

# ANU wants you

INFORMATION FOR  
PROSPECTIVE CANDIDATES

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**Research Fellows**

ANU ENERGY CHANGE INSTITUTE



Australian  
National  
University



# Message from the Director, ANU Energy Change Institute

The Australian National University (ANU) is unique in Australia. Ranked in the world top 20 by QS, and based in our capital city, ANU is charting a new strategic course to redefine the role of a contemporary national university.

Thank you for your interest in applying to be part of this truly unique and exciting opportunity to join the ANU Energy Change Institute in its mission to deliver Zero-Carbon Energy for the Asia Pacific.

The Asia-Pacific will be responsible for two-thirds of global energy demand growth in coming decades. Meeting this demand with minimal carbon emissions is essential if the world is to avoid catastrophic climate change. Australia has a formidable set of geographic, climatic and institutional features which make it uniquely placed to help our region achieve this goal.

The ANU Energy Change Institute (ECI) combines world-leading research and teaching on the technologies, efficiency, policy, law, sociology and economics of moving to a sustainable and predominantly renewable energy future. The ECI are honoured and very proud to be the winners of this year's ANU Grand Challenge, for their project – Zero-Carbon Energy for the Asia Pacific.

The Zero-Carbon Energy for the Asia-Pacific project harnesses the existing research strengths at ANU and extends and integrates these to deliver research impact and outcomes. The ECI seeks to appoint world-class researchers across key relevant research areas. The successful candidates will have demonstrated research excellence in relevant area(s) and a demonstrable ability to contribute high-impact research as part of an interdisciplinary team.



I welcome your interest in joining the team that seeks to lead the world on research toward Zero-Carbon energy to Asia-Pacific. These appointments will form the core of a cross-campus team that will undertake transformative research underpinning a rapid, fair and sustainable energy transition in the region whose path will determine the fate of the entire world.

**Professor Kenneth Baldwin**

Director, ANU Energy Change Institute and ANU Public  
Policy Fellow  
The Australian National University



# Introducing ANU

## INFORMATION FOR PROSPECTIVE CANDIDATES

ANU was established by an Act of the Federal Parliament in 1946. Its founding mission was to be of enduring significance in the post-war life of the nation, to support the development of national unity and identity, to improve Australia's understanding of itself and its neighbours, and to contribute to economic development and social cohesion. In the seven decades since, the University has cemented its unique national position and its standing as one of the world's finest institutions, validating the mandate and the faith of its founders.

Ranked in the top 25 universities globally, the first Australian university to be recognised in this elite tier, ANU continues to be an academic resource for the whole of Australia. The University can claim four of the seven Nobel prizes awarded for work undertaken in Australia alongside numerous other academic distinctions and innovations that have helped nurture the unique research culture for which our University is renowned.

Our focus on excellence in research and education ensures our graduates are in demand the world-over, and are well-prepared to address complex contemporary challenges. We encourage in them a leadership and service ethos which characterises ANU more broadly, framed by our responsibilities as a recipient of the National Institutes Grant from the federal government.

Among these responsibilities is to work to enhance Australian society in all parts of our nation. The land on which our campus stands has been a meeting place for hundreds of generations over thousands of years, a legacy and tradition we honour, celebrate and continue, particularly through our renewed partnership with Indigenous Australia.

Our physical campus environment defines much of the character of the ANU community. ANU is among the most residential universities in Australia. We will nurture this asset, and have made a strategic commitment to create an unrivalled campus environment.

At ANU, we are ambitious for our future, and for our nation's future. We will continue to strive to be the excellent institution Australians rightly expect their national university to be.

## Our Vision

- > Contemporary ANU will sit among the great universities of the world, and be defined by a culture of excellence in everything that we do.
- > We will be renowned for the excellence of our research, which will be international in scope and quality, always measured against the best in the world. Our research investment will be strategic, taking a long-term view and focus on high-quality activities, high-impact infrastructure and areas of high national importance.
- > We will be renowned for the excellence of our undergraduate and graduate education: excellence in student cohort, excellence in teaching, excellence in student experience, and excellence in outcomes.
- > We will be renowned for the quality of the contribution our research and education make to societal transformation. We will identify emerging areas of need

for the nation and provide research and education that will equip Australia to cope with challenges not yet imagined.

- > ANU research, education and contributions to public policy-making will change Australia and change the world. It will have impact.

