UNIVERSITY OF CAMBRIDGE

Cambridge Industrial Innovation Policy

IfM|Engage

Women in Manufacturing

Women in UK Manufacturing 2024: Addressing labour shortages and bridging the gender gap

A review of best practices for diversity and inclusion

About this report

The *Women in UK Manufacturing 2024* report presents an overview of the progress and challenges encountered by women participating in UK manufacturing over the past year. This edition specifically addresses two of the most pressing challenges faced by the industry: labour shortages and the gender gap. It offers evidence-based insights into how diversity and inclusion initiatives can help to tackle these issues, providing a framework for fostering a more inclusive and diverse industry. This report was funded by IfM Engage and Cambridge Industrial Innovation Policy in support of the Women in Manufacturing UK initiative.

Contributors

Authors: Jennifer Castañeda-Navarrete, Zoi Roupakia, Viktória Döme and Guendalina Anzolin

IfM Engage, Institute for Manufacturing, University of Cambridge

Copy-editing by Amanda George, Perfect Words

Stakeholder management: Ella Whellams, Kate Willsher, IfM Engage, Institute for Manufacturing, University of Cambridge; and Lorelei Gherman, Innovate UK Business Connect

Cover design by Ella Whellams, IfM Engage, Institute for Manufacturing, University of Cambridge

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Contents

Foreword

The manufacturing sector is experiencing times of great uncertainty and challenge, driven by digitalisation, the skills shortage, and the need to become a net-zero economy. Amidst these changes, the role of women in manufacturing presents a timely opportunity and solution.

We hope this report inspires meaningful actions and dialogue, encouraging all stakeholders to actively engage in changing the perception of women's roles in manufacturing, and building a more inclusive and equitable future for the manufacturing industry.

In this context, the Women in Manufacturing UK Initiative (WiM UK), launched in 2022, has emerged as an important force for advancing an inclusive manufacturing environment. WiM UK is committed to increasing women's participation in manufacturing to 35% by 2035. Achieving this goal would unlock the potential of over 200,000 women, helping to address labour shortages and drive the growth of the industry.

As the manufacturing industry navigates this new era, it is crucial to recognise that diversity and inclusion are not just ethical considerations but also business and societal imperatives. Although significant strides have been made toward creating more inclusive and diverse work environments, the underrepresentation of women remains a pressing challenge. Women bring unique perspectives, innovative ideas, and valuable skills that are vital to driving the future of manufacturing. Cultivating an inclusive culture that embraces gender diversity enhances productivity, resilience, creativity, and growth. Commitment to inclusion is crucial for unlocking the sector's full potential.

This report offers a comprehensive overview of the experiences of women in UK manufacturing over the past year. It uses enlightening case studies to highlight a framework for promoting equality, diversity, and inclusion within the industry, encompassing businesses of all sizes, industry trade associations, and broader industrial strategies. The report serves as a call to action for all stakeholders and provides tangible examples of best practices for manufacturers to implement.

We extend our gratitude to all contributors and stakeholders whose insights and experiences have contributed to this report and have been instrumental in shaping this comprehensive understanding.

As we move forward, let us commit to fostering an inclusive, dynamic and sustainable manufacturing sector where everyone, regardless of gender, can thrive and contribute to our collective success.

Women in Manufacturing Industry Advisory Board

Executive summary

Gender disparities persist in the participation of women in manufacturing, with little change observed over the past year. Despite women making up approximately half of the UK's working population, they represent only 26.1% of the manufacturing workforce.[1] Recognising this gap, the Institute for Manufacturing (IfM), the High Value Manufacturing Catapult, and Innovate UK established the Women in Manufacturing UK initiative (WiM UK).

WiM UK is a network of professionals united by a shared commitment to increasing diversity and inclusion in the manufacturing sector. Established in 2022, WiM UK aims to raise women's participation in manufacturing to 35% by 2035. This report forms part of our efforts to raise awareness of the gender gaps in manufacturing and to offer actionable insights for businesses, industry associations and the government to improve diversity and inclusion within the sector.

The *Women in UK Manufacturing 2024* report presents an overview of the progress and challenges encountered by women participating in UK manufacturing over the past year. This edition specifically addresses two of the most pressing challenges faced by the industry: labour shortages and the gender gap. It offers evidence-based insights into how diversity and inclusion initiatives can help to tackle these issues, providing a framework for fostering a more inclusive and diverse industry.

Key findings of the annual review

- Little progress made in women's representation in the past year. Between December 2022 and December 2023, minimal progress was observed, with a slight increase in women's participation from 25.9% to 26.1%.[2]

- Mixed progress by occupation. While small gains were made in skilled trades, and managerial and senior official roles, there was a significant decline in women's representation in professional occupations. In 2023 women's presence in skilled trades, including roles such as electricians, welders and upholsterers, increased by 1.5 percentage points, and among managers and senior officials it increased by 1.3 percentage points. However, their participation in professional occupations, such as engineering, IT, marketing and finance professionals, fell by 4.4 percentage points, and in process, plant and machine operative roles, it decreased by 1.9 percentage points (Figure ES1).[3]

- Rising part-time roles highlight a persistent gender divide in unpaid work. In March 2024 women spent 50% more time on unpaid childcare, adult care and household work than men – a pattern unchanged in recent years.[4] This traditional gender-based division of unpaid work makes women more likely to work part-time than men. In December 2023, 26.2% of women in manufacturing worked part-time, compared to only 6% of men, marking a 2-percentage-point increase from December 2022.[5]

- Narrowing the gender pay gap. While the gender pay gap in manufacturing is narrowing, women still earn 15.9% less than men. This is an improvement from the 16.7% gap observed

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[1] Office for National Statistics, ONS (2024). *Workforce jobs by industry (SIC 2007) and sex – unadjusted*.
[2] Ibid.
[3] ONS (2024). *Annual population survey. Workplace analysis*. These occupations are based on ONS Standard Occupational Classification (SOC) 2020.
[4] ONS (2024). *Online Time-Use Survey (OTUS)*.
[5] ONS (2024). *Workforce jobs by industry (SIC 2007) and sex – unadjusted*.

in 2022 but remains higher than the 14.3% gap across the entire UK economy.[6] Among full-time roles, the gender pay gap stood at 13.4%, nearly double the 7.7% gap seen across all sectors, although lower than the 14.8% gap in 2022.[7]

- The UK lags behind other leading manufacturing countries in women's participation. Among the top 15 global manufacturing leaders, the UK ranks last, with countries such as Indonesia, Mexico and China leading in this area, and India experiencing significant improvements in women's participation in the sector.[8]
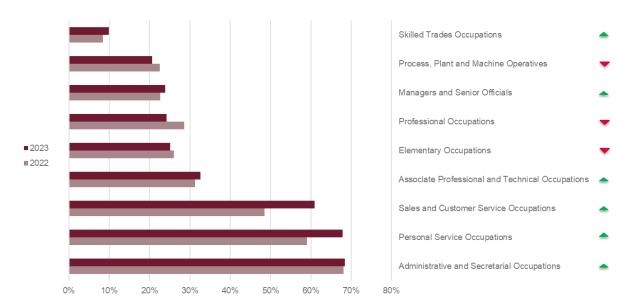
FIGURE ES1. WOMEN'S SHARE IN MANUFACTURING BY OCCUPATION, 2022 AND 2023

Source: Office for National Statistics (2024). *Annual population survey*. *Workplace analysis*. Occupations based on ONS Standard Occupational Classification (SOC) 2020.

Tackling labour shortages and employee retention

In the last quarter of 2023, the number of vacancies in manufacturing stood at 65,000, a notable decrease from the peak of over 90,000 vacancies observed in 2022.[9] Despite this improvement, manufacturers continue to face challenges finding workers with both traditional and advanced skills.

A critical aspect of this challenge is the sector's difficulty both attracting and retaining women. Women's participation rates tend to decline after their 30s,[10] when they also encounter wider gender pay gaps (Figure ES2).[11]

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[6] Difference between average hourly earnings (excluding overtime) of men and women as a proportion of men's average hourly earnings (excluding overtime), based on median values.
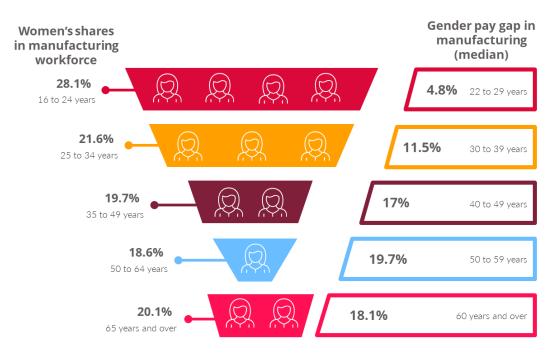[7] ONS (2024). *Annual Survey of Hours and Earnings*.
[8] International Labour Organization (2024). *ILOSTAT explorer*; National Bureau of Statistics of China (2023). *China Population and Employment Statistics Yearbook*.
[9] ONS (2024). *VACS02 Vacancies by industry*.
[10] ONS (2024). *Census 2021*.
[11] ONS (2024). *Annual Survey of Hours and Earnings*.

FIGURE ES2. THE LEAKING PIPELINE OF WOMEN IN MANUFACTURING

Women's shares in manufacturing workforce | Gender pay gap in manufacturing (median)

- 28.1% — 16 to 24 years | 4.8% — 22 to 29 years
- 21.6% — 25 to 34 years | 11.5% — 30 to 39 years
- 19.7% — 35 to 49 years | 17% — 40 to 49 years
- 18.6% — 50 to 64 years | 19.7% — 50 to 59 years
- 20.1% — 65 years and over | 18.1% — 60 years and over

Note: Women's shares in the manufacturing workforce by age correspond to March 2021, while data on pay gap corresponds to 2023.

Source: Authors, based on data from Office for National Statistics, ONS (2024). *Annual Survey of Hours and Earnings*; Office for National Statistics, ONS (2024). *Census 2021*.

While information on workers who have left the manufacturing sector is limited, data reveals that the largest opportunities for improving retention are found in shop-floor-related roles and associate professional and professional roles. These are also the roles where gender pay gaps tend to be larger.[12]

Between 2011 and 2022 women most frequently left manufacturing from administrative roles, sales and marketing positions, assemblers and routine operatives and related roles, functional managers, and science, engineering and production technician positions. For men, common transitions occurred from shop-floor-related roles, production management, and positions in engineering and information and technology.[13]

In terms of sectors, women were more likely to transition from manufacturing to activities such as wholesale and retail trade, human health and social work activities, professional, scientific and technical activities, and education. Men also tended to move to wholesale and retail trade and professional, scientific and technical activities, in addition to construction and transportation and storage.[14]

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[12] Ibid.
[13] University of Essex, Institute for Social and Economic Research (2023). *Understanding Society: Waves 1–13, 2009–2022*. 18th Edition. UK Data Service. SN: 6614, http://doi.org/10.5255/UKDA-SN-6614-19.
[14] Ibid.

