

Budget 2021 – Employment

Women in STEM overview

Two measures identified as aimed at increasing the number of women in science, technology, engineering and mathematics (STEM) fields were announced in the 2021 Budget totalling \$42.4 million for co-funded STEM scholarships for women and the development of a gender equity evaluation toolkit for the STEM sector. These initiatives complement existing small-scale programs provided for under the [Advancing Women in STEM 2020 Action Plan](#) including the WISE program which has, to date, provided \$7.97 million for 46 projects across Australia ([Women’s Budget Statement](#), p. 52).

While NFAW supports efforts to encourage career options free from gendered assumptions, along with workplaces free from discrimination, there is limited evidence that more women in STEM addresses gender inequality at the aggregate level. More women in STEM may fulfil a number of policy objectives including improved workforce capability, but it should not be the key or central plank of a government approach to achieving gender equality. Of significant value would be more attention paid to fairly valuing all sectors of the workforce including, particularly, the care sector (see Social Infrastructure section).

Women in STEM

The Budget

The 2021 Budget announced:

- \$42.4 million over seven years from 2021-22 to establish the Boosting the Next Generation of Women in STEM Program by co-funding scholarships for women in STEM in partnership with industry ([Budget Paper No 2](#), p. 81). This measure is intended to support more than 230 women to pursue Higher Level STEM Qualifications ([Women’s Budget Statement](#), p. 52).
- \$0.6 million over three years from 2021-22 for the Women in STEM Ambassador to develop an evaluation toolkit to support standardised evaluation planning and reporting tools for the STEM sector in the evaluation of STEM gender equity initiatives. Funding for this will be met from within the existing resources of the Department of Industry, Science, Energy and Resources ([Budget Paper No 2](#), p. 82).

Gender implications

Why is this an issue for women?

Women continue to be under-represented in STEM subjects in schools, university and careers. According to the Department of Industry, Science, Energy and Resources' [STEM Equity Monitor 2021](#), in 2019, of all higher education enrolments, only 9 per cent of women were studying STEM courses compared with 35 per cent of men, representing no change at all for women from the previous year (p. 8).

The STEM Equity Monitor also measures outcomes for women and men in STEM post-education. There is a significant pay gap for women in STEM fields from their very first job – of people entering the workforce from all VET fields of education, the median full-time annual income was \$52,000 for women and \$65,000 for men (p. 9). This is consistent with data from the [Workplace Gender Equality Agency](#) showing 'trades and technicians' as the occupational grouping with the highest gender pay gap of 25.4 per cent in full-time earnings, compared to the national average across all occupations of 13.4 per cent in full-time earnings drawn from Australian Bureau of Statistics data.

Drawing on the data in the STEM Equity Monitor, the [Australian Financial Review](#) recently reported that "a \$100 million investment encouraging women to take up jobs in the science and technology sector has come to little, with a new government report showing the number of females in related occupations has barely budged over the past decade". The article commented on key reasons behind the poor level of female representation being "a yawning gender pay gap, low levels of seniority, high levels of unemployment and lack of job satisfaction".

What are the 2021 Budget impacts on women?

Based on limited progress so far, and on the nature of the measures, the new initiatives – while welcome in themselves – will have minimal impact but for the modest number of scholarship recipients.

Ensuring that girls and young women are equipped with the skills and confidence necessary to enter STEM fields requires a national STEM program for all young people in schools. Such a program would need to be fully funded and resourced (see Schooling section).

Government incentives and programs aimed at STEM industries – such as the digital and patent box measures - should be linked to evidence that the gender imbalance and the gender pay gap in the industry are being addressed. There should be a clear linkage to industry schemes developed under the STEM initiative in the Women's Economic Security Package (see Business Tax section).

It is clear that STEM fields perform poorly in terms of the gender pay gap and inclusive workplace cultures which may impact on women's willingness to enter associated industries and occupations, and that there may be clear value in efforts to improve gender equality within the sector to improve workforce capability and opportunities for women. There may be limited

benefit in investing more in recruiting women to the field without commensurate effort in addressing the barriers and inequities currently endemic within in the sector. The evaluation toolkit may be of value in this context.

More important still is that most women are employed in other largely undervalued industries and that – in the context of improving gender equality outcomes across the economy and community – a much larger return on investment would occur with more fairly valuing all sectors of the workplace including, in particular, the care economy (see Social Infrastructure section). A lack of focus on female-dominated industries represents a lost opportunity. NFAW notes, for example, that Women’s Economic Security package is almost silent about measures to improve the circumstances of those women employed where most women are employed, in the services sector (see Machineries of Government section).

Along with lost opportunities there are clear risks associated with strongly preferencing assistance to some industries over others in terms of achieving gender equality. There is sound [evidence](#) that when more women enter fields in greater numbers, pay declines — for the very same jobs that more men were doing before – highlighting that significant systemic issues exist regarding the valuing of ‘women’s work’ that go beyond individual career choices. Monitoring gendered outcomes across all industries and occupational groups therefore needs to remain a central function of the Workplace Gender Equality Agency (WGEA). Enabling WGEA to conduct more sector-specific investigation, evaluation and promotion, could also valuably assist in ensuring that the correct policy levers are being used to effect genuine improvements in gender equality performance, as these likely differ from industry to industry.

Recommendations

A number of recommendations relevant to STEM are made in other papers, including schooling, business tax, and social infrastructure. Additionally NFAW recommends:

- Noting and supporting the additional \$4.3m over four years to WGEA to strengthen reporting on sexual harassment (see Respect@Work section), WGEA be adequately resourced to conduct cross-sectoral analysis on all outcomes measures, and to develop tailored responses based on industry characteristics.
- That WGEA maintain and improve its capacity to collect data on a full range of gender equality indicators, including wages and non-monetary compensation.