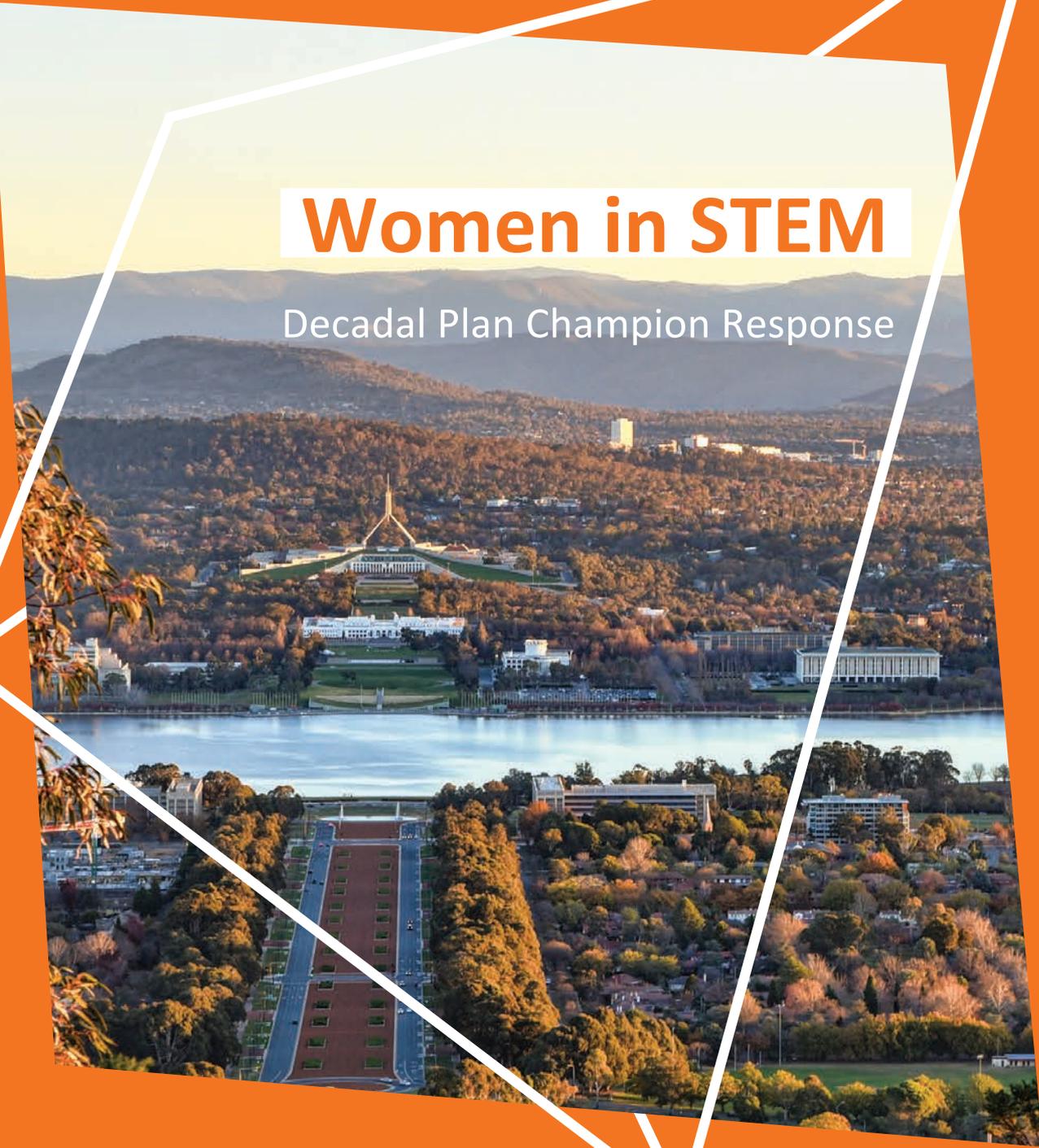




Australian Academy of
Technology & Engineering

Women in STEM

Decadal Plan Champion Response



Women in STEM Decadal Plan Champion Response

Introduction

The Australian Academy of Technology and Engineering is committed to greater action towards diversity and inclusion.