## Our Values

- > We bring a distinctive excellence to our work and have the confidence to pursue original ideas.
- > We are inclusive, open and respectful, reflecting the diversity of our nation.
- > We are committed to integrity and ethical behaviour.
- > We value, enable, reward and celebrate collegiality.
- > We embrace informed risk-taking in pursuit of our objectives.
- > We are committed to better outcomes for our community, the environment, our nation and the world.
- > We are committed to the service of our nation, through original thinking and through courage in advancing our ideas.

## Location

The University campus has over 200 buildings and occupies 145 hectares adjacent to the city centre of Canberra. The University also has a number of smaller campuses:

- > Mount Stromlo Observatory (west of Canberra)
- > Siding Spring Observatory (near Coonabarabran, western New South Wales)
- > North Australia Research Unit (Darwin, Northern Territory)
- > Kioloa (coastal campus near Bawley Point, on the New South Wales South Coast)
- > ANU Medical School – Canberra Hospital
- > ANU Medical School – Calvary Hospital
- > Health Facilities in South East New South Wales

## Partnerships

The University has strong links with leading research institutions including the International Alliance of Research Universities:

- > ETH Zurich
- > National University of Singapore
- > Peking University
- > University of California, Berkeley
- > University of Cambridge
- > University of Cape Town
- > University of Copenhagen
- > University of Oxford
- > University of Tokyo
- > Yale University



# Academic colleges

ANU has seven academic colleges, each housing the schools and research centres that contribute to various broad disciplines. The ANU Colleges link research and teaching at undergraduate, postgraduate and higher degree levels. They undertake globally significant research and provide education programs at the highest standards. Reflecting its national significance and multi-disciplinary nature, in addition to its seven colleges, ANU has established the National Centre for Indigenous Studies.



## ANU College of Arts & Social Sciences

The ANU College of Arts and Social Sciences (CASS) is the research and education college for the broad disciplines of the creative arts, humanities and the social sciences. The College has two research schools: the Research School of Social Sciences and the Research School of Humanities and the Arts.

> [cass.anu.edu.au](http://cass.anu.edu.au)

## ANU College of Asia & the Pacific

The ANU College of Asia and the Pacific (CAP) hosts the largest assembly of scholars dedicated to working on Asia and the Pacific in the English-speaking world. The College comprises four Schools: the School of Culture, History and Language; the Coral Bell School of Asia Pacific Affairs; the Crawford School of Public Policy; and the School of Regulation and Global Governance (RegNet). The Australian Centre on China in the World is also based in the College.

> [asiapacific.anu.edu.au](http://asiapacific.anu.edu.au)

## ANU College of Business & Economics

The ANU College of Business and Economics (CBE) seeks to advance knowledge through high quality education and research in the closely related areas of accounting, actuarial studies, business information systems, econometrics, economic history, economics, finance, international business, management, marketing and statistics. Its four Research Schools research and teach in these disciplines.

> [cbe.anu.edu.au](http://cbe.anu.edu.au)

## ANU College of Engineering & Computer Science

The ANU College of Engineering and Computer Science (CECS) undertakes basic and applied research in information and communications technologies, materials and manufacturing, formal methods and logic, machine learning and vision, robotics and energy systems. CECS comprises the Research Schools of Electrical, Energy and Materials Engineering; Aerospace, Mechanical and Environmental Engineering; Computer Science, and the 3Ai and Cyber Institutes.

> [cecs.anu.edu.au](http://cecs.anu.edu.au)

## ANU College of Health & Medicine

The ANU College of Health and Medicine (CHM) works across the spectrum of medicine and health-related fields, working in partnership with the health sector at local, national and international levels. It comprises the ANU Medical School, the John Curtin School of Medical Research, the Research School of Psychology and the Research School of Population Health.

> [chm.anu.edu.au](http://chm.anu.edu.au)

## ANU College of Law

The ANU College of Law (CoL) is Australia's national law school, committed to legal research and education at the highest level, and to striving for continuous improvement in the law for the benefit of national and international communities.