Driving equality, diversity and inclusion in manufacturing

Drawing on consultations with more than thirty organisations, through interviews and an online survey, and an extensive review of best practices in the UK and internationally, we propose a framework for fostering an inclusive manufacturing industry with equal opportunities and a diverse workforce. The framework includes five equality, diversity and inclusion (EDI) principles for manufacturing companies, four principles for industry associations, and five specific recommendations for gender-responsive industrial strategies. It is further enriched by 14 case studies showcasing best practices across UK manufacturing organisations of various sizes and sectors (Figure ES3).

FIGURE ES3. PRINCIPLES FOR DIVERSITY AND INCLUSION IN MANUFACTURING

An inclusive manufacturing industry with equal opportunities and a diverse workforce

Principles for companies

Principle 1. Champion equality, diversity and inclusion in leadership.

Principle 2. Assess, track and report progress on equality, diversity and inclusion.

Principle 3. Foster an inclusive culture within the company and throughout the supply chain.

Principle 4. Promote a diverse talent pool and inclusive recruitment.

Principle 5. Adopt an inclusive approach to retention and promotion.

Principles for industry associations

Principle 1. Promote diversity and inclusion on boards.

Principle 2. Assess, track and report on the industry's progress on equality, diversity and inclusion.

Principle 3. Promote and champion equality, diversity and inclusion best practices.

Principle 4. Promote a diverse and inclusive image of manufacturing.

Key steps

- Commitment from leaders
- Assessment
- Participatory vision and targets
- Initiatives and engagement
- Monitor, report and review

Recommendations for a gender-responsive industrial strategy

Recommendation 1. Embed gender analysis and inclusive consultations in policy development.

Recommendation 2. Set gender equality targets and allocate adequate resources.

Recommendation 3. Incorporate a gender perspective throughout all programmes and projects.

Recommendation 4. Monitor and evaluate progress and review initiatives.

Recommendation 5. Collaborate with other ministries and agencies to address gender disparities.

Source: Authors, based on consultations and review of best practices.

A call to action: from principles to pledges

The business case for Equality, Diversity, and Inclusion (EDI) initiatives in UK manufacturing is clear as businesses face ongoing challenges related to skills shortages, driven by demographic shifts, technological advancements, and climate change action. Embracing diversity is key to attracting and retaining the skilled talent needed to maintain competitiveness and foster innovation.

According to Make UK, addressing the current vacancies in the manufacturing sector could boost the UK's GDP by an estimated £7 billion annually.[15] Although the impact of EDI initiatives is not always measured, a global survey by the International Labour Organization[16], covering nearly 13,000 enterprises, found that 57% reported improvements in business outcomes from such initiatives.

The Women in UK Manufacturing initiative invites all stakeholders – whether you are a large multinational corporation or a small enterprise –to engage with these principles, provide feedback and share your insights. Your input is invaluable in refining these guidelines to ensure they are practical, relevant and effective across the diverse landscape of UK manufacturing.

How to get involved:

- **Provide feedback:** Review the principles proposed in this report and share your thoughts on how they can be improved or adapted to better suit your organisation's needs.
- **Express interest in pledges:** If you are interested in developing tailored EDI pledges based on these principles, please reach out to us. We are eager to collaborate and support you in this endeavour.
- **Commit to action:** Once your pledges have been established, publicly commit to them and share your progress. This transparency will inspire others and help to build momentum towards a more inclusive and diverse manufacturing sector.

Together, we can turn these principles into actionable pledges that will shape the future of UK manufacturing. Let's work collaboratively to ensure that every company, regardless of size or sector, has the opportunity to contribute to – and benefit from – a more equitable and inclusive industry.

Please use this QR code to provide your feedback and express your interest in sharing EDI pledges aligned with these principles.

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[15] Make UK (2023). *Industrial Strategy: A Manufacturing Ambition*. London: Make UK. The Manufacturer's Organisation.
[16] International Labour Organization, ILO (2019). *The business case for change*. Geneva.

Introduction

Gender disparities persist in the participation of women in manufacturing, with little change observed over the past year. Despite women making up approximately half of the UK's working population, they represent only 26.1% of the manufacturing workforce. Recognising this gap, the Institute for Manufacturing (IfM), the High Value Manufacturing Catapult, and Innovate UK established the Women in Manufacturing UK initiative (WiM UK).[17]

WiM UK is a network of professionals united by a shared commitment to increasing diversity and inclusion in the manufacturing sector. Established in 2022, WiM UK aims to raise women's participation in manufacturing to 35% by 2035. This report forms part of our efforts to raise awareness of the gender gaps in manufacturing and to offer actionable insights for businesses, industry associations and the government to improve diversity and inclusion within the sector.

The *Women in UK Manufacturing 2024* report focuses on two of the most pressing challenges faced by the industry: labour shortages and the gender gap. This report provides evidence on how manufacturing struggles both to attract and retain women and other under-represented groups, and how improving diversity and inclusion can help to address these challenges.

Drawing on consultations, with more than thirty organisations, through interviews and an online survey, and an extensive review of best practices in the UK and internationally, we propose a framework for fostering an inclusive manufacturing industry with equal opportunities and a diverse workforce. The framework includes five equality, diversity and inclusion (EDI) principles for manufacturing companies, four principles for industry associations, and five specific recommendations for gender-responsive industrial strategies. It is further enriched by 14 case studies showcasing best practices across UK manufacturing organisations of various sizes and sectors.

This report is structured as follows:

- **Section 1** reviews the changes in women's participation in UK manufacturing over the past year, offering insights across regions, occupations, industries, ethnicity and disability. It examines the impact of the gender-based division of unpaid work on women's participation in part-time roles and pay gaps and compares the UK with leading manufacturing countries.
- **Section 2** discusses the labour shortages in the manufacturing sector and how improving employee retention could help to mitigate these issues. It provides information on the population groups and roles most likely to leave manufacturing and identifies the sectors to which these workers typically move.
- **Section 3** presents the framework for creating an inclusive manufacturing industry with equal opportunities and a diverse workforce, offering recommendations and examples for implementing these principles.
- **Section 4** concludes with a call to action, inviting stakeholders to refine these principles and use them as a foundation for actionable pledges tailored to the unique contexts of individual companies and industry associations.

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[17] Office for National Statistics, ONS (2024). *Workforce jobs by industry (SIC 2007) and sex – unadjusted*.

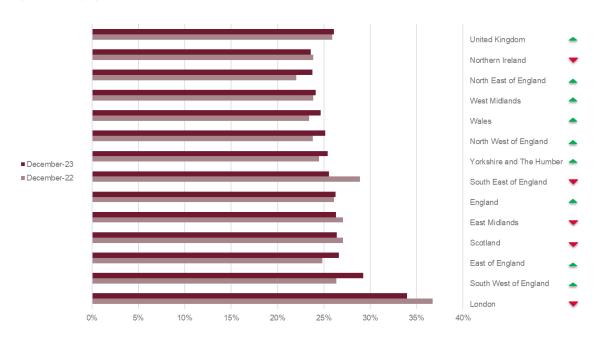# 1. Annual review: women's participation in UK manufacturing

Women represent 26.1% of the manufacturing workforce, with little progress made in the past year

Although women constitute approximately half of the UK's working population, they account for only 26.1% of the manufacturing workforce, around 680,000 in December 2023. Between December 2022 and December 2023, minimal progress was observed, with a slight increase in women's participation from 25.9% to 26.1%. However, since 2012 we have observed an upward trend.[18]

Across the UK's nations and regions, the most significant progress in women's participation occurred in the South West of England, where their share in the manufacturing workforce rose by 2.9 percentage points. This was followed by the East of England, with an increase of 1.8 percentage points, and the North East of England, with a rise of 1.7 percentage points.

In contrast, the largest setbacks were seen in the South East of England, where women's participation fell by 3.4 percentage points, and in London, where it decreased by 2.8 percentage points (Figure 1).[19] The South East of England and London are also the regions with the lowest shares of manufacturing value added in the UK.[20]

FIGURE 1. THE UK'S NATIONS AND REGIONS: WOMEN'S SHARE IN MANUFACTURING WORKFORCE, 2022 AND 2023

Source: Office for National Statistics (2024). *Workforce jobs by industry (SIC 2007) and sex – unadjusted*.

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[18] Office for National Statistics, ONS (2024). *Workforce jobs by industry (SIC 2007) and sex – unadjusted*.
[19] Ibid.
[20] Castañeda-Navarrete , J. (2023). *Women in manufacturing: the case for a gender-transformative digitalisation*.

Mixed progress in women's participation by occupation: small gains in skilled trades, managers and senior officials, but a large decline in professional occupations for women

In 2023 we observed progress in women's participation in some of the most male-dominated occupations within manufacturing. Women's representation in skilled trade occupations, including roles such as electricians, welders and upholsterers, increased by 1.5 percentage points in 2023 compared to 2022, while their presence among managers and senior officials rose by 1.3 percentage points.[21]

However, there is also a concerning decline in other areas. Women's participation in professional occupations, such as engineering, IT, marketing and finance professionals, fell by 4.4 percentage points, and in process, plant and machine operative roles it decreased by 1.9 percentage points.[22]

These findings align with those of a report published earlier this year by EngineeringUK, which highlighted a worrying decline in the percentage of women working in engineering and technology occupations, from 16.5% in 2022 to 15.7% in 2023. The report noted that while more women are entering these fields, organisations are struggling to retain them, particularly those aged 35 to 64.[23] We examine this issue further in Section 2.
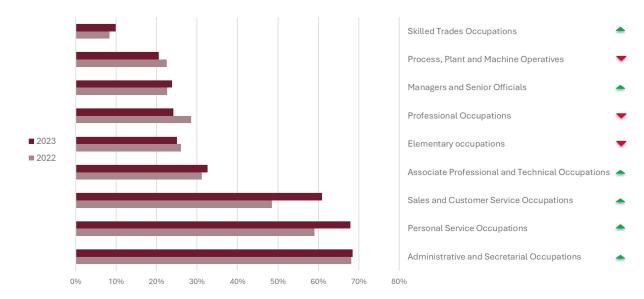
FIGURE 2. WOMEN'S SHARE IN MANUFACTURING BY OCCUPATION, 2022 AND 2023

Source: Office for National Statistics (2024). *Annual population survey*. *Workplace analysis*. Occupations based on ONS Standard Occupational Classification (SOC) 2020.

