



Chief Executive Women

BCG

Why don't women get the cool jobs?

What to do differently so talented women advance to leadership in STEM sectors, according to women who are leading the way.

March 2022

Introduction

Science, technology, engineering and maths (STEM) industries are widely acknowledged as growth sectors. Today in Australia, women hold fewer than 10 percent of leadership positions in STEM related industries. This must change. In late 2021 Chief Executive Women brought women leaders in STEM together to discuss the barriers – and solutions – to increasing women’s leadership in these vital sectors.

STEM sectors are playing an increasingly important role in the Australian economy. We must secure women’s participation in these sectors – especially in leadership. Women’s leadership in STEM is vital to the success of these growth sectors. Like any industry, it is critical that women are represented at tables where decisions are made and the future is created. It is an economic imperative for the STEM sectors to draw on all available talent. The sectors must retain all talent and ensure equal pathways to leadership.

The conversations that were shared in the roundtables were confronting and eye opening. While there are a number of senior and experienced women leaders across STEM industries, it is clear that women face unique and significant challenges. Most striking was the degree to which women, despite good intentions of many leaders, are facing pushback and exclusion and in some instances, are leaving these sectors altogether. This is clearly unacceptable for the women in the industry, a repudiation of the investment made in STEM education and STEM careers and an unsustainable path for the future of the sectors.

In this whitepaper we share the lived experience of senior women leaders in STEM, hoping this may be a catalyst for change.

Building on the commendable work that is underway in many organisations, this report outlines seven critical actions that organisations can take now. If adopted, these can address the inequality in the sectors and secure women’s leadership across STEM sectors. The actions include adopting balanced interviewing, demonstrating genuine sponsorship of talented women, ensuring foundational equity practices are in place with leaders accountable to targets and proactive efforts to retain and advance talented women. We know these actions can have impact and will enhance the pipeline of leadership talent.

While the challenging experiences of women were clear, we are optimistic because we know that many leaders in STEM understand the value women bring to these sectors. We must harness this to drive urgent action to ensure women’s leadership is prioritised today.

CEW would like to thank former Australian representative for G20 EMPOWER Council Christine McLoughlin and Women in STEM Ambassador Professor Lisa Harvey-Smith for their contribution and leadership in driving women’s leadership in STEM forwards. We would also like to especially thank the roundtable participants who shared their stories so generously in these important discussions. It is to them and the women who want strong careers in STEM to whom we must promise a brighter future through the actions this report recommends.



Sam Mostyn AO
CEW President



Sarah Thom PhD
Partner, BCG

Acknowledgment of Country

We acknowledge the Traditional Custodians of Country throughout Australia and pay our respect to their Elders past, present, and emerging. Chief Executive Women (CEW) and Boston Consulting Group (BCG) celebrate the diversity of First Nations people and their continuing connection to land, water, and community, and acknowledges the strength of First Nations women leading their communities. We extend that respect to Aboriginal and Torres Strait Islander people who are part of the CEW community.

About Chief Executive Women

Chief Executive Women's shared mission is 'women leaders enabling women leaders' and represents more than 800 women leaders committed to promoting gender equality and enabling women leaders in Australia.

CEW members include women CEOs, chairs, and non-executive directors, leaders in the arts, civil society organisations, and academics. At June 2021, CEW's members oversaw more than \$749 billion in revenue, more than 1.3 million employees, and contributed more than \$249 billion to Australia's GDP. Members include four state Governors, Australia's chief scientist, senior bureaucrats, and some of the top health experts who led Australia through the pandemic. Members also include women who help our most vulnerable Australians during the toughest of times, leading peak bodies that represent migrants, refugees, and First Nations women.

CEW's members work actively to realise our vision of a community where women and men have equal economic and social choices and responsibilities. Our members sit at decision-making tables around Australia, leading the businesses, institutions, and services that will drive Australia's economic recovery in 2022.

For more information, visit cew.org.au.

About Boston Consulting Group

Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we work closely with clients in Australia, New Zealand, and around the world

to embrace a transformational approach aimed at benefiting all stakeholders – empowering organisations to grow, build sustainable competitive advantage, and drive positive societal impact.

Our diverse, global teams bring deep industry and functional expertise and a range of perspectives that question the status quo and spark change. From our local offices in Sydney, Melbourne, Perth, Canberra and Auckland – and from client sites across Australia, New Zealand and Asia Pacific – our local work consists of a uniquely collaborative model across the firm and throughout all levels of the client organisation, fuelled by the goal of helping our clients thrive and enabling them to make the world a better place.

BCG has conducted Diversity & Inclusion research projects around the world, including global surveys of more than 30,000 people and interviews with senior executives at some of the world's largest companies. We share our research internationally in reports, podcasts and videos.

Professor Lisa Harvey-Smith is the Australian Government's Women in STEM Ambassador. As the [Women in STEM Ambassador](#), Professor Harvey-Smith is responsible for mobilising Australia's business leaders, educators and policymakers to increase the participation of women and girls in Science, Technology, Engineering and Mathematics (STEM) studies and careers. She is a Professor of Practice at the University of New South Wales, an astrophysicist and author of 5 books on astronomy. Lisa is a member of the Questacon Advisory Committee and the Australian Space Agency's Advisory Board. She is a CEW Member.

Christine McLoughlin AM, was formerly the Australian private sector representative to the G20 EMPOWER Council, which is focused on women's economic representation across the globe. Christine has had experience as a director on the boards of ASX Top 50 companies in the financial services, resources, health insurance, and infrastructure sectors over the past 12 years. She is the Chairman of Suncorp Group, as well as a Director of listed company Cochlear Limited, Chancellor of the University of Wollongong, Chairman of Destination NSW and co-founder and Chairman of the not-for-profit organisation, the Minerva Network. Christine is also a CEW Member.

Why are Australian businesses not able to keep their talented, experienced, capable women? Talk to women who have senior roles in STEM businesses and they'll tell you:

"There's lots of good intentions but a lack of practical outcomes. The intention is genuine. The concept is that we need to progress women but there's a lack of understanding by leaders. Senior men say "I understand there's a problem but I treat women as equals and I'm here to support you – so I don't know why this issue is still there". But it is obvious to the women! The men don't know what it is like for women."

– Executive, technology services business

"Despite reactions against the idea that a woman would run the [technical line] business, when a few senior men who knew I was capable spoke up for me, I got the role. But then everyone seemed to think I got the big line role because I was a woman, not in spite of the fact that I was a woman."

– General Manager, multinational manufacturing business

"There's a real "tech trap door" where we lose experienced women to other industries. ... There are still some attitudes that a man will do better than a woman in a senior role. We see it how it plays out: when people get leadership roles, the "cool jobs" flow to the men."

– Former senior executive, tech giant

"I'm the last of the women in my starting cohort. All my female peers have dropped out of STEM and taken roles in other fields. I've been lucky to have a sponsor who pushed me into roles when there was resistance to a woman taking it on. But if there isn't that leadership, then it just isn't worth it for women to put their neck out for it."

– Senior executive, major energy business

"The active hostility is real. Talented women step out not because they are not capable or not confident but because they are bullied and are just over it. It is a fight every day."

