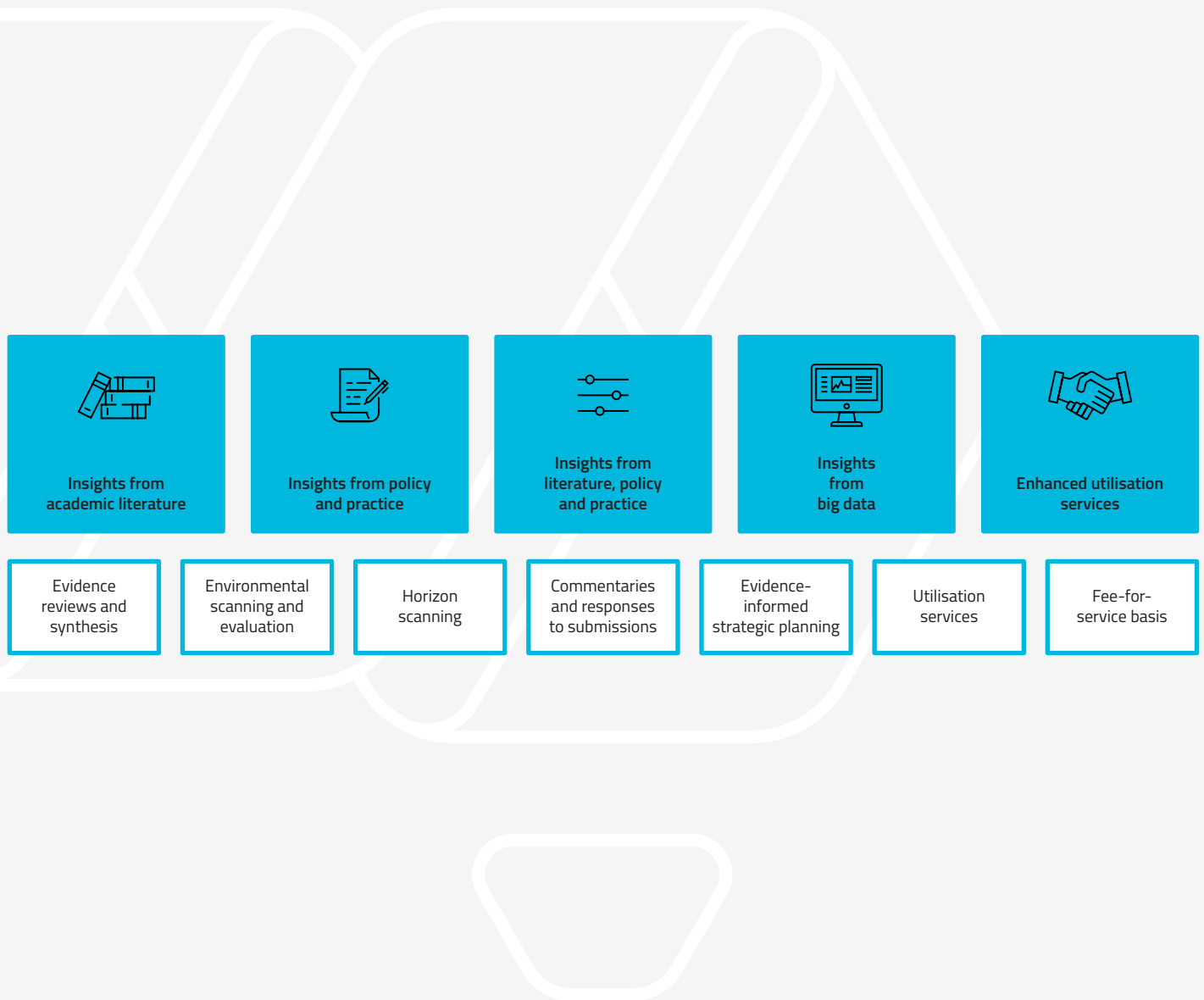


# Business extension

A suite of fee-for-service capabilities will enhance the main research program, by offering research more closely aligned to specific partner needs in business planning and operations.