> [law.anu.edu.au](http://law.anu.edu.au)

## ANU College of Science

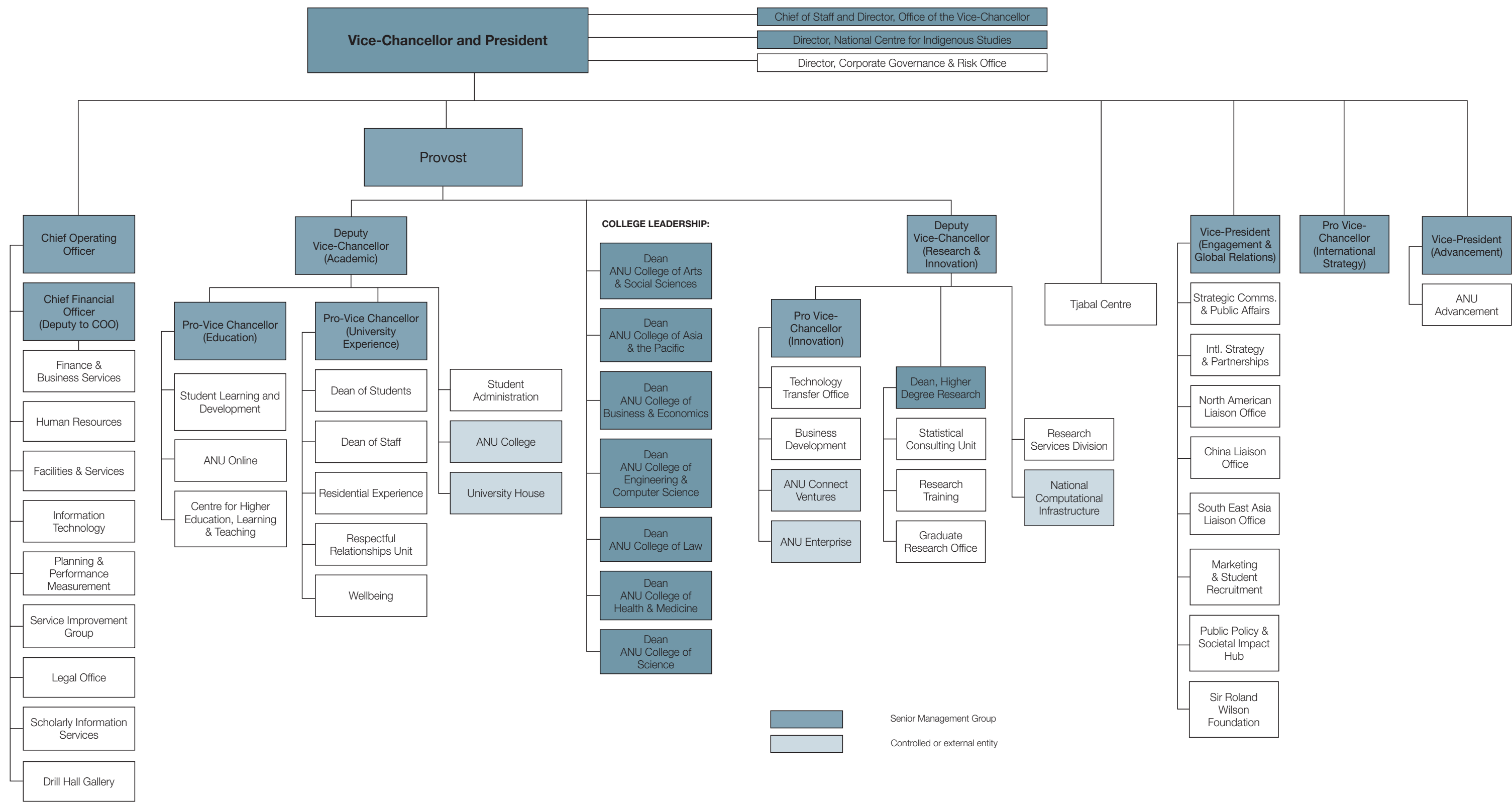
The ANU College of Science (CoS) focuses on scientific education and research of global importance, supported by extensive international networks and world class facilities. CoS includes the Research Schools of Physics; Earth Sciences; Chemistry; Astronomy and Astrophysics; and Biology. The Fenner School of Environment and Society, the Mathematical Sciences Institute, and the Australian Centre for the Public Awareness of Science are also within the CoS.

> [cos.anu.edu.au](http://cos.anu.edu.au)



Further information can be found at  
[anu.edu.au/about/academic-colleges](http://anu.edu.au/about/academic-colleges)

# ANU Executive Structure





# Excellence in education & student experience

Great research by outstanding staff creates the right environment for the highest quality education

## Innovative teaching and learning

Our graduates will have a positive influence on the future. They are passionate, creative and capable of solving critical problems not yet imagined. They create and apply knowledge to improve the lives of people, the nation and the world.