– Executive, large engineering business

"Big technical roles are the "cool jobs". In our industry the men do the cool hard tech stuff together; they have the change house conversations before there is even a woman around. People don't see it. If you raise the exclusion then you just get pushed back."

– Manager, resources business

"In tech, when you scale so fast, you quickly lose the opportunity to intervene... smaller businesses emulate what goes on in the successful ones... It doesn't make for a culture that women necessarily want to be a part of"

– Experienced tech founder

"While we're still behind, our executive team is now clear that we need women at the leadership table. It helps to see a few [big STEM businesses] making strides. There are definitely things that work – we need the sector to start doing them!"

– Chair, technical specialty organisation

These senior women see the economic imperative not to waste STEM talent – they know that Australia will be hamstrung if the sector can't urgently work out how to develop people with promising talent into leaders of the future who want to stay in STEM roles. But for women to be convinced to stay, they need to know there is a pathway to leadership in the "cool jobs" – and the data aren't compelling today.

These accomplished women also see actions that do work to increase gender diversity in STEM leadership. They see what matters most to staunch the attrition and attract women to senior roles, reflecting on data from their organisations, on their experience gained across their careers and on times they have seen impactful leadership on this issue in their field. They point to examples of efforts that are making a difference and to select organisations that are visibly acting to change the gender balance. They know what works.

This whitepaper lays out why organisations urgently need to take action to advance women's leadership in STEM and what works so talented women who have invested so much – and into whom so much has been invested – advance into leadership roles.

Science, technology, engineering, and mathematics (STEM) skills and the industries they power are in increasing demand and opening new areas of economic activity. In the next decade there will be accelerating demand for engineering, more investment into scientific research and rapid development of technologies such as artificial intelligence, quantum technology, robotics, automation, precision manufacturing and advanced materials. These fields will also drive the growth and emergence of other high-value, high employment industries such as fintech, medtech, agritech, cybersecurity, clean energy, renewables and other green tech. To meet this economic opportunity, Australia must be able to adapt and compete globally – meaning we need full attraction, retention and advancement of people in STEM careers.

Yet despite significant efforts over the last decade, and genuine intention on the part of many leaders, women remain few and far between in STEM, especially in leadership roles in these sectors. In Australia, women currently hold less than 10% of leadership roles in STEM organisations. This leadership representation has remained persistently low despite having strongly increased representation in STEM studies, and nearing 30% representation in STEM careers. In other countries, increased numbers of women in junior roles has translated to increased senior gender balance. But Australia risks wasting a significant share of its well-trained women in STEM, limiting the pool of talent available to step into leadership roles.

Recognising the criticality of this issue for Australia, Chief Executive Women (CEW) convened a series of roundtables in November 2021 on advancing women's leadership in STEM. Across a series of discussions, experts Christine McLoughlin, Australia's former private sector representative to the G20 EMPOWER Council, and Lisa Harvey-Smith, the Commonwealth Government's Women in STEM Ambassador, joined 30 women from CEW's membership and CEW Connect community. Roundtable participants were women who hold executive or board roles in major STEM organisations around Australia. Participants discussed advancing women's leadership in STEM, with focus on surfacing interventions they have seen make a meaningful impact that could be more broadly taken up in these sectors today. Federal Office for Women representative, Kaylene Zakharoff, also joined in the roundtables.

Participants brought rich insights from their experiences working in STEM and along the pathways to leadership. They highlighted that not only must the sectors address the lack of women in leadership — but many organisations lack the broader gender equality measures considered basic in other sectors. While there are good examples of STEM-driven businesses with efforts directed at retaining and advancing women, STEM sectors have not yet systematically adopted these practices. And isolated initiatives won't be enough to stem the attrition along the path to leadership.

Participants discussed the significant barriers that skilled women face advancing in STEM organisations and the challenges they face when they do become senior leaders. The lack of retention of women in middle management levels means the leadership pipeline in STEM dries up as these experienced women take roles in other sectors. They shared stories of harassment and bullying, of experiencing gender bias, and the challenge of well-intentioned but naïve colleagues. These blockages along their career path with an organisation are why it remains



challenging for women with proven STEM capability to keep choosing to stay in these sectors and take on leadership roles.

Roundtable participants recognised the significant challenges to building the talent pipeline of women in STEM - from childhood, through education and at early and mid-career steps. Addressing all these systemic challenges would require a range of alternate policy setting changes by government (e.g., around childcare, superannuation), and action through academia, the education system and industry, as discussed in Australia's Women in STEM Decadal Plan.

However, the roundtable discussions highlighted that there are many meaningful actions that STEM businesses can implement now in their organisations to advance women's leadership. These examples are drawn from practices that are working today in leading STEM organisations and in other sectors. If STEM sectors can adopt these leading examples more broadly across organisations, it will better enable women to stay in STEM, develop into leaders and thrive in leadership roles.

In this report, we recap the case for change and the challenges faced by women advancing in STEM organisations and explore the immediate opportunities for these sectors to better advance women's leadership, reflecting the perspectives shared by the senior, experienced women in STEM at CEW's roundtables.

The case for change

Over the last fifty years, much of Australia's economic growth can be attributed to improvements in the use of capital, labour, and technological innovation – made possible in large part by STEM.¹ As technological change accelerates and computing power increases, STEM capabilities become even more essential to our economic growth. In turn, this growth will fuel the demand for STEM skills. If Australia can activate STEM talent and leadership to meet this demand, the sectors will drive our economy and further improve our quality of life. Yet Australia has not

yet been able to fully realise the leadership potential of its skilled women in STEM, risking the opportunity to have all available talent grow these sectors.

Lifting women's leadership and economic participation in Australia is recognised by senior leaders across sectors as a critical challenge, as discussed in CEW and BCG's recent [Meet the Moment: Women Leaders on What Matters in 2022](#) report. In this report, CEW's members identified climate change, women's economic participation and Australia's economic growth as the most pressing priorities for all people in Australia. The link across these issues is being able to advance women in these sectors that will power our economy and our climate resilience.

Yet in Australia, women make up a small fraction of the STEM-skilled workforce and leadership.² The number of women in management and leadership roles thins at every stage of the career pipeline. In Australia, women make up just 28% of management positions in STEM, and only account for 8% of CEOs and heads of businesses.³ Despite the substantially greater share of women receiving STEM degrees and taking junior roles than in previous years, many opt out – or are driven out – of pursuing leadership roles in these sectors.

This is despite recognition that organisations that have more women in leadership roles significantly outperform their less diverse peers. Studies demonstrate time and time again that organisations with gender-diverse leadership teams yield better economic performance and outcomes, including on ESG dimensions, particularly in innovation focused companies.⁴ And the higher the ASX position, the stronger the representation of women in ELT roles.⁵ Other sectors have done better at advancing women to leadership, with women across all sectors now holding 40% of management positions and 19% of CEO roles on average.⁶

Within the ASX100, positive improvements that provide evidence that it is possible to drive change and achieve a gender balance of at least 40:40. The CEW Senior Executive Census 2021 now sees that 54% of the ASX100

¹ Office of the Chief Scientist 2014, *Science, Technology, Engineering and Mathematics: Australia's Future*. Australian Government, Canberra. Available from: https://www.chiefscientist.gov.au/sites/default/files/STEM_AustraliasFuture_Sept2014_Web.pdf

² Australian Bureau of Statistics, *Australian Census of Population and Housing*, 2006 and 2011.