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[21] ONS (2024). *Annual population survey*. *Workplace analysis*. These occupations are based on ONS Standard Occupational Classification (SOC) 2020.
[22] Ibid.
[23] EngineeringUK (2024). *Women in Engineering and Technology*.

Women from non-White backgrounds and women with disabilities have not seen any progress in their representation in UK manufacturing

In 2023 less than 10% of women working in manufacturing were from a non-White ethnic group, a figure that was largely unchanged from 2022 (Figure 3).[24] Similarly, women with disabilities, as defined in the Equality Act 2010, represented 4.7% of the overall manufacturing workforce and 19.4% of the women in the sector, figures that did not change from 2022 (Figure 4).
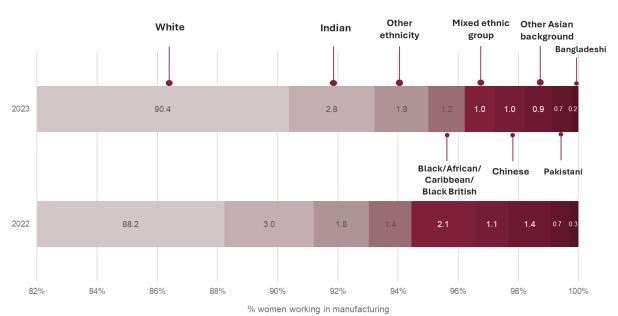
FIGURE 3. WOMEN IN MANUFACTURING BY ETHNIC GROUP, 2022 AND 2023

Source: Office for National Statistics (2024). *Annual Population Survey, January - December, 2023* [data collection]. UK Data Service. SN: 9248, DOI: http://doi.org/10.5255/UKDA-SN-9248-1

FIGURE 4. WOMEN IN MANUFACTURING BY DISABILITY, 2022 AND 2023

Source: Office for National Statistics (2024). *Annual Population Survey, January - December, 2023* [data collection]. UK Data Service. SN: 9248, DOI: http://doi.org/10.5255/UKDA-SN-9248-1

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[24] ONS (2024). *Annual Population Survey, January - December, 2023* [data collection]. UK Data Service. SN: 9248, DOI: http://doi.org/10.5255/UKDA-SN-9248-1
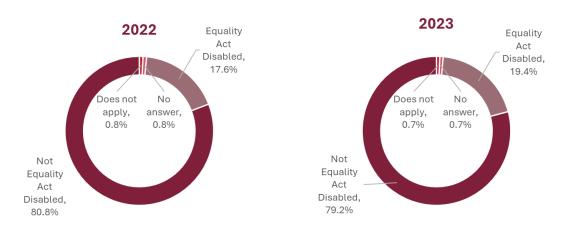
Traditional gendered division of labour persists across UK manufacturing industries
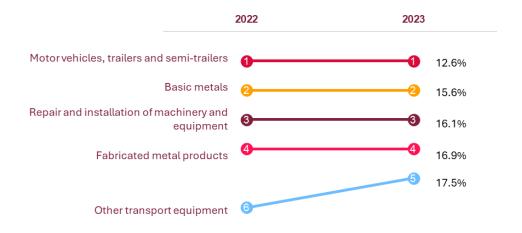
Little change has been observed in the participation of women across manufacturing industries over the past year. The lowest representation of women is found in: motor vehicles (12.6%), basic metals (15.6%), the repair and installation of machinery and equipment (16.1%), fabricated metal products, excluding machinery and equipment (16.9%) and other transport equipment (17.5%). In contrast, industries with near-equal gender participation include: wearing apparel (48.6%), textiles (44.5%), food products (37.6%), chemicals (40.3%) and pharmaceuticals (37.6%) (Figure 5).

FIGURE 5. PARTICIPATION OF WOMEN BY MANUFACTURING INDUSTRY, 2022 AND 2023

Note: Women's shares in total workforce.

Source: ILOSTAT. Employees by sex and economic activity – ISIC level 2.

Rising part-time roles highlight persistent gender divide in unpaid work

In March 2024 women spent 50% more time on unpaid childcare, adult care and household work than men, a pattern that has not changed in the last couple of years.[25] This traditional gender-based division of unpaid work makes women more likely to work part-time than men. In December 2023, 26.2% of the women in manufacturing worked part-time, compared to only 6% of men. This represents a 2-percentage-point increase in the proportion of women working part-time compared to December 2022.[26]

The gender pay gap in manufacturing is narrowing, but women still earn 15.9% less than men

In 2023 women in the manufacturing sector earned 15.9% less than men, an improvement from the 16.7% gender pay gap observed in 2022.[27] This value, however, is higher than the 14.3% gender pay gap across the entire UK economy. As discussed above, this is partly explained by an over-representation of women in part-time roles; however, pay gaps are also observed among full-time manufacturing workers. In 2023 the gender pay gap among full-time roles stood at 13.4%, nearly double the 7.7% gap observed across all sectors but lower than the 14.8% gap observed in 2022.[28]

Manufacturing industries with the largest gender pay gaps (where data is available) include: the manufacture of computer, electronic and optical products (30.3%); the repair and installation of machinery and equipment (19.2%); the manufacture of chemicals (19%); the manufacture of

[25] ONS (2024). *Online Time-Use Survey (OTUS)*.
[26] ONS (2024). *Workforce jobs by industry (SIC 2007) and sex – unadjusted*.
[27] Difference between average hourly earnings (excluding overtime) of men and women as a proportion of men's average hourly earnings (excluding overtime), based on median values.
[28] ONS (2024). *Annual Survey of Hours and Earnings*.

electrical equipment (19%); and the manufacture of motor vehicles, trailers and semitrailers (16.6%).[29]

By occupation, the largest gender pay gaps (where data is available) are observed in: business and public service associate professionals (24.3%); skilled trade occupations (20%); sales occupations (17.7%); and science, engineering and technology associate professionals (15.7%).[30]

Across UK industries the largest gender pay gaps are seen among workers aged 40 and above: 17% for those aged 40–49, 19.7% for those aged 50–59, and 18.1% for those aged 60 and above. In manufacturing the pay gaps are particularly pronounced for women aged 50–59 (21.2%) and those aged 60 and above (23.8%).[31]

The UK lags behind: Women's participation in manufacturing is the lowest among the top 15 global leaders

Comparing women's participation in manufacturing in the UK with that of the top 15 manufacturing countries globally, where data is available, the UK ranks last. In contrast, Indonesia, Mexico and China lead in this area (Figure 6).

India has seen significant improvements in women's participation in this sector, with their share of the workforce rising from 28.2% in 2022 to 31.4% in 2023. Although women's overall participation in
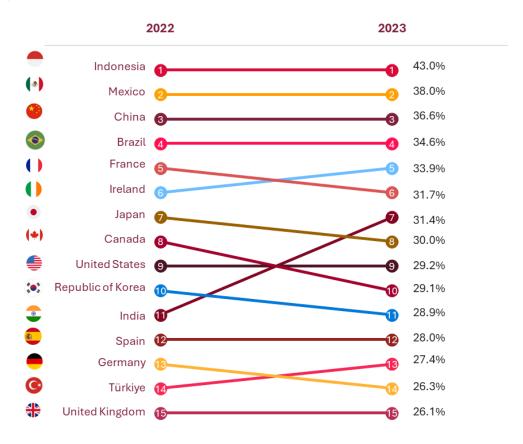
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[29] Ibid.
[30] Ibid.
[31] Ibid.

India's labour market remains among the lowest in Asia and globally, they have played a crucial role in the recent expansion of the manufacturing sector, particularly on factory floors.[32] Initiatives driving this change in India include: flexible work arrangements, dedicated transportation services, and on-site daycare facilities and training support, alongside.[33]

FIGURE 6. PARTICIPATION OF WOMEN IN MANUFACTURING IN TOP MANUFACTURING COUNTRIES, 2022 AND 2023

	2022	2023	
Indonesia	1	1	43.0%
Mexico	2	2	38.0%
China	3	3	36.6%
Brazil	4	4	34.6%
France	5	5	33.9%
Ireland	6	6	31.7%
Japan	7	7	31.4%
Canada	8	8	30.0%
United States	9	9	29.2%
Republic of Korea	10	10	29.1%
India	11	11	28.9%
Spain	12	12	28.0%
Germany	13	13	27.4%
Türkiye	14	14	26.3%
United Kingdom	15	15	26.1%

Note: Data for China is based on 2022 figures for both years, as it is the most recent data available.
Source: Authors based on International Labour Organization (2024). ILOSTAT explorer. *Employment by sex and economic activity*; National Bureau of Statistics of China (2023). *China Population and Employment Statistics Yearbook. Employed Persons at Year-end in Urban Units Excluding Private Units by Sector*; Office for National Statistics (2024). Workforce jobs by industry (SIC 2007) and sex – unadjusted.

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[32] Rao, A. (2024). More Women Are Now Part of India's Expanding Manufacturing Workforce. *India Briefing*.
[33] Jaipuria, A. (2024). Closing Gender Gap in Manufacturing. Cosmo First Limited.

2. Tackling labour shortages and employee retention

In the last quarter of 2023, the number of vacancies in manufacturing stood at 65,000, a notable decrease from the peak of over 90,000 vacancies observed in 2022.[34] Despite this improvement, manufacturers continue to face challenges finding workers with both traditional and advanced skills. Without effective policies, this issue is likely to worsen as trends like environmental sustainability and technological advancements reshape the industry's skill requirements.[35,36]

Manual skills continue to be among the main shortages faced by UK manufacturers. As of September 2024, 32.6% of the manufacturing business that participated in the ONS Business Insights and Conditions Survey mentioned manual skills as an area of high demand in the last 12 months.[37] This was followed by customer service skills (11.9%), basic digital skills (11.5%), and management skills (9.8%).

As shown in Figure 7, a critical aspect of this challenge is the sector's difficulty both attracting and retaining women. Women's participation rates tend to decline after their 30s,[38] a period when they also encounter wider gender pay gaps.[39]
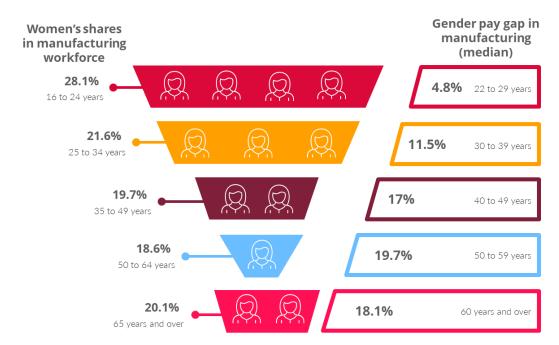
FIGURE 7. THE LEAKING PIPELINE OF WOMEN IN MANUFACTURING

Note: Women's shares in the manufacturing workforce by age correspond to March 2021, while data on the pay gap corresponds to 2023.

