

Budget 2019 – Women in science, technology, engineering and maths (STEM)

Women in STEM Budget Overview

Measured against the women in STEM priorities for women that we have identified, the 2019 budget provides little to address the under-representation of women in these male-dominated industries. The only specific initiative is \$3.4 million over four years from 2019-20 to extend the *Science in Australia Gender Equity* (SAGE) program for an additional three years; and a digital content National Awareness Raising Initiative, led by the Women in STEM Ambassador. This budget's \$3.4m over four years compares to the \$4.5m over four years allocated for women in STEM in last year's budget. There has been no further funding identified for the Women in Science strategy, the Women in STEM Decadal Plan, or the STEM choices resourcing kit.

WHY IS THIS AN ISSUE FOR WOMEN?

- Women remain under-represented in traditionally male-dominated industries, such as science, technology, engineering, maths and medicine (STEMM), as well as mining and construction.
- According to the [Office of the Chief Scientist](#), only 16% of university and vocational education STEM graduates are women. Traditionally male sectors still employ few STEM graduates – for example, only 12% in construction, and 15% in transport.
- [Women in STEMM](#) note that in the life sciences, over half of all Bachelor of Science and PhD graduates are women – and have been since the mid-1980s; yet there are fewer than two women in every ten investigators at senior levels in universities and research institutes. Physics, maths, technology and engineering struggle to attract women to pursue careers in these disciplines.
- Workers in the male-dominated industries and occupations generally earn more than those who work in industries and occupations dominated by women such as education and training, administrative support, health care and social assistance.
- However, women who do work in STEM are still subject to considerable pay inequity. For example, according to WGEA, [the gender pay gap is 22.7% in professional, scientific and technical services, 16.9% in mining, and 12.5% in construction.](#)
- The [Australian Human Rights Commission's 2013 study on women in male-dominated industries](#), identifies the systemic barriers leading to gender segregation as including the lack of family role models, stereotypes and bias starting at school, negative perceptions and lack of awareness of

occupations in male-dominated industries, stereotypes about women in the workplace, ‘blokey’ non-inclusive workplace cultures, and lack of flexibility and work-life balance.

- The report also strongly supports a link between the constrained choices presented to women, gender segregation in employment, and longer-term economic insecurity:

Women’s decisions to take time out of paid work, to trade salary for flexibility or to work in a low paid job are often viewed as a matter of individual choice and responsibility. Yet, these choices are very often constrained by a range of external factors such as inflexible workplace structures, family dynamics, cultural pressures and gendered stereotypes...the sum of these factors could leave her in a financially impoverished retirement.

The ‘choices’ serve to make the gender segregation a self-fulfilling prophecy about the life of many women, where the cultural drivers in their early lives crowd them into industries with limited career and financial prospects, and the closed culture of male dominant industries perpetuate and reinforce those cultural drivers.

BUDGET MEASURES

The following table sets out the priorities identified by NFAW and the relevant 2019 budget commitments.

| NFAW priorities | In 2019 budget? | Comment (if any) |
|--|-----------------|---|
| Aims around women in STEM should be more clearly articulated and actioned as part of Towards 2025: An Australian Government Strategy to Boost Women’s Workforce Participation, and should be considered and measured alongside the Women in STEM Decadal Plan, working with both educators and employers. | No | NFAW welcomes the Government’s commitment to the funding for the SAGE program for a further three years, but notes its focus is limited to the higher education and research sectors. There will likely be some benefits for women’s participation in these sectors, but a more strategic cross-economy approach is required – involving a broader range of employers and educators – to effect sustainable long-term improvements. |
| The Workplace Gender Equality Agency should receive additional funds to build the evidence-base and partnerships with vocational and higher education institutions, male-dominated Industry groups and employers, with the aim to accelerate the removal of barriers to the recruitment and | No | WGEA has no items in the 2019-2020 Budget |

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| retention of women in STEM. | |
| NFAW supports the recommendation in the AHRC Report that the Department of Foreign Affairs and Trade should partner with the AHRC to consult internationally on special measures to reduce workplace gender segregation, focusing on States comparable to Australia in this context. | Not applicable |
| NFAW supports the Office of the Chief Scientist's recommendation that leaders and institutions must take an active approach to improving equality and diversity, and tackling both conscious and unconscious bias and that, at a national level, sexual harassment in science must be reported regularly. | Not applicable |
| Other budget measures | |
| Measure | Comment |
| The Government will provide \$3.4 million over four years from 2019-20 to encourage more women into science, technology, engineering and mathematics (STEM) education and careers. The funding will support an extension of the <i>Science in Australia Gender Equity</i> program for an additional three years; and a digital content National Awareness Raising Initiative, led by the Women in STEM Ambassador. | NFAW welcomes the extended funding of the SAGE program, but notes the measure's limited range and scope. |