³ Australian Academy of Science. (2019) *Women in STEM Decadal Plan* (Australian Academy of Science). Available from: www.science.org.au/womeninSTEMplan.

⁴ Dezsö CL, Ross DG. *Does female representation in top management improve firm performance? A panel data investigation*. Strategy Management Journal 2012;33(9):1072–89. Available from: <https://onlinelibrary.wiley.com/doi/epdf/10.1002/smj.1955>

⁵ CEW Senior Executive Census 2021. Available from <https://cew.org.au/topics/cew-senior-executive-census/>

⁶ WGEA Gender Equality Scorecard 2020-21. Available from: <https://www.wgea.gov.au/publications/australias-gender-equality-scorecard>

companies have achieved, or are on the cusp of achieving, gender balanced executive leadership teams. And 41% of functional roles, 17% of line roles and 25% of CFO roles in the ASX100 are held by women. There is a correlation between a high proportion (50%) of the ASX100 companies having set gender targets of at least 40% for each gender for their executive leadership teams and achieving representation of at least 40% for each gender.

A skilled STEM leadership is essential to realising Australia's innovation and productivity potential. Advanced sciences underpin 14-26% of Australia's economic activity and demand for STEM skills is at an all-time high, growing 1.5 times faster than any other job sector.⁷ STEM-skills power a diverse set of growth industries, from technology and data science, to health care and biotech, to technologies to mitigate climate change. But because women are underrepresented in these fast-growth fields, and because women disproportionately don't remain to attain leadership roles, the current approach could leave women even further behind and the sectors at risk.

For example, BCG's global report, [Why Climate Action Needs a Gender Focus](#) (October 2021), highlights why women need to be part of the climate solution. "Women are underrepresented today in sectors where major green reskilling efforts will take place, such as energy (where women account for just 23% of the workforce), building and materials (31%), industrial goods (21%), and engineering (25%). For example, six million jobs will be reskilled in the oil and gas segment of the energy sector, but only 22% of reskilled workers will be women." A recent look at the top 100 most influential individuals in climate in Australia named fewer than 25% women.⁸ Increasing women's leadership participation is crucial for Australian businesses to activate all talent available to driving such growth sectors of our economy.

STEM-skilled leaders will also increasingly have the option to apply their skills in adjacent geographies and sectors, many far advanced in diversity and inclusion. In a world with increasingly mobile talent, STEM organisations will compete for leadership talent in an ever more competitive global market. In a technology-led economy, STEM organisations also compete with broader businesses for

talent as the distinction between STEM and non-STEM jobs is increasingly blurred.⁹ STEM organisations will need to attract and retain the best talent to remain competitive, which will become increasingly difficult without advances in leadership gender equality.

Achieving gender equality in STEM leadership will require bold efforts by all stakeholders. STEM organisations must urgently take action to ameliorate the challenges faced by women in their own organisations to advance to and thrive in leadership roles.

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We need to enable women to better participate in the STEM economy as leaders, given the global significance of this critical issue. In the private sector there is no single silver bullet: in the G20 we know that many aligned and targeted actions are required.

Necessary actions include removing biases that inhibit developing women into senior STEM leaders... making your leadership team directly accountable by introducing targets for the representation of women in senior STEM roles... and of course, ensuring women are paid fairly when they are in these roles.

Christine McLoughlin AM,
Former Australian private sector representative to the G20 EMPOWER Council

Challenges faced by women seeking a path to leadership in STEM

While other sectors have made strides to achieve gender equality, women continue to face unique and significant challenges to advancing to senior roles in STEM businesses. These challenges can include hostile work environments, pervasive gender bias, and lack of flexibility for both day-to-day working and in their career paths.

Women in STEM are more likely to experience hostile work environments, including bullying and harassment.¹⁰ More than 40% of women in STEM sectors have been bullied and more than half have experienced sexual harassment in

⁷ Office of the Chief Scientist 2016, *Australia's STEM Workforce: Science, Technology, Engineering and Mathematics*, Australian Government, Canberra. Available from: https://www.chiefscientist.gov.au/sites/default/files/Australias-STEM-workforce_full-report.pdf.

⁸ The Australian, 's The List:100 Green Power Players (2022).

⁹ Australian Academy of Science. (2019) Women in STEM Decadal Plan (Australian Academy of Science). Available from: www.science.org.au/womeninSTEMplan.

¹⁰ Australian Academy of Science. (2019) Women in STEM Decadal Plan (Australian Academy of Science). Available from: www.science.org.au/womeninSTEMplan.

the workplace.¹¹ Women in male-dominated workplaces like STEM (where women hold 13% of occupations vs holding 50% of non-STEM occupations¹²) are at higher risk of experiencing sexual harassment than in more gender-balanced organisations.¹³ This was reflected in the experiences of the senior STEM women at the roundtables, who told of times of palpable hostility, subtle undermining and outright bullying they experienced in STEM environments. Where these toxic cultures occur, it makes it difficult for women to thrive and develop. Instead, it prompts women to seek leadership roles in other sectors with more inclusive cultures and longer history of action to retain and promote women.

Even in STEM workplaces with leaders who are visible in sponsoring women, with more supportive cultures and with advanced gender equality programs, women still experience gendered bias and expectations as they advance in their careers. Roundtable participants shared numerous stories of the microaggressions and judgements that were ever present. As they advanced in leadership, women were constantly told that they were a risk because “we don’t know how the team will respond to a woman as a leader.” Compared to their counterparts who are men, women spent longer in each leadership role and were often given fewer reports and responsibility. When they were denied promotions, it was based on subjective notions that were hard to disprove – they weren’t quite ready, or the business wasn’t ready for a woman in the role.

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As women we are routinely told that they are ‘not confident enough,’ ‘not technical enough,’ or ‘not a safe pair of hands’ when we seek leadership roles.
 – COO, advanced technology business

We heard from women in all roundtables that their organisations lacked foundational gender equality measures that have already become standard in other industries. One roundtable participant who returned to STEM after time as a leader in real estate felt that gender equality in STEM was, “immature and uncoordinated – stuck 10 years in the past.” In particular, women observed that in STEM leadership cultures there is a perception that one would fall impossibly behind given the pace

of change in STEM fields if working part time, taking a path through an alternate sector, or stepping out of the workforce entirely for a period of time. As a result, flexible work programs and parental leave are less likely to be available, and when available, more likely to leave women feeling stigmatised for taking these options up. We heard that without such flexibility, women found it difficult to remain in technical and line roles, especially at mid-level career periods that also often coincide with when women have young children. And when these programs did exist, few senior leaders took them up, further fostering a culture with beliefs that career progression would be less possible for those who did avail themselves of flex options.

For women who sought to return after a period away in a non-STEM business or in a corporate support role, where flexible options are seen as more acceptable, they experienced significant negativity associated with their time away and a perception that they would have difficulty adapting to technological developments that may have transpired. Yet roundtable participants observed that few STEM organisations offer paid reskilling or support on their return, making it doubly hard for women to flex their career paths along the route to leadership, even when they deeply want to continue in the field.