Australia's future workforce will need a growing base of STEM skills and knowledge combined with a diversity of views and experiences, to appropriately equip Australia to remain innovative and globally competitive.

ATSE is proud to have co-produced the Women in STEM Decadal Plan alongside the Australian Academy of Science, to provide a 10-year roadmap for achieving sustained increases in the participation of women in STEM.

The plan identified the barriers and enablers that affect women's participation, retention and success in all areas of the STEM sector, at every level of education, to all levels and stages of careers in academia, government, industry and private enterprise.

ATSE commits to championing the Women in STEM Decadal Plan and ensuring that the principles of gender equity, diversity and inclusion are embedded within our work and reflected in our actions.

Opportunity 1 – Leadership

Describe activities that leaders in your organisation are taking to achieve gender equity. Be sure to mention how success and accountability are being measured.

- *What are the commitments and activities?*
- *Have you formed partnerships?*
- *What future activities are planned?*

ATSE's leadership recognises the importance of gender equity, diversity and inclusion within Australia's STEM workforce. ATSE has committed to a number of initiatives that will contribute to achieving gender equity through internal and external activities.

- Along with the Australian Academy of Science, ATSE was a co-founder of the Science in Australia Gender Equity program (SAGE) and remains committed to this program through an enduring presence on the Board of SAGE Ltd.
- ATSE has committed to the inclusion of women across our own governance and leadership structures, by ensuring that women constitute 50 per cent membership of the Board and committees, Assembly, and policy Forum leadership groups.
- ATSE has committed that women should constitute 40 per cent of all new Fellows elected to the Academy by 2020, and 50 per cent by 2025.
 - a. In 2019, almost 50 per cent of newly elected Fellows were women, putting us well ahead of our 2025 target.
- ATSE has a Vice President of Diversity, whose role is to ensure that the activities of the Academy support and promote diversity and inclusion in STEM.

- ATSE has a Diversity & Inclusion Committee of the Board. The primary role of the Diversity and Inclusion Committee is to support, measure and report ATSE's diversity and inclusion performance, including the gender balance across ATSE's Board, Assembly, Fellowship and Forum leadership. This performance is scored against the Diversity and Inclusion Progression Framework created by the Royal Academy of Engineering (UK), with this data then made public via the ATSE website to showcase our performance for transparency and accountability, both internally and externally. The Committee also acts to identify priority areas for ATSE to contribute to programs or projects geared towards gender equity and diversity in the STEM workforce.
- ATSE leadership ensures a diversity of perspectives on internal matters, policy development and strategic management by enhancing the numbers and participation of women on committees and leadership groups.
- ATSE leadership has also committed to ensuring gender equity and diversity in prizes, awards, meetings, events, and communication activities. In recognising excellence in STEM and in providing forums for technology awareness and public debate, Academy awards, meetings, communication activities and events will reflect gender diversity and promote inclusion of people from underrepresented groups.
- ATSE proudly supports women in leadership roles within the Secretariat. Our CEO, Kylie Walker, is a proud advocate for women in STEM.

Future activities:

ATSE's first priority will be to address the imbalance in gender in STEM, and future diversity priorities include age, indigenous Australians and diverse ethnicity in STEM. Future activities include:

1. The production of a diversity and inclusion toolkit for STEM-focussed SMEs to encourage and support industry action towards D&I in small and medium enterprises.
2. To produce policies and targets for age, ethnicity and indigenous reconciliation to ensure inclusion of broader perspectives.
3. ATSE Committees Gender Balance
Of ATSE's major committees, women comprise:
 - 50% of the Board
 - 36% of Assembly delegates
 - 33% of the chairs of ATSE's nine policy forums
 - 42% of the Audit and Risk Committee
 - 60% of the Diversity and Inclusion Committee
 - 32% of state and territory Division committees
 - 43% of Division committee Chairs
 - 41% of Project steering committees
 - 48% of Award committee members
 - 44% of Fellowship assessment committee members

Gender and CALD Profile of New Fellows

Statistics on 2020 New Fellows will be supplied following the November announcement.