In achieving the vision of a contemporary ANU, sitting among the great universities of the world, defined by a culture of excellence (ANU Strategic Plan 2017 – 2021), the University is committed to high quality learning and teaching.

This commitment acknowledges that students are the centre of learning and teaching at ANU. A partnership between students, academics, professional staff and the University forms the foundation for excellence in learning and teaching.

The Vision for Excellence in Learning and Teaching requires commitment and leadership across the University and at all levels. The University values, enables, rewards and celebrates excellence in learning and teaching.

Four key interdependent pillars – engaged students, inspirational academics, an enriching environment, a connected community – provide a frame of reference for aligning focus and effort to continuously improve the outcomes of learning and teaching at ANU.





# The Grand Challenge Research Fellow

As Grand Challenge Research Fellows you will contribute to world-leading, high-impact research, underpinning Australia’s transition to becoming a renewable energy powerhouse.

This position is expected to carry out independent and/or team research as part of the Energy Change Institute (ECI) Grand Challenge: Zero-Carbon Energy for the Asia-Pacific (ZCEAP). The Indigenous Engagement sub-Project aims to understand whether and how Indigenous people can best benefit from renewable energy generation in northern Australia. The academic will participate in the design and delivery of this project, particularly in collaboration with Aboriginal people in the Kimberley & Pilbara regions.

## Position Dimension & Relationships

Located within the Centre for Aboriginal Economic Policy Research (CAEPR), and associated with the Energy Change Institute’s Zero-Carbon Energy for the Asia-Pacific Grand Challenge, the Grand Challenge Research Fellow will have a reporting line via the ZCEAP Indigenous project convenor in CAEPR to the ECI Director.

As an academic member of CAEPR and the Energy Change Institute, the appointee will be required to contribute to research, education and outreach agendas both nationally and internationally in a manner that is appropriate to the level of appointment. Education activities may include the supervision of research students involved in the staff member’s research. More senior appointments may also be asked to supervise or mentor less senior staff and undertake general leadership roles as applicable.

The Grand Challenge Research Fellow will help drive a fair, rapid, and sustainable energy transition in the Asia-Pacific as part of a multi-disciplinary team.

## Role Statement

- > Undertake high impact independent research with a view to publishing original and innovative results in international refereed journals, present research at academic seminars and at national and international conferences, collaborate with other researchers at a national and/or international level, and prepare suitable communication materials for Indigenous people related to renewable energy.
- > Actively seek and secure external funding including the preparation and submission of research proposals to external funding bodies.
- > Occasional contributions to teaching and supervision of research students working on individual or group projects at undergraduate, honours or graduate levels.
- > Lead, supervise and develop less senior academic and research support staff in your research area.
- > Proactively contribute to the operation of the University. This may include representation through committee membership at more senior levels.
- > Lead outreach activities including to Indigenous people, prospective students, research institutes, industry, government, the media and the general public.
- > Maintain and actively promote high academic standards in all education, research and administration endeavours.
- > Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
- >

# Selection criteria

## Academic Level B

A Level B research academic will normally have experience in research or scholarly activities, which has resulted in publications in refereed journals or other demonstrated scholarly activities.

A Level B research academic will carry out independent and/or team research. A Level B research academic may supervise postgraduate research students or projects and be involved in research training.

### 1.

A PhD, or equivalent research and/or industry experience, with a substantial Indigenous policy and (preferably) renewable energy research focus, as evidenced by publications in peer-reviewed journals and conferences, a record of developing and maintaining collaborations, and other measures such as awards, invitations to give talks at leading conferences etc.

### 2.

Evidence of the ability to articulate and prosecute innovative research in the field of policy-relevant Indigenous studies with a social and economic focus.

### 3.

Knowledge and understanding of Indigenous Australian cultures; the ability to communicate effectively and build strong collaborative relationships with Indigenous communities and organisations, researchers and governments, and promote Indigenous engagement in research (experience in the Kimberley and Pilbara regions strongly preferred).

### 4.

An ability and commitment to win bids for competitive external funding to support individual and collaborative research activities.

### 5.

The ability to contribute to supervision that graduates high quality PhD/Masters research students.

### 6.

Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.

### 7.

A demonstrated high-level understanding of equal opportunity principles and a commitment to the application of these policies in a University context.



# ANU Grand Challenges Scheme

The ANU Grand Challenges Scheme calls on researchers to identify a problem or challenge that research can address.