In several roundtables, participants referenced the adage, “you can’t be what you can’t see.” They pointed out that the vacuum of senior women leaders in STEM organisations made it difficult for people to imagine a woman in a leadership position. Roundtable participants experienced a narrow image of leadership in STEM. Women in STEM face, as participants referred to it, a ‘double barrier’ to advancing into leadership — first the challenges associated with advancing as a woman who is a technical expert in a mostly-men environment, and again when advancing into line leadership.

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Smart, technical women are told not to put their ideas out as often and to speak up less because they will be seen as threatening.
 – GM, large circular economy business

¹¹ Australian Academy of Science. (2019) Women in STEM Decadal Plan (Australian Academy of Science). Available from: www.science.org.au/womeninSTEMplan.

¹² Australian Government Department of Industry, Science, Energy and Resources. (2020) STEM Equity Monitor. Available from: <https://www.industry.gov.au/data-and-publications/stem-equity-monitor>

¹³ Australian Human Rights Commission. (2020) Respect@Work: National Inquiry into Sexual Harassment in Australian Workplaces. Available from: <https://humanrights.gov.au/our-work/sex-discrimination/publications/respectwork-sexual-harassment-national-inquiry-report-2020>.

Many senior STEM women in the roundtables shared experiences of the extra effort required to convince an executive to let them take on a technical line leadership role. Beyond having to prove their skills, they had commonly heard “You won’t get the respect of the team as a woman” or “This business just isn’t ready yet for a leader like you”. They saw this scepticism motivate women colleagues to take leadership roles outside STEM sectors, or in non-technical leadership roles, where executives were more eager to recruit talented women into leadership roles.

And then when women did land technical leadership roles, they then often heard their colleagues and team believe they only got the role “because you are a woman”. Unless they had visible support from more senior leaders when newly appointed to leadership, women struggle to dispel the notion in the business that they may not be genuinely qualified for the role.

Roundtable participants agreed that the STEM organisations and leaders (of all genders) they had worked with were often well intentioned and genuine in their desire to improve leadership gender diversity and inclusion. And there are examples of programs and initiatives in these sectors that were perceived as impactful. However, most organisations failed to collect, analyse and report on the efficacy of their programs. Leaders thus often had no visibility of which interventions were working and whether they were moving the needle on advancing women. Without analysis and accountability, it is challenging to advance women in STEM.

Most recently, there has been a shift in workplace norms because of the COVID-19 pandemic. Roundtable participants saw this as creating both challenges and opportunities. Some participants were optimistic that COVID-driven opportunities for greater flexibility could serve as an equaliser, as women with caring responsibilities were able to attend virtual meetings and events they may have otherwise missed, and traditional networking was largely curtailed. On the flip side, we know large numbers of women left the workforce and experience more stress than ever.¹⁴

While many challenges women face in STEM are seen in some form in other sectors, the risk is much greater in STEM. STEM organisations, in particular technology

companies, are scaling faster than we have ever seen globally. When the culture is challenges women’s career development or women struggle to have their voices heard, the opportunity to intervene is reduced because the company is growing so fast. With STEM set to power many of the sectors of the future, we risk a deepening gender divide and slowing leadership participation rate by women if STEM sectors do not mitigate the gender imbalance. Australian organisations with STEM roles must take steps to address these challenges as a matter of urgency, or risk falling further behind other sectors and other countries in building a strong pipeline of talent for leadership roles.

However, women in the roundtables also knew from experience the kinds of actions that have impact. Senior executives taking a visible role in creating gender balance in leadership ranks makes a meaningful difference in setting the tone for the organisation and makes a big difference to women’s continuing interest in staying in the organisation. The roundtable participants want to see STEM sectors more broadly take on the practices of those STEM organisations where women do want to stay and build their careers. In these organisations women feel backed to take on bigger roles, see that leadership applies the tools and resources available to address drivers of gender imbalance, including having gender balance targets in senior executive leadership teams, and have the data available to make the case for what else is needed. They see the potential for talented women to contribute as leaders in STEM, and the opportunities for STEM sectors to make this possible.

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Once you get highly trained women into STEM jobs – how do you stop them hating their experience and leaving before they become leaders? That’s the wicked problem we have to solve.... But there are already a lot of well-researched actions that are ready and waiting to be implemented. And we know we need to better evaluate what’s working and what isn’t, so we can stop just talking and get into doing more of what works.

Professor Lisa Harvey-Smith,
Australian Government Women in STEM
Ambassador

¹⁴ Krentz, M, Dartnell, A., Green, A., Kos, E., and Locklair, S. (2021) With Caregivers in Crisis, Companies Need to Step Up, Boston Consulting Group. Available from: <https://www.bcg.com/en-au/publications/2021/working-caregivers-in-crisis-need-company-support>.

Actions for industry

The senior STEM women in the roundtables saw immediate opportunities for organisations to advance women's leadership in STEM. Their perspectives reflected their experiences at their own organisations, successful practices by others in STEM sectors, and their observations of how such initiatives — of lack thereof — impact women.

Across the roundtables, seven primary themes emerged for how STEM organisations can move the needle on women's leadership in their own ranks, starting today.

Actions that organisations can take now to advance women's leadership in STEM



Require balanced interviewing for all talent pools



Sponsor, don't just mentor



Get the basics in place, as other sectors have done



Make leaders accountable for gender-balanced promotion and retention



Create pathways to draw on your existing talent



Reflect women's lived experiences in tailoring initiatives to your business



Measure, evaluate and report on gender data to inform the right interventions in the right areas



1. Require balanced interviewing for all talent pools

STEM organisations should require gender-balanced interview shortlists for all roles, technical and non-technical, for roles that can lead to leadership positions.

This requirement should cover hiring, promotion, and all related processes. If gender-balance is not achieved, leaders must explain why. Common approaches are to require 50:50 and 40:40:20 (40% women, 40% men, and 20% open) shortlists for interviews.



2. Sponsor, don't just mentor

Organisations should encourage senior leaders to sponsor mid-level women, as well as mentor them. Women in STEM are over-mentored and under-sponsored.¹⁶ Across sectors, men are more likely than women to have a sponsor.¹² Effective sponsorship focuses more on proactive career support and advocacy, beyond the traditional

Roundtable participants overwhelmingly saw balanced leadership as a critical mechanism to increase the number of women in leadership roles in their organisations. It also had positive flow-on impact on the numbers of women taking up middle-level roles, resulting in more gender-balanced talent pools for future leadership roles. Women from organisations that had already adopted balanced interviewing requirements shared that leaders were initially concerned about the difficulty of finding women to interview meet this requirement and the added costs in time and money. However, after a couple of balanced interview rounds, which saw more women hired in leadership roles, balanced interviewing proved a virtuous cycle: once more women were in leadership roles, it become much easier to attract talented women to apply for subsequent roles as they saw a greater chance of succeeding.

Traditionally, it is argued that hiring and promotion are based on merit, and thus unbiased. However, merit tends to be defined by admirable qualities that we innately recognise, linked to inherent and unconscious gender bias. As Elizabeth Broderick, former Sex Discrimination Commissioner, shared, “unless we actively and intentionally include women, the system will unintentionally exclude them.”¹⁵ Introducing gender-balanced interviewing is one step towards to equitable gender balance in leadership ranks.