Source: Authors, based on data from Office for National Statistics, ONS (2024). *Annual Survey of Hours and Earnings*; Office for National Statistics, ONS (2024). *Census 2021*.

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[34] ONS (2024). *VACS02 Vacancies by industry*.
[35] The Institution of Engineering and Technology (2023). *IET sustainability skills survey*.
[36] World Skills UK (2023). *Manufacturing excellence.*
[37] ONS (2023). *Business Insights and Conditions Survey, Wave 115,* September 2024.
[38] ONS (2024). *Census 2021*.
[39] ONS (2024). *Annual Survey of Hours and Earnings*.

While information on workers who have left the manufacturing sector is limited, some evidence highlights the roles that are particularly challenging to retain. In 2021 Randstad surveyed over 6,000 workers across the UK about their intention to leave their current industry within the next 5 years. The survey revealed that nearly half of the women in manufacturing, production or warehouse roles were considering a move to a different sector, with only a quarter certain they wanted to stay.[40]

Data from the *Annual Population Survey* indicates that in 2023, women in associate professional roles in manufacturing were more likely to look for a new or additional job, while the same trend was observed among men in professional occupations.[41]

The longitudinal survey Understanding Society,[42] which tracks the same individuals over time, provides insights into the sectors people transitioned to after leaving manufacturing. Figure 8 illustrates the industries to which individuals moved between 2011 and 2022. Women were more likely to transition to wholesale and retail trade (26%), services such as human health and social work activities (23%), professional, scientific and technical activities (10%) and education (5%). Men also tended to move to wholesale and retail trade (23%) and professional, scientific and technical activities (14%), as well as construction (16%) and transportation and storage (10%).

Although this data is not specifically designed to track manufacturing employment, it helps to identify certain gendered patterns. For example, among women, those aged 30–39 are more likely to leave manufacturing, whereas for men, the age group most likely to do so is 50–59. Among women, the roles most likely to transition to a different industry included administrative occupations; sales, marketing, and related associates; assemblers and routine operatives and related roles; functional managers and directors; and science, engineering and production technicians. For men, roles that commonly shifted industries included shop-floor-related positions, along with production managers and directors, and engineering and IT professionals.[43]

This data reveals a significant opportunity to improve diversity and inclusion on the shop floor by creating environments that encourage workers to remain in the sector. During the consultations for this report, we interviewed Sue Johnson, Managing Partner for Inclusion at Odgers Berndtson. Sue brings extensive experience helping manufacturers to enhance diversity and inclusion, particularly on the shop floor. Box 1 presents some of Sue's key insights.
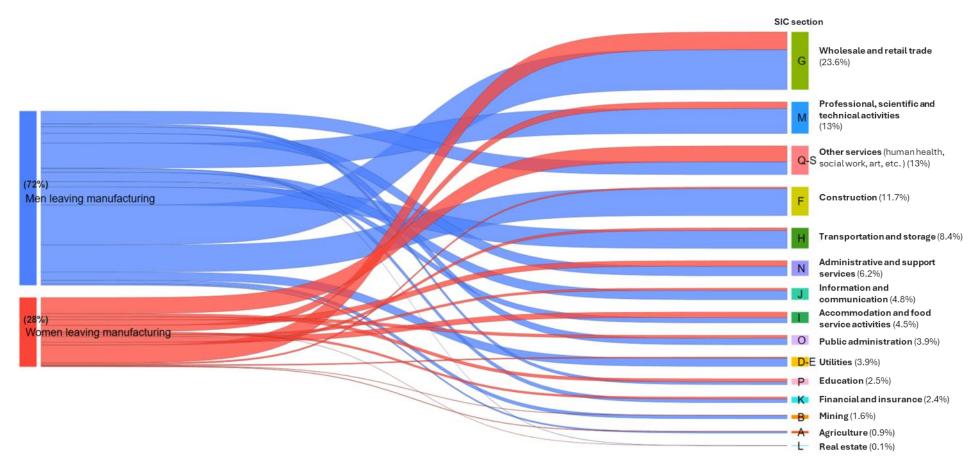
Another crucial opportunity lies in attracting individuals back to manufacturing, especially those who have left the sector or moved out from relevant roles in other industries. This is the mission of STEM Returners, an organisation dedicated to supporting employers and professionals returning to STEM fields after a career break. Women represent nearly half of the STEM returners, despite accounting for only 12% of professional engineers. Box 2 provides further details about the STEM Returners programme and the Aerospace and Automotive STEM Returners Project, a collaboration with Enginuity, the Society of Motor Manufacturers and Traders (SMMT) and ADS Group.

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[40] Randstad (2021). *More than just a job: recruiting women in the manufacturing industry*.

[41] Office for National Statistics (2024). *Annual Population Survey, January - December, 2023* [data collection]. UK Data Service. SN: 9248, DOI: http://doi.org/10.5255/UKDA-SN-9248-1

[42] University of Essex, Institute for Social and Economic Research (2023). *Understanding Society: Waves 1–13, 2009–2022*. 18th Edition. UK Data Service. SN: 6614, http://doi.org/10.5255/UKDA-SN-6614-19.

[43] Ibid.

Note: No sampling weights applied.

Source: Authors, based on data from University of Essex, Institute for Social and Economic Research (2023). *Understanding Society: Waves 1–13, 2009–2022*. 18th Edition. UK Data Service. SN: 6614, http://doi.org/10.5255/UKDA-SN-6614-19.

BOX 1. ODGERS BERNDTSON: A FOUR-STEP GUIDE TO DIVERSITY AND INCLUSION ON THE SHOP FLOOR

Sue Johnson, Managing Partner in Inclusion at Odgers Berndtson, has extensive experience helping manufacturers to enhance diversity and inclusion within their organisations, particularly on the shop floor, where she identifies the largest opportunity. In an interview with the Women in Manufacturing initiative, Sue shared her valuable insights.

Why should businesses care about diversity and inclusion?

Throughout her work Sue has witnessed how gender balance and diversity enable companies to perform better. From attracting top talent and improving occupational health and safety to increasing operational efficiency, the benefits are clear:

> *Gender balance and diversity within a business is a proven no-brainer, enabling companies to be more innovative, understand their consumer, attract the best talent, achieve higher performance, and the list goes on.* (Sue Johnson)

A four-step guide

Sue follows a four-step approach to help companies in their inclusion and diversity journey:

1. The facts – Where are you today? Assess the current state of workforce diversity, as well as the prevailing culture, mindset and attitudes within your organisation. This can be achieved through, for example, structured conversations with employees, surveys, focus groups and interviews. For instance, analysing employee demographics by hierarchical level and department can reveal critical points where disparities tend to deepen.

2. Make a plan – Where do you want to go? This includes:
   - *Clear vision and elevator pitch.* Create a simple and bespoke vision for your organisation.
   - *Accountability.* Define everyone's role in achieving the vision, set objectives and reward progress.
   - *Solution focused.* Identify and eliminate roadblocks to progress.
   - *Communication.* Use an omni-channel approach to ensure everyone is informed.

3. Upskill for success. Identify the key skills and behaviours required to be inclusive and embed them into upskilling opportunities. This is not a "one and done" effort – regularly refresh and update knowledge.

4. Make it stick – embed it within the DNA. Examples of embedding inclusive practices into the organisation's DNA include:
   - Shift from consultative to participative decision-making, focusing on team tasks in all action planning sessions.
   - During factory visits, replace formal presentations with Q&A sessions to ensure everyone has a voice.
   - Empower operators to implement suggestions for operational improvements.
   - Become a role model of inclusive behaviour.

Source: Interview with Sue Johnson; Johnson (2023). *Diversity in the Shopfloor Manufacturing Workforce is Great for Business*; Johnson (2021). *Gender Balancing the Manufacturing Shop Floor*.

BOX 2. THE AEROSPACE AND AUTOMOTIVE STEM RETURNERS PROJECT

Founded in 2017, STEM Returners emerged in response to the growing skills gap within the UK's STEM industries, providing a supported pathway for professionals to re-enter their careers. In April 2024 the STEM Returners programme joined forces with Enginuity, the Society of Motor Manufacturers and Traders (SMMT) and ADS Group to launch the Aerospace and Automotive STEM Returners Project:

We're on a mission to make it easier for highly qualified STEM professionals to return to work, creating the fairer, more diverse industry we all deserve.

Why is it important to focus on STEM returners?

Many STEM professionals are overlooked when attempting to return from a career break. In a market suffering from skills shortages, it is vital that skilled professionals are not disregarded. Several factors contribute to this situation, including unconscious bias at the shortlisting stage, hiring pressures that lead to assumptions based on limited information, and the common misconception that a "CV gap" indicates a deterioration of skills.

Supporting STEM returners is also crucial for enhancing diversity within the industry. While women represent 46% of STEM returners Programme participants, they account for only 12% of professional engineers. Caring responsibilities, for both children and other family members, are the primary reason women take career breaks. According to the 2023 STEM Returners Index survey, 47% of women cited caregiving as their primary reason for a career break, compared to 17% of men, who are more likely to take a break for health or illness-related reasons (30%).

A holistic approach

The STEM Returners programme supports highly skilled professionals to return to work through a comprehensive approach that includes:

- Partnering with STEM organisations to run paid, 12-week returner programmes
- Providing dedicated career coaching and mentoring in areas including upskilling and certification updates
- Raising awareness of the barriers within organisational culture that affect STEM returners, including providing training to hiring managers about the value of returners, inclusive hiring practices, and unconscious bias
- Enhancing employers' branding through inclusion in social media campaigns.

The Aerospace and Automotive STEM Returners Project offers funding support for SMEs, with Enginuity covering over 70% of the programme cost per returner.

In an era where companies are struggling to attract STEM talent, STEM Returners provides a vital pathway to tapping into an often-overlooked talent pool:

96% of those who do join a placement are offered a long-term role at the end of their placement.

If you are interested in participating in this programme, please contact STEM Returners: https://www.stemreturners.com

Source: Interview with Anouska Carling, Equity & Inclusion Lead, STEM Returners; STEM Returners (2023). *The STEM Returners Index 2023*.

3. Driving equality, diversity and inclusion in manufacturing

The business case for Equality, Diversity, and Inclusion (EDI) initiatives in UK manufacturing is clear as businesses face ongoing challenges related to skills shortages, driven by demographic shifts, technological advancements, and climate change action. Embracing diversity is key to attracting and retaining the skilled talent needed to maintain competitiveness and foster innovation.

According to Make UK, addressing the current vacancies in the manufacturing sector could boost the UK's GDP by an estimated £7 billion annually.[44] Although the impact of EDI initiatives is not always measured, a global survey by the International Labour Organization[45], covering nearly 13,000 enterprises, found that 57% reported improvements in business outcomes from such initiatives. These benefits include: increased profitability and productivity; increased ability to attract and retain talent; enhanced company reputation; greater creativity, innovation and openness; and better ability to gauge consumer interest and demand. See for instance Box 8 which describes how Stellantis, a global leader in the automotive industry, has driven diversity and inclusion as a core brand value, attracting a broader and diverse customer base.