The ANU Grand Challenges Scheme invests in transformative research that will impact on the world's most intractable problems. It is an ambitious initiative designed to build large scale and long-term interdisciplinary programs of research not typically supported by external competitive funding. It will provide critical strategic investment in blue-sky and high-risk activities that are recognised for bold leaps, rather than incremental advances.

The success of the scheme will be reflected in an increase in the quality and impact of our work and the enhancement of the reputation of ANU as a world leader in globally important interdisciplinary research.

The ANU Grand Challenges Scheme will address the objectives of the ANU Strategic Plan 2017 – 2021. The Scheme will draw funding from the National Institutes Grant, to ensure that ANU delivers on its unique national responsibilities, conducting research with global relevance and impact.

One Grand Challenges winner will be announced each year from 2017 – 2021. Grand Challenges winners will receive up to \$10M over a period of five – ten years. Through the process of the Grand Challenges Scheme, other compelling research initiatives will be identified and actively supported through the investment of ANU funds and resources.

Solutions to the world's most intractable problems are likely to come from collaboration across diverse disciplines and stakeholders. The Grand Challenges Scheme aims to focus the creativity and talents of researchers from a range of disciplines around one ambitious goal. ANU researchers across all disciplines are strongly encouraged to be involved, reflecting ANU research strengths in both the humanities and the sciences.

## Objectives

The ANU Grand Challenges Scheme will reward vision, imagination, and reasoned logic which shows how distinctive ANU research will impact on global issues.

The specific objectives of the scheme are to:

- > Tackle pressing social and/or technological problems too complex for a single disciplinary approach.
- > Create unusually creative high-risk / high-reward interdisciplinary opportunities not being advanced elsewhere, and unlikely to be funded through traditional, competitive funding schemes (eg ARC/NHMRC/ARENA).
- > Expose the next generation of researchers and scholars to the benefits of interdisciplinary collaboration and create research leadership opportunities for Early Career Researchers
- > Recognise and reward leadership, research excellence, and collaborative and collegial behaviour
- > Create platforms for future research funding.

The Grand Challenges is an investment scheme and as such the assessment criteria and selection process are deliberately different to those of typical funding schemes. The process and criteria are designed to stimulate enthusiasm and excitement across the ANU community, involve external stakeholders and partners, and embrace new and agile ways of connecting researchers to deliver creative approaches and solutions to global challenges.





# Zero-Carbon Energy for the Asia-Pacific

The ANU Energy Change Institute's Grand Challenge will undertake inter-disciplinary research to underpin a transformation in the way Australia trades with the Asia-Pacific – based on renewable energy.

The ANU Energy Change Institute's Zero-Carbon Energy for the Asia-Pacific Grand Challenge project will catalyse the development of a major renewable energy export industry from the ground up: building the infrastructure, exploring the trade relationships, developing the policy frameworks to get Australia's abundant renewable energy resources cheaply and reliably to our Asia-Pacific neighbours.

It will be developed under two key themes, by exporting Australian renewable electricity, and the creation of renewable electricity capability in the Asia-Pacific and by the development of zero-carbon embedded energy products made using Australian renewable energy.

Our Grand Challenge recognizes that Australia is a renewable-energy, resource-rich nation, whose immediate neighbours in the Asia-Pacific will account for two-thirds of the world's energy demand growth in the coming decades. Decarbonizing that additional energy use and cutting existing emissions from the region are essential if the world is to have any chance of meeting its goals for limiting climate change.

In a rapidly decarbonizing world, Australia's carbon-based exports will soon have to be replaced by zero-carbon embedded energy exports in order to maintain our role as an energy superpower.

Our Grand Challenge will undertake inter-disciplinary research to underpin a transformation in the way Australia trades with the world and with the Asia-Pacific, based on renewable energy.

» [View the Zero-Carbon Energy for the Asia-Pacific Grand Challenge proposal video - Watch it here](#)

Zero-Carbon Energy for the Asia-Pacific Grand Challenge will investigate four socio-technological pathways that integrate social, legal, economic, political and technological solutions.

The first two pathways involve reducing the carbon content of electricity consumed in the region via:

- > Large-scale renewable electricity generation for North Western Australia, and also for export via subsea cable.
- > Policies and frameworks for renewable electricity generation and use in other Asia-Pacific countries.