Given that traditional ‘feeder’ roles for many STEM leadership positions are male dominated, achieving gender-balanced shortlists will initially require additional effort. Organisations may need to encourage applications from people outside the typical talent pools and consider including a ‘wild card’ candidate on every shortlist (e.g., a candidate that seems somewhat outside the scope but may bring diverse experience and perspective to the role).

¹⁵ Male Champions of Change. (2019) 40:40:20 For gender balance. Available from: <https://championsofchangecoalition.org/reports-and-resources/40-40-20-talent-processes-toolkit/>.

¹⁶ Herminia Ibarra (2019) A Lack of Sponsorship Is Keeping Women from Advancing into Leadership, Harvard Business Review. Available from: <https://hbr.org/2019/08/a-lack-of-sponsorship-is-keeping-women-from-advancing-into-leadership>

psychosocial support of mentoring. While mentoring has been found to improve qualitative outcomes, particularly self-belief in women, it is sponsorship that improves objective career outcomes such as promotions and pay increases.¹⁷

Proactive sponsorship can also help alleviate some of the issues women typically face in advancing in STEM, including the backlash effect women face when they advocate for themselves and exclusion from influential networks. Similarly, visible sponsorship and public leadership backing of women appointed into senior roles can help avoid teams making gender-based judgements on capability and preferential treatment.

There are numerous ways to approach sponsorship programs, with the right design heavily dependent on individual organisational context. Organisations will typically need to:

- **Ensure leaders are accountable for the sponsorship of women** by linking accountability to talent management through succession, or performance assessment as a KPI.
- **Plan their sponsorship program** – formal and informal sponsorship programs each have differing outcomes and suit different organisations. Formal programs require thoughtful pairing of emerging and senior leaders, whereas informal sponsor relationships tend to grow in workplaces that actively encourage and reward sponsorship of women.
- **Provide support, resources and training** to those who wish to explore sponsor relationships.
- **Clearly articulate the aims of the sponsorship program**, linking them to strategy and business imperatives to stimulate buy-in.

One ASX 50 business with extensive technical talent (mostly men) ended their women's mentoring program after thorough review. They interrogated seven years of data, comparing the retention and promotion rates of women who participated in the program and those who did not. The team concluded that the program made no discernible difference — neither set of women were being promoted. The business concluded that the mentoring program was making leaders comfortable that they were moving the needle, when in fact the data showed otherwise. STEM organisations should interrogate the impact of their mentoring programs and whether they need to shift their focus to sponsorship.



3. Get the basics in place, as other sectors have done

STEM organisations should make sure they have foundational gender equality measures in place. STEM sectors have fallen behind many others when it comes to implementing the 'basics' of gender equality. Or when the basics are there, few leaders role model their application.

Roundtable participants shared that many of their organisations lacked basic structures and policies to ensure an equal and inclusive work environment, which would be considered a minimum requirement in other sectors. Without the basics in place, it is difficult to credibly argue that your organisation is committed maximising women's participation and advancement.



STEM's attitudes on gender equality feel immature and uncoordinated – stuck 10 years in the past – compared to other sectors. We need to draw on what others have done or we'll keep losing talent to industries where women know they will be able to advance.

- Tech executive experienced in energy and real estate sectors

As a start, organisations should: use inclusive language in job advertisements; take readily available steps towards closing the gender pay gap; implement comprehensive bullying and harassment policies; and promote flexible work and shared care arrangements to all. Leaders should be encouraged and recognised for behaviours that show strong support for these policies and their uptake within their teams. And should have targets for senior executive teams

Pay equity

STEM organisations should urgently identify, and address pay inequity. Organisations should conduct gender gap pay audits and rectify any pay differentials outside legitimate factors (i.e., experience, education, training) through remediation, before addressing the operational gaps that led to salary discrepancies that build up across a career path.

¹⁷ Kammeyer-Mueller, J. D. and Judge, T. A. (2008), A quantitative review of mentoring research: Test of a model. Journal of Vocational Behavior 72: 269–283

While some level of pay transparency builds trust,¹⁸ without ongoing systematic monitoring a return to the status quo is inevitable. An example of this is where salary reviews, whether for market or internal equity, indicate the need to increase salaries. We heard that employees on unpaid leave are rarely included in such reviews, disproportionately disadvantaging women who tend to take more unpaid leave (e.g., maternity) and setting them back yet further and making it less financially attractive to return to the organisation.

As an industry, STEM has the largest gender pay gap in Australia. Women in the professional, technical, and scientific services industry earn an average of 25.3% less than men, compared to the national average of 14.2%.¹⁹ The difference in average earnings starts as early as graduate level for equally qualified candidates in STEM. Women graduates earn, 6.2% less in maths and science, 14.8% less in computing, 16.7% less in engineering, and 19.7% less in agricultural and environmental science than equally qualified men straight out of university,²⁰ despite comparable qualifications. These initial pay gaps can then compound as women advance toward leadership.

Prevailing wisdom indicates that the wage gap occurs because women don't ask for as much money or responsibility as men when seeking promotion, that they lack confidence, or they have made "career-limiting moves" along the way. However, recent studies have confidently refuted these notions, instead indicating that women managers are undermined by being given smaller roles than their male counterparts which snowballs over time.²¹

Bullying and harassment policies in place

Harassment and bullying based on gender are particularly pervasive in STEM. Half of the women in Australian STEM workplaces have faced sexual harassment during their careers,²² and 40% of women in STEM report being bullied, with a quarter of those leaving their workplace as a result.²³

Many roundtable participants felt that their organisations did not have adequate policies for addressing reported instances of harassment and bullying in the workplace. Where STEM organisations do not have comprehensive policies and procedures to address bullying and harassment, they should implement or improve them as a matter of urgency. Roundtable participants agreed that these policies need to include clear consequences for transgressions and accountability measures for leaders.

This area is one where roundtable participants especially noted that STEM sectors in Australia seem to be lagging the now-standard practices of other sectors.

Inclusive language

STEM organisations should review job advertisements, performance evaluation, and promotion criteria for non-inclusive or gendered language.