Based on consultations with over 30 organisations and a review of UK and international best practices (see Appendices and Annex 1), we developed a framework for driving an inclusive manufacturing industry with equal opportunities and a diverse workforce. As illustrated in Figure 9, this framework encompasses five equality, diversity and inclusion (EDI) principles for manufacturing companies, four principles for industry associations, and five specific recommendations for gender-responsive industrial strategies.

Through our review of various approaches to EDI, we identified five steps for successful implementation:

1. **Securing commitment from leaders.** Leadership commitment is essential for driving EDI initiatives and ensuring they are embedded in the organisation's culture.
2. **Assessing the current state of workforce diversity and inclusion.** Conducting a thorough assessment of the organisation's current diversity and inclusion landscape to identify gaps and opportunities.
3. **Defining the organisation's EDI vision and targets through participation.** Engaging employees and other stakeholders in a participatory process to define a clear EDI vision and set measurable targets that align with the organisation's goals.
4. **Identifying key initiatives and engaging employees.** Developing targeted initiatives to achieve the EDI vision and goals, ensuring active employee engagement.
5. **Monitoring progress and reviewing strategies.** Establishing mechanisms for regular monitoring and reporting of progress, and periodically reviewing and adjusting strategies and initiatives to ensure continued relevance and effectiveness.

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[44] Make UK (2023). *Industrial Strategy: A Manufacturing Ambition*. London: Make UK. The Manufacturer's Organisation.
[45] International Labour Organization, ILO (2019). *The business case for change*. Geneva.

FIGURE 9. PRINCIPLES FOR DIVERSITY AND INCLUSION IN MANUFACTURING

An inclusive manufacturing industry with equal opportunities and a diverse workforce

Principles for companies

Principle 1. Champion equality, diversity and inclusion in leadership.

Principle 2. Assess, track and report progress on equality, diversity and inclusion.

Principle 3. Foster an inclusive culture within the company and throughout the supply chain.

Principle 4. Promote a diverse talent pool and inclusive recruitment.

Principle 5. Adopt an inclusive approach to retention and promotion.

Principles for industry associations

Principle 1. Promote diversity and inclusion on boards.

Principle 2. Assess, track and report on the industry's progress on equality, diversity and inclusion.

Principle 3. Promote and champion equality, diversity and inclusion best practices.

Principle 4. Promote a diverse and inclusive image of manufacturing.

Key steps

- Commitment from leaders
- Assessment
- Participatory vision and targets
- Initiatives and engagement
- Monitor, report and review

Recommendations for a gender-responsive industrial strategy

Recommendation 1. Embed gender analysis and inclusive consultations in policy development.

Recommendation 2. Set gender equality targets and allocate adequate resources.

Recommendation 3. Incorporate a gender perspective throughout all programmes and projects.

Recommendation 4. Monitor and evaluate progress and review initiatives.

Recommendation 5. Collaborate with other ministries and agencies to address gender disparities.

Source: Authors, based on consultations and review of best practices.

3.1 Principles for companies

We propose five principles for improving diversity and inclusion among manufacturing companies:

- **Principle 1.** Champion equality, diversity and inclusion in leadership.
- **Principle 2.** Assess, track and report progress on equality, diversity and inclusion.
- **Principle 3.** Foster an inclusive culture within the company and throughout the supply chain.
- **Principle 4.** Promote a diverse talent pool and inclusive recruitment.
- **Principle 5.** Adopt an inclusive approach to retention and promotion.

The aim of these principles is to offer guidance while giving companies the flexibility to develop initiatives tailored to their specific needs. Throughout this section we present examples of various initiatives and approaches adopted by companies of different sizes across diverse sectors, including metal, food equipment, electronics, biotechnology and automotive.

Principle 1. Champion equality, diversity and inclusion in leadership

Why is this important? Committed and inclusive leadership is key to driving equality, diversity and inclusion (EDI). This ensures a consistent approach across all areas and functions of the company and signals commitment to both internal and external stakeholders. Box 3 presents the case of the Centre for Process Innovation (CPI), detailing how the CPI integrated a senior leadership team sponsor for EDI and adopted an employee-driven approach. Box 4 shares Katy Davies' perspective on EDI as Managing Director at CapAir Systems and Box 6 describes how leadership at Nissan Sunderland has committed to EDI through their Diversity, Equity, and Inclusion (DE&I) Manifesto and the DE&I Council.

Suggested actions:

- Ensure that a dedicated board- or senior-level leader is responsible for driving and monitoring EDI initiatives across the organisation.
- Provide managers with unconscious-bias training and other EDI-focused programmes to develop an inclusive leadership team.
- Embed gender equality into your core business values, strategic plans and overall organisational culture.
- Develop and regularly review an EDI strategy that sets specific targets and provides a clear roadmap across all areas of the business.
- Allocate financial and human resources to EDI initiatives.
- Regularly assess the composition of your leadership team, identify any biases or discriminatory practices, and set clear goals and actions to address them.
- Participate in industry-wide initiatives to improve EDI, such as diversity and inclusion and gender equality charters.

BOX 3. CREATING A CULTURE OF INCLUSION AT CPI

CPI is a UK based, technology innovation catalyst, that brings together academia, businesses, government and investors to translate bright ideas and research into the marketplace. They enable this by giving their customers access to the right experts, equipment, networks, funding and more – connecting the dots for effective innovation.

Established in 2004 as a centre of excellence through the UK regional development agency One North East, today, CPI has over 700 employees, based across locations in the North of England and Scotland, focusing on key markets including AgriFoodTech, Materials, Energy Storage, HealthTech and Pharma.

Setting up and signing the Catapult Network's Inclusivity in Innovation Charter

CPI's ED&I journey started a few years ago, but accelerated in February 2022 when CEO, Frank Millar, signed the [Catapult Network's Inclusivity in Innovation Charter](). The Charter was a joint effort set up and signed by the Catapult Network's CEOs committing to a shared vision for diverse and inclusive workplaces in innovation; underlining that more diversity across experiences and thinking enables better science and innovation.

The Charter calls for key ED&I actions such as:

- having a strategy, policy and roadmap document
- collecting and reporting data
- setting up and monitoring targets
- identifying a member of the senior executive team responsible and accountable for reporting
- monitoring at board level
- creating local ED&I champions

The commitment of the senior leadership team at CPI to the Charter demonstrates to the entire organisation that ED&I is a priority. It drives accountability and monitoring, enables resources, provides role models, impacts work culture, and promotes visibility.

The ED&I senior leadership team sponsor's key role is to analyse and present both quantitative and qualitative data, monitor progress, bring ED&I to executive board meetings related to a variety of topics, provide related guidance and support among others.

Making a commitment to inclusivity at CPI

Following this, CPI refreshed their company values, ensuring that their commitment to inclusivity was captured and embedded into the culture of the business. Based on an analysis of different ED&I standards and external experts, in spring 2022, CPI began working with [Inclusive Employers]() on a membership basis, supporting CPI's ED&I journey through access to resources, expertise, consulting and training. In early 2023, CPI [received formal accreditation with a silver award]() identifying further actions that can be taken.

Empowering their people

In the summer of 2022, a group of CPI employees established ED&I affinity groups. These employee-led groups provide a safe space for staff to discuss and share their lived experiences. Employees are empowered to bring their whole selves to the workplace and the affinity groups are critical to removing any bias by raising awareness of all backgrounds, cultures, and experiences.

The four affinity groups focus on areas that employees felt were underrepresented at CPI:

- Disabilities, hidden conditions, and carers (DHCC)
- LGBTQ+ (PRISM)
- Race, religion, culture, and ethnicity (EmbRACE)
- Women in CPI (WICPI)

The creation of dedicated affinity groups to focus on specific ED&I initiatives has led to increased engagement, as employees could more easily identify with the cause and the community. It also gives them a sense of understanding in terms of where they can get involved. Having such structure could help to overcome the difficulties of early engagement, when outcomes are not yet visible.

The employee led groups self-manage their activities; meeting monthly, running campaigns and awareness sessions for the wider business. Their affinity group members take part in external learning sessions and use this to inform policy at CPI, such as their 'Menopause policy' and 'Transitioning at Work policy'. This ensures that the people have a direct impact on the way they work.

CPI's affinity groups use a range of qualitative and quantitative data to measure engagement. In addition to relying on wider CPI statistics such as gender pay gap and diversity data, the groups also define group specific initiatives to enable progress monitoring over time. This includes more qualitative data monitoring such as engagement with related CPI articles (e.g. on International Women's Day and National Inclusion Week) or email/face-to-face engagement with ED&I groups and subgroups. Make UK is the largest manufacturers' organisation in the United Kingdom, dedicated to fostering a supportive environment where UK manufacturers can thrive, innovate, and compete. A cornerstone of Make UK's mission is promoting equality, diversity, and inclusion (EDI) within the manufacturing sector.

Women in CPI (WICPI) group as a support network to empower women

One of the four ED&I groups, the WICPI group has been set up with an aim to provide a support network to empower women to achieve their potential. It also aims to support men in understanding some of the challenges that women face, and making sure that all genders work collectively on these issues. Its three subgroups are:

1. Pregnancy and maternity subgroup. Its key initiative currently focuses on the development of a handbook to help navigate workplace policies, understand available support, manage maternity leave and returning to work.
2. Career development subgroup, which is currently piloting a development course for women, they focus on themes such as mentorship, networking events, confidence training and self-promotion.
3. Women's health and wellbeing subgroup aims to provide resources and facilitate discussions on potentially challenging topics such as domestic abuse, menopause, perimenopause and hormonal and physical changes in the workplace, for example, periods. One of its initiatives involves developing an informational booklet on menopause and perimenopause.

Looking ahead, CPI plans to grow all of their affinity groups over the next few years; continuing to empower their people to establish the groups they feel they need to help drive CPI's inclusive culture.

Source: Interview with Amy Smith, Chief People Officer within CPI's Strategic Leadership team, and Katie Richardson, chair of the Women in CPI affinity group.