Gender and CALD* Profile of Awardees

Awardees (2020)			
Award	Women	Men	Total
Batterham Medal	1	0	1
Clunies Ross Awards	2	2	4
David & Valerie Solomon Award	0	1*	1
Ezio Rizzardo Polymer Scholarship	1*	0	1
ICM Agrifood Award	1	1	2
Total across all awards	5	4	9

Opportunity 2 – Evaluation

Describe strategies your organisation has in place to measure and evaluate efforts in achieving gender equity. Your response in this section will help guide the way forward for a national evaluation framework.

- *Describe strategies you use or plan to use to evaluate your gender equity activities.*
- *Are your evaluation findings publicly available? If so, provide a link or include the details in your submission.*
- *Are you planning or conducting long-term evaluation of gender equity activities?*
- *What are the barriers to your organisation conducting evaluation?*

In order to measure our progress in areas of diversity and inclusion, ATSE has created a Diversity and Inclusion Action Plan and has adopted a diversity and inclusion progression framework that allows for the measurement and reporting of diversity and inclusion progress across multiple levels of maturity.

ATSE's Diversity & Inclusion Committee is responsible for the quarterly reporting of ATSE's diversity and inclusion performance to the Board, including the gender balance across:

- The Board
- Assembly
- Fellowship
- Forum leadership and committees
- Awards and prizes
- Communication activities
- Events

This performance is scored against the Diversity and Inclusion Progression Framework created by the Royal Academy of Engineering (UK)¹, and data is reported to Fellows at ATSE's Annual General Meeting and to shareholders via the [ATSE website](#) to showcase our performance and to ensure transparency and accountability.

The Academy will be accountable for its performance on gender equity and diversity by publicly reporting on our performance statistics on a regular basis.

ATSE's evaluation and reporting practices are intrinsic to our organisations progress towards equity, diversity and inclusion and we are committed to continual review of our evaluation methods in order to achieve measurable progress in these areas.

Opportunity 3 – Workplace Culture

Outline what your organisation is currently doing and plans to do to foster the retention and progression of women.

- *Describe specific workplace or employment practices in your organisation that aim to improve gender equity and create an inclusive and respectful workplace (e.g. recruitment and promotion practices, mentoring and leadership programs, paid parental and carer's leave, and discrimination, harassment and bullying policies).*
- *What activities have made the biggest difference?*
- *What future activities do you have planned?*

ATSE is proud to have a supportive and inclusive workplace culture which encourages healthy work-life balance, is family-friendly and supportive. Secretariat staff are encouraged and supported to undertake flexible work, including work-from-home and flexible hours for staff with caring responsibilities. Children are welcome in the workplace.

ATSE's parental leave policy is non-gender specific and exceeds minimum legislative requirements. In 2020 ATSE has undertaken a salary benchmarking and review exercise, and ensured women and men are paid equally for equal work. When advertising new positions, ATSE proactively welcomes applications from people from traditionally marginalised groups.

ATSE proudly employs talent from regional and metropolitan areas, allowing people to live and work where it suits them. In reflection of our commitment to technology and engineering, ATSE has embraced digital technology to support a widely dispersed workforce of staff who are spread across Melbourne, regional Victoria, Canberra, Sydney and the USA.

ATSE is also committed to the wellbeing and professional development of our workforce. All employees have a professional development plan and access to skills development to support career progression.

Our Diversity and Inclusion Policy embeds the principles of inclusion within our operational processes and this ensures that an inclusive workplace culture is considered an operational requirement of the organisation.