Non-inclusive, gendered language hinders women's advancement in STEM — and in the case of job advertisements — discourages women from applying. Job advertisements in fields that have predominantly men in senior roles, for example computer science, are more likely to include words associated with masculine stereotypes such as 'leader', 'competitive', and 'dominant'.²⁴ The higher the number of masculine attributed words, the fewer women apply.²⁵

¹⁸ Barnard-Bahn, A. *How to Identify — and Fix — Pay Inequality at Your Company*, Harvard Business Review. Available from : <https://hbr.org/2020/11/how-to-identify-and-fix-pay-inequality-at-your-company>

¹⁹ Workplace Gender Equality Agency, *Australia's Gender Pay Gap Statistics*, Workplace Gender Equality Agency; 2021. Available from: <https://www.wgea.gov.au/publications/australias-gender-pay-gap-statistics>

²⁰ Workplace Gender Equality Agency. *Higher education enrolments and graduate labour market statistics*. February 2. Workplace Gender Equality Agency; 2018. Available from: <https://www.wgea.gov.au/sites/default/files/graduate-labour-market-statistics.pdf>

²¹ Kray, L. and Lee, M. *The Pay Gap for Women Starts With a Responsibility Gap*, The Wall Street Journal, 14 October, 2021. Available at : <https://www.wsj.com/articles/the-pay-gap-for-women-starts-with-a-responsibility-gap-11634224762>

²² Science and Technology Australia. *Submission to the Human Rights Commission inquiry into sexual harassment in Australian workplaces*. 2019. Available from: <https://scienceandtechnologyaustralia.org.au/wp-content/uploads/2019/02/STA-Submission-Sexual-harassment-in-the-workplace-.pdf>

²³ Professionals Australia. *Gender segregation in the STEM professions*. 2017. Available from: <http://www.professionalsaustralia.org.au/professional-women/wp-content/uploads/sites/48/2014/03/Gender-segregation-in-the-STEM-professions-submission.pdf>

²⁴ Gaucher D, Friesen J, Kay AC. *Evidence that gendered wording in job advertisements exists and sustains gender inequality*. J Pers Soc Psychol. 2011;101(1):109–28.

²⁵ Evans T. *Tackling the gender gap in the technology sector*. Seek. 2016. Available from: <https://insightsresources.seek.com.au/tackling-gender-gap-technology-sector>

Removing these gendered expectations of women before they start is a simple but impactful step.

Flexibility for all, regularly taken up by leaders

STEM organisations should offer and promote flexibility to all employees, regardless of gender, to retain and advance women in line with advances in other sectors. Indeed, 51% of employees considered flexibility to be the most effective intervention for increasing gender diversity across all industries worldwide²⁶. STEM organisations are behind other sectors, with far fewer men than women accessing carer's leave and flexible working arrangements.²⁷

Entrenched stereotypes remain a barrier to gender equality in STEM, partly rooted in the expectation that women are the primary caregivers and a perception that caregiving will detract from a woman's ability to give sufficient focus to the role to advance to greater leadership responsibility.

Numerous roundtable participants said that when organisations encouraged the use of flexible arrangements for men and for women, and supported leaders to adopt flex arrangements themselves, it helped address the stigma of flexible work and increased uptake. Measures could include offering flexible work arrangements, creating part-time or job-share positions, destigmatising career breaks, and setting targets for uptake of these options among men.

Across sectors, COVID made visible the challenges people face in integrating work and caring responsibilities. STEM industries have opportunity now to more fully embrace the reality that employees have responsibilities outside employment, acknowledging that shared caring responsibilities more typically fall to women. And recognising, as research shows, that these responsibilities don't make women any less committed to their career.²⁸

Roundtable participants were adamant that flexibility and shared care must be modelled from the top otherwise it is viewed as a risk for employees. Internal campaigns promoting senior leaders, men and women, who have used flexible working arrangements and parental leave entitlements will help normalise and destigmatise flexibility.



4. Make leaders accountable for the retention and promotion of women on their teams

Beyond introducing clear targets for the retention and advancement of women, organisations should hold senior leaders accountable for achieving them, with visibility of progress for the executive team.

Setting targets for gender balance, disaggregated by area of the business and seniority was recognised as essential by senior leaders at the roundtables, but these targets must "have teeth". This view echoes the findings of the broader [2021 CEW Senior Executive Census](#), which highlighted the need for gender diversity executive leadership targets. Have KPIs linked to gender-balanced retention and promotion targets in senior performance reviews and make progress against these targets visible in the organisation. Research by BCG shows that holding senior leaders accountable to the CEO for specific diversity metrics is known to drive increases in the share of women in the senior leadership team.²⁹

There are many mechanisms an organisation can implement to achieve this accountability, what works will be highly dependent on their individual context. One mechanism that can be applied near universally is transparent succession planning that sees leaders held responsible for mid-level women's progression. Roundtable participants shared that in some STEM organisations, as prospective leaders advanced, they were shepherded into 'feeder roles' prior to major leadership roles for which they would be "ready in two years." Men were routinely promoted in line with succession plans, whereas women were routinely told they did not meet the criteria for promotion, they weren't quite ready for the role, or the business wasn't ready for a woman in the role. They found themselves languishing in that two-year role for five years.



Women are languishing in the 'ready in two years' roles for five or more years while the men around them are promoted.

- Australia/New Zealand GM, software company

²⁶ Garcia-Alonso J., Krentz M., Tracey C., and Tsusaka M. (2017) *Getting the Most from Your Diversity Dollars*, Boston Consulting Group. Available from: <https://www.bcg.com/publications/2017/people-organization-behavior-culture-getting-the-most-from-diversity-dollars>

²⁷ Australian Academy of Science. (2019) *Women in STEM Decadal Plan* (Australian Academy of Science). Available from: www.science.org.au/womeninSTEMplan.

²⁸ Professionals Australia. (2021) *Women Staying the STEM Workforce*

²⁹ Garcia-Alonso J., Krentz M., Tracey C., and Tsusaka M. (2017) *Getting the Most from Your Diversity Dollars*, Boston Consulting Group. Available from: <https://www.bcg.com/publications/2017/people-organization-behavior-culture-getting-the-most-from-diversity-dollars>

One ASX 50 STEM company verified that on average women spend longer in each 'feeder role' than men. Using leading indicators, they determined that that gender was the driver, largely due to the bias that women were not capable in operational roles. Yet teams with more equal gender balance routinely outperformed less balanced teams. To increase women in leadership roles organisations must educate leaders on these biases and make progression a shared responsibility between manager and employee.

To see results, organisations must also ensure furthering women's leadership is tied to material consequences and reward. Roundtable participants shared this was so far uncommon in their organisations, but instances where it did occur had been effective. Beyond targets and succession planning, other mechanisms that senior women in STEM identified as effective to better incentivise gender-balanced career advancement include:

- Set a review of gender equity performance in retention and promotion to senior roles as a standing agenda topic for the executive team and Board
- Recognise leaders who promote inclusivity and visibly back women in leadership roles, with expectations that leadership progression requires demonstrated efforts to support women to advance into leadership ranks
- Financially incentivise leaders for achieving gender diversity targets.

5. Create pathways to draw on your existing talent

For women to equitably progress into leadership roles, **STEM organisations need more clear pathways for women in untapped talent pools to return to or move into STEM leadership roles.** Accessing existing talent pools will help organisations meet the insatiable demand for STEM skills, but will not occur without specific initiatives to do so. Roundtable participants saw two internal talent pools that businesses should draw on to increase the representation of women in senior roles.

First, STEM organisations must address the exodus of women from technical roles by providing opportunity and support for those who wish to return after shifting into non-technical roles. Participants observed that many women with technical skills had taken leadership roles in non-technical or non-P&L parts of the business. There were various reasons why women were pursuing these opportunities. Many participants had been or seen mid-level women drawn into support roles when they required additional flexibility in their career with the intention to return to a technical role later. Others had taken what felt like a rare opportunity for a leadership role, even if wasn't in the technical or P&L part of the business. Many of these women struggled to return to the technical parts of the business. Roundtable participants noted that STEM organisations that were proactive at drawing back



technically-skilled women who had taken these alternate roles found it a successful and efficient way to increase leadership gender balance.