BOX 4. KATY DAVIES SHARES HER FOUR-STEP RECIPE TO EDI

Katy Davies is the Managing Director of CapAir Systems, an SME manufacturer of printed circuit boards, cable assemblies and box builders. She has extensive experience with both smaller and larger teams as a female managing director implementing EDI practices in the workplace. Katy shared her valuable insights in an interview with the Women in Manufacturing initiative:

Katy Davies, Managing Director, CapAir Systems

> *I think as a leader, it starts with you to say, right, actually, we've got to make people feel included and this is what it would look like.*

Four-step recipe to EDI: supportive environment, flexibility, leadership commitment and openness

1. The foundation is creating a supportive environment and a safe space for employees, where people feel they have equity and they are included. This ranges from offering personal protective equipment in various sizes all the way to building and fostering a respectful and non-judgmental work culture.
2. The next most important thing is offering employees flexibility of working patterns in a way that helps them accommodate other aspects of their life. Examples of having a real impact include an older employee preferring to work 5 short days instead of 4 long days, or a young male caregiver needing to leave work unexpectedly but making up the time as soon as possible.
3. The next step is to ensure that the senior team is fully on board and committed, as change needs to come from the leadership and will only work if they want to do it, not because they need to do it.
4. Being open and making space for employees with personal needs, who tend to change jobs often for personal reasons and because of inflexible work arrangements. Understanding personal needs and circumstances can help to establish work patterns that suit both employee and employer.

Katy shared that, in her experience, **trust and care allowed through flexibility are returned** undoubtedly and diligently. She also said that flexibility **does not inconvenience the manufacturing process**; instead, it creates an environment where people are more productive. It also **helps to make retention and recruitment easier**.

Challenges faced when implementing EDI initiatives:

- Cultural change and shifting mindsets away from stereotypes
- Accepting flexibility and promoting respect does not mean less productivity
- A collective responsibility to change the perception of manufacturing.

The biggest challenge described by Katy centres around stereotypes and the struggle to be taken seriously as a woman, even in a leading position, when discussing or addressing issues related to EDI.

Source: Interview with Katy Davies.

Principle 2. Assess, track and report progress on equality, diversity and inclusion

Why is this important? Improvement begins with understanding. A starting point in the EDI journey is to collect and analyse data to determine the current status of the company. This foundation allows informed goals and actions to be set. A robust monitoring and evaluation framework is then essential to regularly assess progress, ensuring transparency and accountability in fulfilling EDI commitments.

Suggested actions:

- Develop a confidential EDI form to gather information on applicants' gender, ethnicity and other diversity characteristics during the application process.
- Establish EDI targets – Box 5 presents examples of EDI targets that Hobart Equipment UK has adopted in recruitment and leadership.
- Implement a system for continuous monitoring and reporting of EDI metrics. Examples of these metrics include: workforce demographics across different levels and functions of the organisation, employee satisfaction and sense of inclusion by demographic, turnover rates by demographic, pay gaps among different demographic groups, promotions by demographic. Wherever possible, analyse how different identities (e.g. gender, age, ethnicity) shape the observed gaps. ISO 538000:2024 and other diversity and equality frameworks and certifications provide examples of EDI indicators.[46]
- Use the collected data to track progress, inform EDI strategies, and measure the effectiveness of initiatives.
- Publicly report progress on EDI targets and initiatives, showcasing achievements and identifying areas for further improvement.
- Participate in industry-wide initiatives to assess EDI.

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[46] ISO 538000:2024; Economic Dividends for Gender Equality Certification (EDGE); UN Women Private Sector Accountability Framework (UNW-PSAF)

Hobart Equipment UK is a business unit operating within the Food Equipment Division of the leading global industrial manufacturer ITW (Illinois Tool Works Inc). Hobart Equipment employs 63 staff members, 80% of which are aligned to sales and marketing services. Gender balance varies, with a lower representation of women in sales roles, indicative of the industry norm; however, four out of five of the senior leadership positions are represented by women. We had the opportunity to talk to Tracy Southwell, Managing Director, who shared Hobart Equipment's success in increasing female participation and the initiatives driving this change.

Tracy Southwell, Managing Director, Hobart Equipment UK

Equality, diversity and inclusion initiatives

Hobart UK Equipment has implemented several EDI initiatives to promote a more inclusive environment:

- **Early career programme.** This 3-year programme targets individuals who are new or early in their career and unsure of their own potential or career pathway, but who demonstrate behavioural potential that could be harnessed and enriched through a structured and supported learning programme.
- **Leadership development and coaching programme.** This 6-month programme is designed for potential leaders, developing the essential skills, knowledge and behaviours required to build their understanding of leadership qualities.
- **Monitoring and reporting.** Regular monitoring occurs during the spring and autumn business cycles, with a clear focus on gender and diversity within business units.
- **Parental policy.** Improvements in the policy, including greater flexibility in applying the benefits, enables more choice for parents.
- **Employment Resource Group (ERG).** Established 10 years ago, the network includes 7 ERG and 55 global chapters. Employee-led, they bring together diverse groups of people to ally, share experiences, grow professionally and network. Directly supports the company's talent strategy, focusing on attracting, retaining and developing future leaders and promoting cultural diversity and community; Pride, Young Professional Network (YPN), ITW Women's Network (IWN) and Multicultural Network (MCN) are just four of the seven ERGs available.
- **Recruitment process.** A deliberate effort to ensure gender and racial diversity in recruitment. Where possible, the company tries to achieve a 50/50 gender balance and diverse racial representation in candidate shortlists, recognising that effective recruitment is the foundation of broader diversity efforts.

Hobart adopts a decentralised entrepreneurial approach within ITW frameworks, tailoring policies to meet the specific needs of individual business units.

Lessons learned and future goals

Tracy identified three crucial factors for driving change:

- **Lead by example.** Embrace the role of a value leader and set a positive example.
- **Make difficult but necessary decisions.** Address issues promptly and decisively. If something is not working, fix it.
- **Challenge behaviours.** Address problematic behaviour directly, through formal processes or informal conversations.

For the future, ITW as a group aims to achieve 30% female representation among their top 1,000 leaders globally, Hobart UK Equipment has achieved 100% in the last 3 years in the appointment of female directors. While gender diversity targets have been met in the UK Equipment business, increasing the representation of ethnically and culturally diverse people remains a significant challenge, with current figures at less than 3%.

Source: Interview with Tracy Southwell, Managing Director at Hobart UK.

Principle 3. Foster an inclusive culture within the company and throughout the supply chain

Why is this important? An inclusive company culture is vital for ensuring that all employees feel valued, respected and empowered. An inclusive environment enhances employee satisfaction and strengthens talent attraction and retention. By fostering such a culture, companies can harness diverse perspectives, drive innovation and enhance overall organisational success.

Suggested actions:

- Introduce and communicate inclusive policies, including a zero-tolerance protocol for sexual harassment in compliance with the Worker Protection Act 2023, effective from 26 October 2024.[47,48] Other relevant policies include support for employees with caring responsibilities (e.g. paid leave, subsidised childcare, breastfeeding facilities, return to work), flexible working arrangements and menopause policies. Box 7 shows examples of these initiatives implemented by Amari Metals Limited.
- Conduct EDI awareness-raising campaigns and provide training to contribute to shifting perceptions and behaviours towards greater inclusivity.
- Promote inclusive communication by providing guidelines for the use of inclusive language in all communications,[49] and embed EDI principles in all corporate communications, including documentation, email signatures and notice boards.
- Clearly communicate the available channels for raising concerns and ensure timely resolution of issues.
- Encourage the formation of employee resource groups to drive EDI initiatives and allyship. This is one of the most popular initiatives among the companies we interviewed. See Boxes 3, 5, 6, 8 and 9 for examples of employee resource groups.
- Promote diversity and inclusion within your supply chain by encouraging engagement with businesses owned by under-represented groups, fostering partnerships with companies that cultivate an inclusive culture, and ensuring that both direct and indirect employees experience fair working conditions. For example, Box 6 shows how Nissan's approach to EDI includes extending best practices to their partners.
- Leverage assistive and adaptive technologies to enhance workplace inclusion, and ensure that technologies developed by – and adopted in – manufacturing are inclusive.[50]

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[47] Worker Protection (Amendment of Equality Act 2010) Act 2023. Available at:
https://www.legislation.gov.uk/ukpga/2023/51/section/1

[48] ISO 538000:2024 includes a guideline for the development of a grievance mechanism to prevent, detect and respond to gender-based violence (GBV).

[49] Examples of inclusive language include the Council of Europe's Guidelines for the use of language as a driver of inclusivity, the United Nation's gender- and disability-inclusive language guidelines, and the United Nations Global Compact's gender-inclusive language toolkit.

[50] ISO 538000:2024 provides guidelines for the provision of gender responsive goods and services, while University of Stanford's gendered innovations provides guidelines for research and innovation.

Nissan Motor Manufacturing UK Ltd (NMUK) was established in 1984 in Sunderland, UK. It is predominantly a manufacturing plant employing about 6,000 people producing the Nissan Leaf, Juke and Qashqai models. Nissan Sunderland plays an important role in Nissan's wider ambitions of carbon neutrality with plans to transform Sunderland into a flagship electric vehicle (EV) hub, bringing together EVs, renewable energy and battery production. An interview with Rachel Brown from Nissan Sunderland sheds light on its local DE&I initiatives as well as the wider AMIEO regional DE&I initiatives.

Nissan Sunderland prides itself on building a proud and engaged workforce, with a focus on Belonging @ NMUK where employees can bring their true selves to work. 'Belonging' is the foundation of the plant's DE&I initiative that underpins everything that they do. Nissan encourages employees to challenge the norm and come forward with ideas on how to improve daily life at the plant. This has led to some fundamental adaptions to training courses for neuro-diverse employees, sign language training for deaf operators, multi faith rooms to name a few.

The creation of ally networks has also been borne under the Belonging umbrella including: Sunderland Women's Network, the Pride Network, and Disabilities Network. The Women's Network was established in March 2024 to acknowledge that certain experiences are unique to women, which may require different approaches, including tailored policies. The network was inaugurated by a flagship event with inspirational keynote speakers such as Sarah Noble, founder of the Women at the Wheel network driving DE&I across the automotive sector, and Michelle Breffitt from Women Drive Electric UK. Information on the Women's Network is disseminated through a newsletter, which includes news, upcoming events, and information on training courses such as their upcoming management leadership seminar.

The wider Nissan AMIEO region and its four key pillars

Nissan Sunderland is part of the Nissan AMIEO region – Nissan's recently created largest region spanning Africa, Middle East, India, Europe, and Oceania. Since its establishment, it has developed a DE&I Manifesto along with a DE&I Council. These efforts are championed by the AMIEO region's chairperson, Guillaume Cartier, who also chairs the DE&I steering committee. In 2023, Nissan AMIEO published its first DE&I Report detailing its four key pillars:

These initiatives underscore Nissan's commitment to fostering diversity, equity, and inclusion not just within the Sunderland plant, but across its entire AMIEO region. Nissan Global also makes its key DE&I figures publicly available, demonstrating its dedication to transparency and commitment to creating an inclusive environment for all employees.