'We are an equal opportunity employer providing a flexible and respectful workplace.'

Opportunity 4 – Visibility

Describe your activities focused on providing role models to girls and women in STEM. Include changes to how you or your organisation approaches conferences and events, social media and media engagement.

- *Describe any current activities, or those planned, that increase and promote the visibility of women in STEM within or outside your organisation.*

ATSE brings together Australia’s leading experts in applied science, technology and engineering to provide impartial, practical and evidence-based advice to enable Australia to maintain its position as a leading technology economy. To do this, we need to support greater gender equity and diversity within the STEM workforce to ensure a diversity of views and lived experience which reflects the diversity of our nation.

ATSE is committed to promoting the visibility of women in STEM within and outside of our organisation by ensuring that all ATSE programs, awards, meetings, events and publications reflect gender diversity and promote inclusion.

ATSE has committed not to take part in national or international activities where the organising body has no gender equity policy or where women are not reasonably and meaningfully represented among speakers.

ATSE ensures that all of our publications reflect the diversity of the community in which we operate.

Opportunity 5 – Education

If you are part of the education system, describe the activities that support and/or encourage girls and women to study STEM. If you are not part of the education system, do you or your organisation engage with schools, teachers or the education system? If you don’t currently have a strategy to work with the education system use this section to describe how you would like to engage and what resources you have available.

- *Describe the programs you or your organisation are involved in to inspire, support and/or encourage the teaching and learning of STEM for girls and women.*

ATSE has committed to supporting educational programs that promote diversity and inclusion across schools, university, and industry. Through our STELR and IMNIS programs we are engaging young women at critical times during their formative educational experiences and inspiring them to build careers in STEM.

IMNIS

Now in its fourth year, the Industry Mentoring Network in STEM (IMNIS) has evolved from a small-scale pilot into a prestigious national initiative. The program involves more than 600 participants each year — over 300 motivated PhD students from Australia’s leading universities matched with 300 senior-level industry leaders.

The Academy's vision is for IMNIS to develop a new generation of STEM PhD graduates and early career researchers who can:

- engage and collaborate with industry
- network beyond academia with confidence
- readily transition to an industry career
- excel within any part of the STEM ecosystem.

The IMNIS program supports the advancement of women in STEM by pairing PhD students with industry mentors. A significant proportion of mentees and mentors are women, allowing young researchers to build meaningful mentor relationships which facilitate career progression for young women in STEM.

STELR

Teacher and classroom resources for ATSE's secondary school education program STELR feature women and men in equal number, both in images and in examples given for worksheets. All events for school students feature at least 50% women from science and engineering, and often more women engineers than men – as we are conscious that women are severely under-represented in engineering disciplines.

STELR has also created 20 women in stem and entrepreneurship videos covering the breadth of careers in Engineering from traditional areas such as Civil, Chemical and Electrical Engineering through to those working in Renewables, Sustainability and Digital Systems.

STELR targets girls' schools to receive solar car kits each year; and to receive subsidies for class kits through our corporate partnerships.

Other activities

ATSE participated in Gender Equity in Engineering with the World Federation of Engineering (WFEO)

ATSE was on the Engineering for Australia Taskforce which produced the report 'Barriers to participation in engineering and the value of interventions to improve diversity'.

Opportunity 6 – Industry Action

Highlight collaborations you have undertaken to help other organisations, especially SMEs, to achieve gender equity.

- *If you are a small or medium enterprise, what tools or support have enhanced your capacity to support gender diversity and equity in your organisation?*
- ***If you are not an SME, do you provide any advice, resources or incentives to SMEs to attract and support diverse workforces?***
- *If you are in the industry sector, what STEM gender equity initiatives are you currently involved in?*

ATSE is developing a Diversity and Inclusion Toolkit for STEM-focused SMEs. This project commenced in 2019, as one of the Implementation Activities arising from the sixth opportunity outlined in the *Women in STEM Decadal Plan* which identified the urgent need for tools to address gender equity amongst SMEs. The pilot will be rolled out in early 2021.