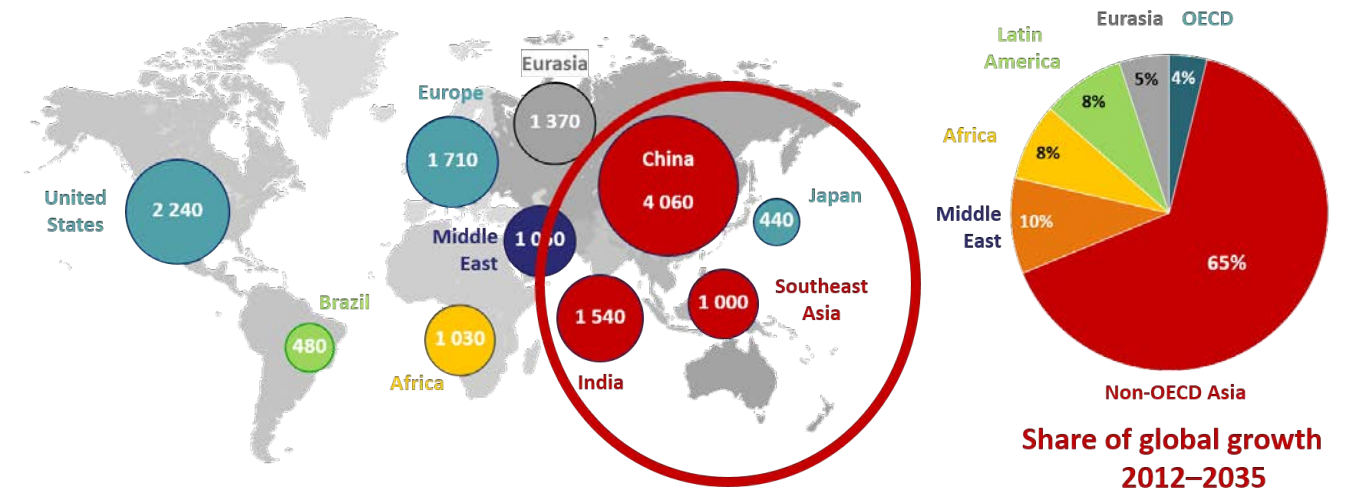
The other socio-technological pathways embed our zero-carbon energy in exports via:

- > Large-scale renewable electricity production of hydrogen-rich fuels and other products.
- > Large-scale renewable refining of metal ores (especially iron).

Our aim is to produce high-quality, high-impact research by combining world-class expertise in Energy, the Asia-Pacific and Indigenous Policy in an inter-disciplinary research program. We will enhance our existing expertise by establishing a team of early/mid-career researchers who will partner with our industry collaborators – particularly in the Asian Renewable Energy Hub (AREH) - to investigate key research questions.

» [View the full five-page Grand Challenge proposal - Read it here](#)

## Two-thirds of global energy-demand growth will occur in the Asia-Pacific



Primary energy demand, 2035 (Mtoe)



# Our responsibility to Indigenous Australia

As Australia's national university one of our defining roles has been to contribute to the advancement of Australia's Indigenous peoples.

We contribute by graduating Indigenous students, as well as through game-changing research and direct engagement. Delivering on our Unique National Responsibilities with Indigenous communities. We provide an environment for debating the big issues and partnering with Indigenous Australia to advance the status, recognition and lives of Aboriginal and Torres Strait Islander peoples.

Although the proportion of Indigenous students at ANU is high by the standards of some of our peer universities, we remain far from parity with the population at large for undergraduates. The proportion of postgraduate and higher degree students is lower again, as is the proportion of

professional and academic staff. Through targeted activities we will work towards achieving parity with the proportion of Indigenous Australians in the overall population.

Research focused on Indigenous issues is broad in scope and has made a substantial contribution. ANU has strong Indigenous research leaders in a number of disciplines. However, our continued salience requires constant attention to impact, partnership with Indigenous communities and a commitment to novel and multidisciplinary approaches to our work.



# Achieving equity

ANU is committed to equity and diversity as fundamental values. Australia has a diverse population and we are committed to providing opportunities and an inclusive and welcoming environment, to those of all backgrounds and identities.

As Australia's National University, we have a responsibility and an obligation to educate students from across Australia who have the capacity to succeed, no matter their background. It is for this reason that we have launched a pioneering program to transform the way we do admissions. We are undertaking an international first to link our admission, scholarship, and accommodation processes so that when we make a student an offer to university, they will at the same time know where they will be living and whether they have a scholarship to support them. We are reserving a place for domestic students in the top 2% of every school in Australia who have the capacity to succeed, ensuring students have access to a world class education no matter the socio-economic status of their school.