Source: Interview with Rachel Brown, champion of Nissan's Sunderland Women's Network and DE&I Ambassador; *Nissan Sunderland (2022). Welcome to Nissan Sunderland: Your Guide to Settling In; Nissan Europe (2023). Fostering a safe space for everyone: Nissan AMIEO.*

BOX 7. IMPROVING EQUALITY, DIVERSITY AND INCLUSION IN METAL MANUFACTURING

We had the opportunity to speak with Morag Hale, the Company Secretary and Head of Human Resources at Amari Metals Limited. Morag has worked in the metal sector since the 1980s and describes Amari as a special company in terms of its high standards and values, and opportunities for progression. With an English literature degree and a professional qualification in business law and HR, Morag began her career in heavy engineering as an administrative assistant. After working in a couple of manufacturing companies, both private and listed, she developed a passion for the metals industry, remarking: *"I'm proud to work in a sector at the heart of industrial manufacturing, past, present and future."*

Morag Hale, Company Secretary and Head of HR, Amari Metals Limited

At Amari, Morag's responsibilities encompass legal aspects – contracts, disputes and related matters – insurance and the human resource function. The company employs approximately 1,500 people, with women under-represented on the shop floor, in management and in senior positions:

> *I'm passionate about getting more women into metals. It's a fabulous career, which no longer means working heavy machinery in oily overalls.*

Equality, diversity and inclusion initiatives

Amari's journey towards promoting equality, diversity and inclusion (EDI) gained momentum in 2022, with its first significant effort to collect diversity data. This marked the beginning of a series of initiatives aimed at fostering an inclusive workplace. Key initiatives include:

- Data collection. Gathering diversity data was a critical first step in understanding the demographic make-up of the organisation.
- EDI training for managers. As well as several development courses tailored for women, the company implemented EDI training for managers. This type of training is crucial in addressing both conscious and unconscious biases and promoting inclusive behaviours.
- Establishing an EDI policy. In March 2023 Amari introduced an Equality, Diversity, and Inclusion policy, outlining the company's commitments, initiatives and the responsibilities of managers and employees. This policy complements other company policies, including those on hybrid working, home working, menopause, neurodiversity and wellness.
- Women's Day Conference. Launched in 2023, this initiative brings together women within the company to discuss prevalent challenges and to network. As a result, systemic issues have been identified and addressed, including challenges faced by women returning from maternity leave and looking to progress within the business.
- Family-friendly leave. The company is exploring ways to offer more flexible working arrangements for parents and for those with other caring responsibilities.

Principle 4. Promote a diverse talent pool and inclusive recruitment

Why is this important? Ensuring a diverse talent pool and inclusive recruitment processes is essential to enhancing the representation of women, people from non-White backgrounds, and individuals with disabilities in manufacturing. This approach helps to better reflect the diverse communities the industry serves.

Suggested actions:

- Employ inclusive language in job advertisements to appeal to a diverse audience.
- Ensure that job recruitment and promotion tools do not embed bias against certain populations.
- Review job descriptions to focus on skills rather than experience to widen the candidate pool.
- Anonymise application forms by removing personal identifiers to prevent bias during the selection process.
- Aim for gender-balanced applicant shortlists and include diverse interview panels to ensure fair evaluation.
- Showcase careers in the industry to young people through targeted outreach efforts. Box 8 shows examples of Stellantis' outreach activities supporting a diverse workforce for the future.
- Make apprenticeships more accessible to under-represented groups by adapting materials and ensuring inclusive training environments.
- Participate in industry-wide initiatives to change the public perception of manufacturing.

Box 9 describes examples of initiatives Johnson Matthey to attract, retain and promote the advancement of women in the company.

Stellantis is a global leader in the automotive industry, comprising 14 iconic brands and two mobility divisions. With a workforce representing over 160 nationalities, industrial operations in more than 30 countries, and customers across 130 markets, Stellantis stands as one of the most diverse companies worldwide. This diversity extends beyond its teams, attracting a broader and diverse customer base.

"Our passionate, talented, and diverse teams support our iconic brands in providing freedom of mobility tailored to every need."

In the UK, Stellantis employs approximately 5,000 people across a number of locations, including two manufacturing plants, a parts distribution warehouse, a retail network, head office operations, and financial services divisions. To gain insights into Stellantis' commitment to equality, diversity, and inclusion (EDI), we spoke with Louise Gardner, Head of Talent, Diversity, and Inclusion, who has been with the company for 30 years, holding various roles throughout her tenure.

An approach focused on inclusion and wellbeing

Stellantis' EDI approach encompasses a wide range of initiatives aimed at fostering inclusion and supporting employee wellbeing. These initiatives include wellbeing events, employee resource groups, a global leadership training programme for women, an emerging talent course, community outreach activities, and flexible working arrangements, among others.

Stellantis' employee resource groups, which focus on topics such as women's issues, LGBTQ+ inclusion, and menopause support, together with Armed Forces, were established in response to employee feedback. These groups, led and managed by employees, meet regularly throughout the year to address concerns and create a sense of community.

These efforts, along with employee recognition programmes and open communication with staff returning from parental leave, have helped Stellantis attract and retain female talent. Globally, the company has achieved 30% female representation in leadership roles and 21.3% across all positions. While there is room for improvement, these figures exceed the 2023 industry average for female participation in the automotive sector, which stands at 12.6%.

Additionally, Stellantis places a strong emphasis on diversity in recruitment, ensuring that processes are designed to attract diverse talent. Particular attention is given to the use of inclusive language and diverse imagery. To minimise bias, the company employs a gender decoder to ensure job advertisements are free from gendered language.

BOX 9. JOHNSON MATTHEY'S JOURNEY TO DIVERSITY, INCLUSION AND BELONGING

In 2017, Johnson Matthey (JM) celebrated 200 years of its history, marking the establishment of its precious metals business in the UK. With roots in gold assaying, JM has evolved through the recovery, recycling, and refining of precious metals, expanding into catalysis for the automotive and pharmaceutical industry, as well as entering the sustainable technologies market, including hydrogen solutions.

Today, JM operates in over 30 countries, employing more than 11,600 people worldwide. In the UK, women represent about 29% of their workforce – 3 percentage points higher than the national average for the manufacturing sector. Women hold 33% of board positions, 25% of group leadership team positions, and 31% of management roles. However, manufacturing roles are still predominantly held by men. Although JM's 2023 median gender pay gap increased to 7.6% compared to the level from previous year, it remains well below the UK manufacturing sector's median pay gap of 15.9%.

Diversity, Inclusion and 'Belonging' (DI&B)

DI&B initiatives have become an integral part of JM's journey towards becoming 'an organisation where everyone thrives, can bring their full self to work and feel a sense of belonging' – also represented by the addition of the letter 'B' for belonging.

Organically formed, employee-led Employee Resource Groups represent a variety of networks including the Asian, Black Employee, DiversAbility, Enhance (early career employees), Family, Gender Equality, Hispanic/Latinx, Pride, and Veterans network. Each of the Employee Resource Groups is led and supported by the members of the executive team. Furthermore, JM sites are represented by local DI&B ambassadors. Their key role is arranging local events, spreading awareness of global events, actively educating colleagues and identifying local DI&B challenges.

Global events celebrating DI&B and bringing together different Employee Resource Groups

JM annually celebrates DI&B through events that bring together a variety of Employee Resource Groups. These events usually include talks by internal guest speakers and panel discussions of experiences, which are available globally, as well as local site celebrations. Annually its five 'Platinum' events celebrate International Women's Day, LGBT+ Pride Month, Inclusion Day, Ethnicity Inclusion, and Disability & Neurodiversity.

Women at JM

JM initiatives promoting DI&B include activities such as reverse mentoring, early career support, flexible working hours and shared parental leave. There are several initiatives that aim to eliminate the gender pay gap and support women's recruitment and talent management, including:

- Partnering with organisations like the Society of Women in Engineering and Women in Chemicals to attract the best talent
- Attracting and recruiting women into JM's global graduate programmes
- Offering development courses for women for career development, confidence and resilience building (through the LHH Elevating Women in Leadership programme)
- Embedding diversity data into the application process and using gender neutral recruitment practices

Source: Interview with Martin Hayes, Global Technology Manager for the Life Science Technologies business at JM, and Stephen Rouse, Development Chemist II and DI&B Ambassador at JM; Johnson Matthey (2023). Gender Pay Gap Report 2023.

Principle 5. Adopt an inclusive approach to retention and promotion

Why is this important? Adopting an inclusive approach to retention and promotion helps to create a supportive work environment where all employees can thrive. It also prevents companies from losing talented employees because of unconscious bias and unequal opportunities. As discussed in Section 2 of this report, and highlighted in previous studies,[51] the most significant opportunity to improve the gender balance in manufacturing is through inclusive retention and promotion.

Suggested actions:

- Establish a flexible working policy offering options such as working from home, job sharing, reduced hours and term-time working to accommodate diverse needs. Box 10 presents the case of Almond Engineering and how they started implementing flexible working, while Box 11 presents more information on flexible working and advice from the consultancy Flexibility Works.
- Collect information on employee leavers and review exit interviews to refine strategies and improve retention practices.
- Provide comprehensive support for employees returning from maternity leave and other career breaks.
- Introduce and communicate a carers policy, including leveraging partnerships to provide subsidised child and adult care, encouraging the formation of employee resource groups for carers, and establishing returnship programmes. Box 3 presents the example of CPI's pregnancy and maternity employee resource group.
- Establish mentoring programmes to help the career progression of employees from under-represented backgrounds.
- Use promotion panels to reduce bias in selection processes.
- Develop clear career-progression pathways, including transparent promotion criteria, accessible to all employees.
- Increase the visibility of role models from diverse backgrounds to inspire and support under-represented groups.

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[51] Made Smarter Innovation Network (2021). *Making Manufacturing Smarter. A guide for improving diversity and inclusion in UK manufacturing*. London: Knowledge Transfer Network.

BOX 10. ALMOND ENGINEERING: LEADING THE WAY IN FLEXIBLE WORKING

Located in Livingston, Scotland, Almond Engineering has a broad offering, including design, precision machining, repairs, fabrication and welding, catering to both one-off prototypes and small-to-medium-volume batch work. Originally established in 1979 as a mould-maker, the company gradually expanded its expertise to encompass a wider array of solutions.

In January 2020 Almond Engineering embarked on its journey into flexible working, shortly before the onset of the COVID-19 pandemic. The primary objective was to create an optimal work environment and adaptable arrangements for its staff. The changing work patterns of its customers also acted as a driving force for embracing flexible working practices, especially with companies finishing earlier on Fridays.