Open career planning discussions between emerging leaders and their managers were cited as a simple but effective method to help build a path for women back into technical roles. Roundtable participants expressed that these do not routinely occur as women approach senior levels in STEM. When these women had open career planning discussions, it promoted continued interaction with technical and line leaders and increased their chances of returning. Senior executives similarly reported great value in undertaking these discussions with their reports, as it allowed them to better guide and sponsor them.

Second, STEM organisations should consider and proactively prepare women in middle-level and leadership roles in non-technical parts of the business to consider technical and P&L leadership roles. Candidates without deep technical expertise can be highly effective leaders of STEM teams. For example, women entrepreneurs who founded successful technology start-ups may not know how to code, but they know how to manage projects and talent in that realm, making them attractive hires³⁰. Having technical expertise as a prerequisite restricts the pool of candidates, can inadvertently exacerbate gender bias, and may exclude from consideration the most effective leaders. Women also disproportionately perceive technical skills as important in advancement in STEM – with 23% citing advanced technical skills as the most important factor in their success, versus just 13% of men.³¹ This perception may be restricting the supply of women applicants, fuelling the trends that are driven by bias in recruitment into senior roles.

STEM organisations can proactively seek to recruit more non-technical talent to apply for leadership roles, including from outside their organisation, seeking people with a proven track record of learning new skills, rather than only considering people with demonstrated technical excellence. They can do this by changing the position description, selection criteria, interview questions and selection process to focus less on existing technical expertise and more on leadership ability and willingness to learn. Businesses can expand the pipeline by looking to a broader talent pool who have demonstrated these skills in other sectors and who can transition into STEM sectors.

To effectively draw both pools of women into technical leadership roles, STEM organisations need to make it worth the financial and career risk to women, and destigmatise such moves among technical and P&L leaders. They must ensure there is continued support for these women to develop and advance within the organisation once they are there. Roundtable participants voiced there was little point drawing women into technical / P&L leadership roles if significant barriers to advancing remained, as women will opt back out into leadership roles in businesses where they can put more of their time into their role, instead of into combatting the day-to-day hostility and exclusion.

STEM organisations must also develop mechanisms to plan with, re-skill, re-integrate, and retain women over the long-term. They should offer training, re-skilling, and return-to-work programs for their existing talent – both with and without technical work experience. The Australian mining sector was commended during the roundtables as having made impressive advancements in this area. At one company, mid-career women who are advancing in support roles are routinely offered the opportunity to gain technical skills while retaining their salaries. This supports women to move into technical roles and helps the company to tap into existing talent.



6. Reflect women's lived experiences to tailor initiatives to your business

Organisations should promote policies and mechanisms that help leaders gain a greater understanding of women's experiences in their business, so they are better able to understand the need for change and have confidence in investing behind initiatives that are more likely to be successful in encouraging women to stay and advance their career in the organisation.

Many roundtable participants felt that while men who are leaders in STEM often recognise there is a lack of gender equality and are willing to support the advancement of women, they often struggle to fully comprehend the issues that women face in STEM careers, and are often surprised to learn from women what their day-to-day experiences are like in their business. And women don't always feel able to raise these issues.

³⁰ Krentz M., Tsusaka M., Ziegler B., and Brooks Taplett F. (2018) *Winning the Race for Women in Digital*, Boston Consulting Group. Available from: <https://www.bcg.com/publications/2018/winning-race-women-digital>

³¹ Awad N., Hennesy A., and Kim Morse C. (2021) *Learning from Women Who've Made It to the Top in Tech*, Boston Consulting Group. Available from: <https://www.bcg.com/de-de/publications/2021/benefits-of-women-in-tech>

Roundtable participants showed particular enthusiasm for three actions that can help men gain a greater depth of understanding of what women are experiencing as they develop in the organisation. Men who experienced these kinds of initiatives said they gained eye-opening realisations that resulted in them pushing for changed practices in their organisation. Such actions are:

- **Promote a better understanding of the impact bullying and harassment has on individuals.** This could be by allowing senior men to hear from women when they experienced harassment. Sharing these stories, within boundaries of confidentiality, supports senior leaders to comprehend the personal impacts of these experiences and to notice the systemic patterns of bullying and harassment in their organisation, rather than relegating them to “clinical” HR resolution. Organisations can also draw on the [Respect Is Everyone's Business](#) toolkit developed by CEW. These resources are designed to help facilitate conversations at leadership tables around the country to drive commitment and focus on eradicating sexual harassment in the workplace. The toolkit includes guidance to support a range of outcomes, like how to navigate potential resistance, how to initiate appropriate action, effective communication and how to report on progress.
- **Go on a leadership ‘listening tour’** to learn from more mid-level women in the absence of women in leadership positions. Listening to the women in the talent pipeline on what has or could make a difference to their experience as a woman in the business provides leadership with perspectives and suggestions that may not have otherwise been heard. For example, one large data science organisation used this approach and as a result changed their teaming model to address the isolation women consistently mentioned when staffed as the only woman on a project.
- **Introduce a ‘devil’s advocate’ role in cohort performance evaluations** to call out gender bias. Having a member of the leadership team call out potentially gendered language or perspectives quickly creates awareness of potential bias and its impact on the progression of women into leadership.

Once there are safe spaces for women to raise issues and senior leaders have gained a deeper understanding of women’s lived experiences, they should use this understanding to inform the right initiatives and pursue them.



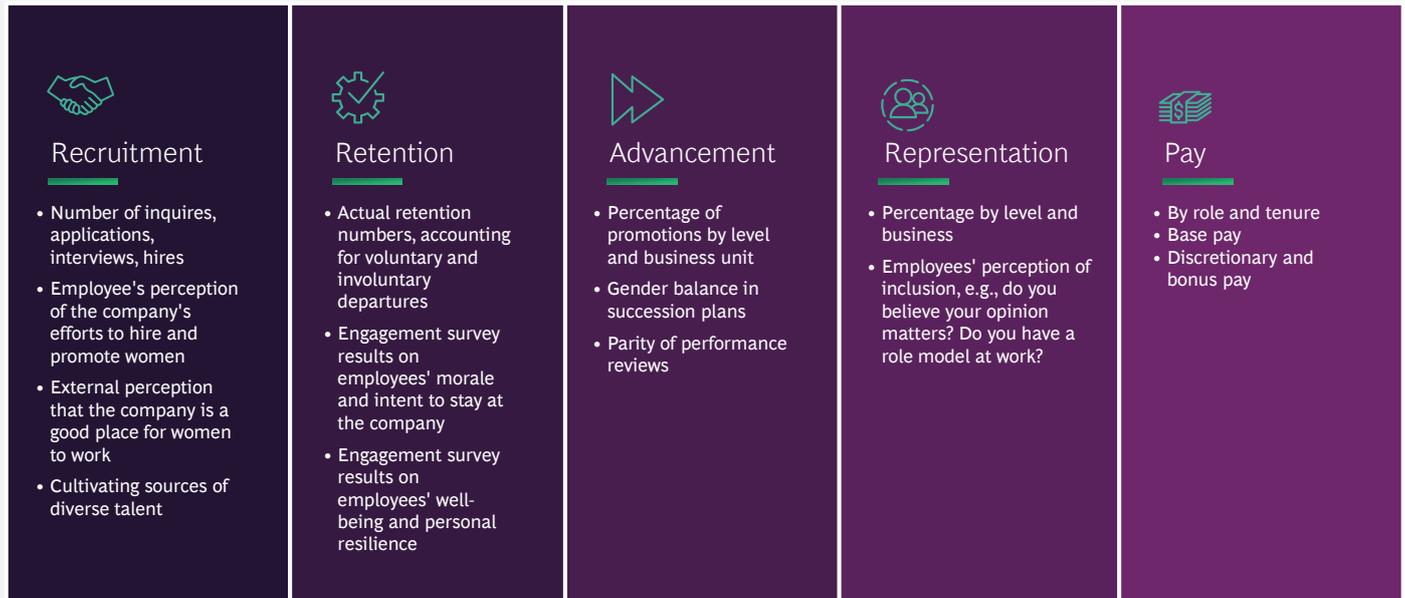
7. Measure, evaluate, and report on gender data to inform the right actions in the right areas