Alongside this we are undertaking a major scholarship drive to remove the financial barrier for some of our most capable but most disadvantaged students, whether they be indigenous, suffering a long term disadvantage, low-SES, or from interstate regional and remote areas. We now have a single application form that allows both excelling and disadvantaged students to access more than 200 scholarship opportunities across campus by answering just four questions. And we are looking at the whole person, requiring all undergraduate applicants to have engaged beyond the classroom to support themselves, their family or their community, to clearly signal the importance of engagement beyond studies to both academic and employment success.

## Athena Swan

ANU has committed to the SAGE Pilot of Athena SWAN in Australia. Athena SWAN is an accreditation program that recognises, promotes and rewards excellence in advancing gender equity and diversity. ANU became an inaugural member of the SAGE Pilot project in 2016.

While the focus of the SAGE pilot is on Science, Technology, Engineering, Mathematics, and Medicine (STEMM) disciplines, ANU is also committed to gender equity in the Humanities and Social Science disciplines, as well as in our professional staff.





# One of the worlds most liveable cities

## The power of surprise

Canberra has the power to surprise, with its abundance of food, wine, art, culture, ideas and innovation. As an evolving city, this element of surprise continues even once you've made Canberra your home, with new developments, events and opportunities constantly emerging to keep life interesting.

### About Canberra

Canberra is also a planned city – designed to maximise opportunities for work and play. As our Nation's Capital, big ideas emerge, circulate and grow here, thanks to unique links between leading thinkers in business, government, education and research. Our dynamic economy, highly educated workforce and an innovative business culture provide career and business opportunities unique to Canberra.

Our healthy appetite for outdoor pursuits is enhanced by the natural resources available: from sailing on Lake Burley Griffin, mountain biking at the world class Mount Stromlo facility or heading up to the Snowy Mountains for a day on the slopes. We are also home to most of Australia's major national cultural institutions, with whom the University has a close relationship, and a cultural calendar overflowing with international exhibitions, arts festivals and entertainment.

### Where to Live

The architects who designed Canberra, Walter and Marion Burley Griffin, had a master plan to create a series of 'satellite cities' separated by nature reserves and connected with major roads. Today their vision lives on, with Canberra divided into seven distinct regions of residential suburbs, each serviced by a central business district.

The resulting benefits are that commuting times are short. Employment hubs are virtually on your doorstep and recreational facilities are within walking distance, regardless of where you live.

Find information on each district and the suburbs contained within them through the ['Explore Canberra' map](#).

### Education and Childcare

Canberra nurtures the pursuit of dreams from the ground up. Here families are provided with the supportive services, facilities and environments to raise happy, inspired and resilient children. Community is crucial for the support of families and Canberra has a number of ways to connect families with each other through playgroups, family events and activities.

Find out more about Canberra's excellent childcare, preschool and school system [here](#).

**Canberra has the lowest commuting times of all Australia's major cities**

**More than 25% of Canberra residents were born overseas**

**The region is known for four distinct seasons, enjoying 246 days of clear, crisp sunshine**



Further information about Canberra visit [canberra.com.au](http://canberra.com.au)



# How to apply

For a confidential discussion about the role, please contact Dr Emma Aisbett, Grand Challenges Transdisciplinary Research Leader or Associate Professor Janet Hunt, Deputy Director, CAEPR.

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To submit an application for this role, please provide the following information in Microsoft Word format:

1. A candidate statement which outlines both your vision for the role and an overview of your experience and skills as it relates to the parameters of the role and selection criteria.

This should be a narrative and no more than five pages.

2. A one page vision on your contribution to the Grand Challenge, and to a multidisciplinary team.

3. A detailed CV.

4. Three referees including their email and phone contact details.

Referees will only be contacted after prior consultation with the candidate. It is the candidate's responsibility to ensure referees are willing to provide reports when contacted.

5. An indication of the earliest date on which you could commence in the position.

**For a confidential discussion regarding this role and the application process, please contact:**

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ANU reserves the right to appoint by invitation.

On behalf of the University and as part of the application and appointment process, candidates may be requested to provide proof of their identity and citizenship and give permission for verification of their tertiary qualifications and a police background check.