This will further increase the potential return on partner investments, with tailored research for better decision-making and enhanced capability. These services would also be of interest to non-partners, especially in the private and not-for-profit sectors.

These include services comprising:



# Utilisation

The Centre ensures that its partners extract the maximum value from their investment in the research.

This investment payoff is planned from the time the research projects are initiated. The pathways to use are defined and built into research timelines.

Utilisation of the research is fundamental and the key to demonstrating the value of the investment of funds into the research program. This starts with the identification of the problems to be solved. The end-users define the problems and then work in partnership with the researchers to develop and evaluate potential solutions.

Every project has a project sponsor from an end-user organisation who leads and coordinate a group of end-users to ensure guidance on user needs and access to user data and information. This includes linkages to core representative bodies, sector agencies, industry groups and jurisdictions.

As projects begin to deliver their outcomes, active utilisation activities increase to ensure the use of the project is embedded into the partner organisations and linked to any complementary research and operational projects of those partners.

To enable the use of research insights within partner organisations, the Centre supports the development of additional capacity which helps partners understand how the research can inform decision-making strategy, policy and operations.

The Centre also provides opportunities for a two-way exchange of people with the placement of researchers and students into end-user environments, and by the placement of end-users into the research and research management environment.

## Duration of projects

The Centre invests in a balanced portfolio of research projects covering varying terms – one to two years, three years, and longer-term.

This enables an investment in both short-term needs and longer-term systemic longitudinal studies. The Centre chooses its portfolio parameters to meet the requirements of the problems. To ensure the portfolio is meeting partner requirements, the Centre is guided by a high-level 10-year strategy with a rolling two-year research plan that is reviewed annually.



# Investment required

The Centre is always seeking partners to sign up, contribute to and influence the next decade of natural hazards research in Australia.

The Australian Government committed \$85 million over 10 years to the Centre, with the expectation that this would be at least matched with investment from other partners.

The Centre is required to secure partner funding over the life of the Centre to cover all key operations. These foundation partners will have a unique chance to shape the direction and development of the Centre during its establishment phase, ensuring that the initial research portfolio and individual research plans will meet their needs. Investment in the Centre will also allow partners to substantially leverage the funds they invest, by receiving access to the centre's research outputs and expertise.

All levels of membership may nominate people from their organisations to be end-users on specific projects, and actively participate in the development and ongoing support of the research and research translation activities.

All partners can expect to be involved in a dynamic and innovative research network, with access to member-only activities including regular conferences, workshops, webinars, forums, roundtables and other events.



The Centre has two main investor levels and is open to discussions about other options, such as affiliate or not-for-profit participation.

Participation level	Contribution	Rights and benefits
<b>Full participant</b>	<p>Open to end-user organisations</p> <p>Cash contribution of more than \$100,000 per year</p> <p>In-kind contribution</p>	<ul style="list-style-type: none"> <li>→ A license to use all IP created in the core program of the Centre including any specific projects, internally, for non-commercial benefit.</li> <li>→ Full membership of End-User Advisory Panel</li> <li>→ Optional company membership</li> </ul>
<b>Supporting participant</b>	<p>Open to end-user organisations</p> <p>Membership fee (\$20–\$99K per annum) and co-investment into specific projects or programs.</p> <p>Or</p> <p>In-kind contributions that provide significant research services, utilisation opportunities or capabilities to the Centre.</p>	<ul style="list-style-type: none"> <li>→ A license to use the IP created in the specific project or program/ theme funded, internally, for non-commercial benefit.</li> <li>→ Observer membership of End-User Advisory Panel</li> </ul>



# Next steps

If you are interested in being involved in the new Centre, please contact:

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Find supporting research documents and the portfolio of projects on our website [www.naturalhazards.com.au](http://www.naturalhazards.com.au)

We acknowledge the traditional custodians across all the lands on which we live and work, and we pay our respects to Elders both past, present and emerging. We recognise that these lands and waters have always been places of teaching, research and learning.

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