Organisations need data-driven gender equality programs that systematically identify and address the challenges of attracting, retaining, and advancing women into STEM leadership roles.

Roundtable participants shared that their STEM organisations seldom had gender equality programs that took an end-to-end approach, and many did not collect, analyse and report gender balance data. While some organisations collect data on gender balance, these are not always evaluated separately in technical and non-technical parts of the business by metric, masking differences for women in technical roles. Even fewer organisations have mechanisms to systematically evaluate initiative impact on outcomes, instead of just tracking the existence of initiatives.

Participants saw STEM organisations that took a data-driven, holistic approach as more “serious” about gender. They noted that other sectors approach gender equality in a more systematic manner, more likely to have developed a comprehensive set of interventions across the business. These senior women know that women in STEM are attuned to whether their organisations are treating gender balance “like any STEM problem” they’d measure, analyse and address. Organisations that take the issue seriously and are seen as proactive in taking action to improve gender balance at leadership levels are better able to attract and retain women in the critical mid-level and senior roles.

STEM organisations need to track data on relevant gender equality targets and indicators, measuring and sharing progress and initiative success against these goals. To have effective gender equality programs, STEM organisations should methodically collect data, analyse it, and report on it at senior levels. However, roundtable participants saw that many major STEM organisations were failing to leverage sufficiently disaggregated data or mechanisms to assess the performance of their gender equality programs. Relying only on sentiment (how are women feeling about existing initiatives) or only reporting the existence of initiatives (vs effectiveness) was seen as insufficient to convince data-driven senior leaders about what works and what matters. One senior executive suggested: “Get the hard stats in front of them, since that’s how leaders in STEM make decisions! If we did that, it would be clear where we haven’t made progress. These data about our talent pipeline and outcomes exist in our business but we don’t do the work to use them.”



Source: BCG's Diversity and Inclusion Assessment for Leadership (DIAL) tool

Organisations must urgently ensure they are collecting the right data, consistently measuring progress, and identifying and reporting on areas that require additional attention. STEM organisations looking to improve gender equality in leadership need targets and metrics across the talent journey in their organisation: from recruitment, retention, advancement, representation and pay³² for middle and senior leader roles.

Currently senior women report that even when organisations did routinely examine gender-balance data on their leadership pipeline, fewer organisations then used these data to evaluate initiative impact on success in advancing more women into leadership roles. Where this did occur, roundtable participants said leaders found such evaluation increased executive confidence in continuing to pursue and adapt these actions.



Conclusion



Women must play a powerful role in the building of STEM industries in our economy - but we know there are systemic blockages to women's pathways to leadership. We repeatedly heard women in STEM saying "all the men get the cool jobs – the women get missed out". They identify the heart of the issue, that there are ingrained values, beliefs and culture that work to prevent women from having equal career opportunities. It is critical that we address these fundamental issues so that we support women's participation and progress in STEM and ensure the economic success of these industries as a result.

- Sam Mostyn AO, President CEW

If Australia is to realise the full potential of its STEM talent, organisations must address – with urgency – the lack of women leaders. There is much to be done to address gender inequality in STEM that prevents women from choosing to stay and advance into leadership roles. Organisations need to address it using the manner any trained scientist, technologist, engineer or mathematician would apply to solve a problem: try likely approaches, collect data, analyse it, determine what is working or not and iterate reflecting the evidence.

Given the national imperative to unlock the full potential of STEM as an engine of our economy and the innovation, opportunity and motivation to further gender equality, the future can be bright if organisations put into action the needed changes, starting from what is known to work.

³² Boston Consulting Group. (2022) *Measuring Diversity and Inclusion*. Available from: <https://www.bcg.com/capabilities/diversity-inclusion/measuring-diversity-equity-inclusion>

Resources to Get Started

For organisations that are looking for practical advice, tools and resources, there are many options available. These include:

The Office of the Women in STEM Ambassador has developed [a guide and toolkit to evaluate the effectiveness of gender equity programs in STEM organisations](#). And in 2022 will launch the STEM Equity Evaluation Portal, an evaluation planning and reporting tool and repository of program evaluations.

Further resources on gender balanced leadership in STEM include:

- [Programs to unlock women's leadership through STEM skills](#) – from the Women's Forum for the Economy & Society, supported by knowledge partner BCG
- [Commitments to Achieve Gender Equity in the Digital Economy](#) and a [Discussion Guide for Leaders](#) – from the Champions of Change STEM Group
- The [STEM Equity Monitor](#) on gender equality indicators – from WGEA

Resources on advancing women's leadership

- [2021 CEW Senior Executive Census](#) on the representation of women in ASX300 in Senior Executive Teams
- [Best practices to empower women to lead](#) – from the G20 EMPOWER, supported by knowledge partner BCG

Resources supporting gender equality in talent development include:

- How to tackle bias in hiring, promotions and decision-making: [In the Eye of the Beholder: Avoiding the Merit Trap](#) – from CEW and Champions for Change
- A tool for benchmarking within and across industries and geographies: [Diversity and Inclusion Assessment for Leadership \(DIAL\)](#) – from BCG
- [How to design gender diversity programs that better meet employee needs in the post-pandemic world](#) – from BCG

Resources on preventing and responding to sexual harassment in the workplace include:

- [Respect is Everyone's Business](#) – report and resources from CEW
- [Disrupting the System](#) – report and resources from Champions of Change
- [Workplace safety guidance about online abuse](#) – from eSafety and SafeWork Australia

Resources on leading practices to support flexibility include:

- [Accelerating Change on Flexible Ways of Working](#) – from Champions of Change
- [Equitable Flexibility: Reshaping our Workforce](#) and [Flex for Success: Five Practices that Build a Flexible Workforce](#) – from CEW and Bain & Company
- [Resources for executives to lead an organisation toward a successful flexible working environment](#) – from WGEA

Resources on pay gap analysis include:

- Understanding [Australia's gender pay gap](#) - WGEA
- How to [conduct a gender pay gap analysis](#) – from Champions of Change

Thank you to Sarah Thom and BCG for your support of this thought-provoking report. We hope it sparks conversations and action across Australia.