ATSE is producing three quick reference guides to enable STEM-focused SMEs to embed diversity and inclusion in the key activities of **recruitment**, **retention** and **acceleration** of their employees. These quick reference guides will support STEM-focused SMEs to act inclusively as they recruit for new positions, promote and advance existing employees, and to ensure a culture of diversity and inclusion at work.

Australian STEM SMEs play a crucial role in employing Australia's STEM workforce, which is one of significant ethnic, cultural and linguistic diversity, as well as diversity of age, ability and neurodiversity. There is a growing body of evidence that organisations that value diversity and have an inclusive culture are better equipped to recruit and retain high performing staff, increase productivity, and improve business outcomes.^{1,2} By committing to a workplace which is free of discrimination and bias, while providing equitable access to support, opportunity and resources, SMEs can realize the full economic benefits of diversity and inclusion and ensure a safe, fair and respectful workplace for their employees.

These quick reference guides are evidence-based and will refer to other resources available through existing providers (e.g. Diversity Council of Australia). The Toolkit will bring these guides together and make them publicly available on a website, accompanied by an online database of tips, tricks and tools for STEM-focused SMEs to embed diversity and inclusion within their business. The Toolkit will be hosted online, and the quick reference guides will be available in both document and digital format.

The Toolkit is currently in the early stages of development and will be tested in a proof-of-concept trial with several STEM-focused SMEs in early 2021. The toolkit will be adapted according to feedback from the trial and piloted more widely in the second quarter of 2021.

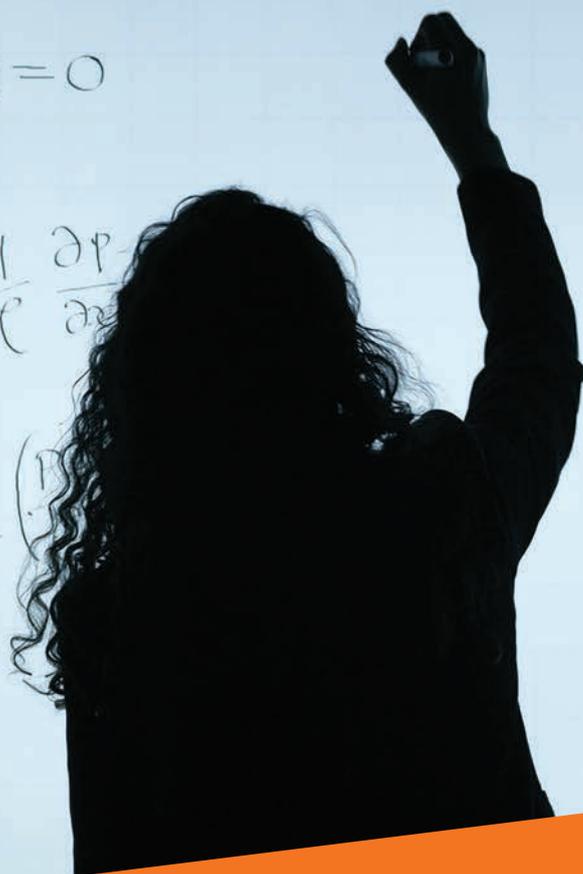
ⁱ Royal Academy of Engineering UK (2019) Diversity and Inclusion Progression Framework for Professional Bodies. Available from: <https://www.raeng.org.uk/publications/other/diversity-progression-framework>



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The Australian Academy of Technology and Engineering operates as a Learned Academy of independent, non-political experts helping Australians understand and use technology to solve complex problems.

Bringing together Australia's leading thinkers in applied science, technology and engineering the Academy provides impartial, practical and evidence-based advice on how to achieve sustainable solutions and advance prosperity.



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