Leading the way for other businesses

In its search for flexible working examples in the industry, Almond could not find any. But that did not stop the company exploring different options. Finally, Almond settled on a flexi-time arrangement: employees would work their core hours from 9 AM to 3 PM between Monday and Thursday, and until 12.30 PM on Fridays, completing a total of 39 hours per week. This lets employees start anytime between 7 AM and 9 AM and finish between 3 PM and 5 PM, giving them more flexibility in their schedules.

The transition involved modifying organisational rules; and, although there was some initial resistance, the results after a year were overwhelmingly positive. Michelle Quinn, Managing Director of Almond Engineering, explains: "It worked really well; now everyone utilises it in some way, and it has only improved over the years." The introduction of flexible working positively impacted the work–life balance among staff:

> *We have lots of people who want to get an early start, so they'll be here working at seven, and we have others who prefer to drop their kids off at school and arrive at nine. Some need to pick up their children after school or manage their commutes, so they leave at three. We even have golfers who enjoy the sunny days, finish early, and head out for a game.*

Almond Engineering's experience with flexible working has been so successful that it eagerly shares its story with others in the industry. Michelle Quinn confidently states: *"People who believe that flexible working does not work in manufacturing, we have tried it for the past three years and it has worked great."*

To hear first-hand experiences from Michelle Quinn, Managing Director, and Darren Jamieson, CNC Five Axis Miller, about their journey with flexible working hours, watch the ⬃ video prepared by Flexibility Works.

Almond Engineering is a remarkable model of how flexi-time can attract talented people and foster a more enjoyable work environment in the manufacturing sector.

Source: Interview with Michelle Quinn, July 2023; Almond Engineering. About; Flexibility Works (2023). Employer Case Study: Almond Engineering.

BOX 11. FLEXIBLE WORKING IS THE FUTURE OF WORK

Flexible working is here to stay and will continue to change working places in the future as digital technologies enable remote work and task automation. Previously, it was believed that flexible working was incompatible with jobs involving machine operatives and production lines. However, manufacturing environments are undergoing transformative changes, offering greater flexibility to workers. This change is contributing to improved work environments and enhancing the ability to attract and retain talented individuals.

The COVID-19 pandemic acted as a catalyst for positive change in flexible working practices. While some employees may currently experience reduced flexibility compared to the pandemic period, overall there has been an upswing in the adoption of flexible working arrangements. According to the *Flex for Life 2023* report, a survey analysis of flexible working in Scotland, 82% of Scottish adults have, or want to have, flexible working, compared to 73% before the pandemic. In addition, most Scottish employers (70%) expect to maintain or increase flexible working opportunities in the next 12 months.

What is flexible working?

Flexible working looks different depending on the person (and their life stage), their role and the organisation where they work. However, overall, it involves providing employees with some choice and control over where, when or how much someone works. For example: being able to choose to work from home or a location other than your employer's premises, varying the length of your working day within the week or month, varying start or finish times, taking breaks for personal reasons during working hours without needing to ask permission or using your employer's hybrid working policy.

For shift workers or frontline, on-site or customer-facing roles, this might include: the ability to swap shifts, self-rostering, the ability to adjust hours occasionally, and making small adjustments to start and finish times. It might also include having predictable shifts and input into shift patterns.

It can be informal or formal (in a contract), or a mix of both, and **it does not include things like zero-hours contracts, over which you have no control.**

What are the benefits of flexible working

According to research conducted by Flexibility Works in Scotland, the benefits of flexible working **for employers include: employee retention, increased diversity, productivity growth, improved employee engagement, reduced sickness absence, and attraction of a wider pool of talent.**

Flexible working is the second most important factor in a job search, after salary. In Scotland, four in ten people who are thinking about changing jobs consider work–life balance to be important.

For employees, the benefits of flexible working include: a **better work–life balance, improved wellbeing (mental and physical), reduced costs in care services and transportation, increased opportunities to participate in the labour market, and the ability to progress in their careers.**

Flexible working has a significant impact on certain population groups who would otherwise face the choice of leaving work or accepting precarious arrangements. This is particularly true for individuals with disabilities or long-term health conditions, as well as mothers, single parents and couples raising children.

In Scotland being a father increases men's desire for greater flexibility around location. Fathers are more likely to prefer working from home and hybrid working. Mothers, in comparison, are more likely to seek part-time hours, flexible start and finish times, and term-time working. However, for women, opting for reduced hours is often influenced by gendered divisions of care and domestic work. This suggests that women encounter greater trade-offs between family obligations and career advancement than men.

Five practical tips for manufacturers

Flexibility Works, a consultancy firm that supports employers to develop more flexible workplaces, has five practical tips for manufacturers to create more flexible ways of working:

1. **Advance notice, reliable and predictable shifts.** If you can plan ahead and give people more notice about their shifts, including specifics about location if this varies, and have some regular patterns, this will give employees more control over the rest of their life. They can book medical appointments, arrange childcare or simply know when they can go for a swim or take the dog for a walk.
2. **Direct rota input for employees, including swaps**. Make it simple for people to select and change shifts. There are good apps that can help teams to communicate clearly, view rotas and swap shifts quickly, as well as email and group messaging.
3. **Flexible hours and locations**. By offering flexibility in working hours and locations, you create opportunities for a wider range of individuals to participate, including parents, caregivers and people with disabilities. Flexible arrangements may involve part-time roles, compressed hours (doing fewer, longer days) or a twilight shift, among others. Even a small amount of remote work, where feasible, can greatly benefit individuals with busy schedules.
4. **Know your team.** Take the time to understand the personal circumstances of your team members. This knowledge allows you to create shift patterns that align better with their needs, even if it might not be possible to accommodate everyone's preferences all of the time. By considering individual circumstances, you demonstrate a commitment to supporting your team members in achieving a healthy work–life balance.
5. **Communicate effectively and empathetically.** Ensure that employees are aware of the support and benefits available to them within the company. Encourage and facilitate the use of leave entitlements and provide clear information on the available resources. Managers who communicate effectively and empathetically with their teams foster a positive work environment and encourage open dialogue.

For more information about Flexibility Works, please visit: flexibilityworks.org

Source: Flexibility Works (2023). Flex for Life 2023. Gallagher, L. (2023). Why flexible working is part of the 'future of work' for manufacturers. InterAct Blog.

3.2 Principles for industry associations

We propose four key principles to enhance diversity and inclusion within manufacturing associations, empowering them to lead and inspire positive change across their member organisations:

- **Principle 1.** Promote diversity and inclusion on boards.
- **Principle 2.** Assess, track and report on the industry's progress on equality, diversity and inclusion.
- **Principle 3.** Promote and champion EDI best practices.
- **Principle 4.** Promote a diverse and inclusive image of manufacturing.

Principle 1. Promote diversity and inclusion on boards

Why is this important? Boards that reflect a variety of perspectives, experience and backgrounds are better equipped to understand and address the needs of a diverse workforce and customer base. Inclusive boards also set a strong example for the entire industry, signalling a commitment to fostering a culture that values diverse voices.

Box 12 highlights how Kirsty Davies-Chinnock, Founder of Women With Metal, has championed women on boards and directorates.

Suggested actions:

- Establish clear and measurable diversity targets for board composition. Publicly commit to these targets and regularly report on progress.
- Actively seek board candidates from under-represented groups by expanding recruitment efforts beyond traditional networks. Partner with organisations that focus on diversity and inclusion, such as women's organisations and networks.
- Encourage member organisations within the association to nominate diverse candidates for board positions.
- Review and revise board membership criteria to ensure they are inclusive and do not unintentionally exclude diverse candidates. Consider whether traditional requirements, such as specific industry experience or previous board service, may limit the pool of potential candidates. Adjust these criteria to focus on broader competencies, such as leadership skills, strategic thinking and a commitment to diversity and inclusion.
- Foster an inclusive culture within the board by providing diversity and inclusion training to current board members, encouraging open dialogue and creating an environment where diverse perspectives are respected and valued.

BOX 12. WOMEN WITH METAL: MAKING THE METAL SECTOR MORE DIVERSE AND INCLUSIVE

We had the opportunity to chat with Kirsty Davies-Chinnock, Founder of Women With Metal and the Women in Industry Podcast, and Managing Director of Professional Polishing Services. Kirsty has worked in the metal sector for 35 years, during which she has been a key driver of positive change, celebrating and championing women. In a male-dominated sector, she has acted as a board member and director of various industry associations, including the British Stainless Steel Association. Kirsty has experienced first-hand how the metal sector has transformed from having just a few women in the room to now accounting for around a third of the sector's leaders.

Kirsty Davies-Chinnock, Founder of Women With Metal

However, she recognises that many diversity and inclusion challenges remain in the industry: *"[The sector] is still predominantly White and middle class"*.

Championing women in the metal sector

Women are not only under-represented in the sector, but the few who are present often face numerous barriers to joining senior leadership roles. To address this, Kirsty has championed women in the metal sector by inviting other outstanding women to join boards and directorates and founding the Women in Industry Podcast to increase the visibility of women in the industry.

Kirsty also founded the Women With Metal Conference, an annual event that provides a platform for women and allies to connect and help them flourish in their careers.

In 2024 she partnered with RX Global to launch the Aluminium Awards, to be held at the Aluminium Show in Dusseldorf, Germany, in October 2024. They will showcase and celebrate diversity and sustainability in the aluminium sector in five categories, including:

- Role model, the best example of what women can achieve in the industry and how she can inspire the sector
- Young leader, a young woman who pursues or develops unusual ideas and creative approaches, with outstanding communication skills and an inspiring innovative spirit
- Male ally, a committed champion who supports, drives, encourages, motivates and celebrates the women in the industry.

Recommendations for SMEs

As a managing director of an SME, Kirsty knows that SMEs face different conditions to larger companies but can still make changes to improve diversity and inclusion. Some of her recommendations include:

- Championing a diverse and inclusive culture
- Ensuring that the language and photos used in recruitment are inclusive
- Being open to changing your leadership style, making it inclusive and flexible to address the needs of all your staff
- Ensuring that flexible working policies do not reinforce gender roles and deepen gaps between women and men in the workplace
- Promoting gender balance of childcare and supporting access and affordability
- Making adjustments to provide women-only facilities when needed, such as changing rooms and breastfeeding spaces, and providing sanitary products.

Source: Interview with Kirsty Davies-Chinnock, https://womenwithmetal.com/

Principle 2. Assess, track and report on the industry's progress on equality, diversity and inclusion

Why is this important? For industry associations, as with individual companies, the foundation of a successful EDI journey lies in gathering and analysing data to identify key areas for improvement. Understanding the current state of EDI within the industry allows critical issues to be prioritised and targeted strategies to be developed. By setting SMART (specific, measurable, achievable, relevant, time-bound) targets and consistently monitoring and reporting on progress, industry associations can drive sustained improvements and demonstrate accountability to their stakeholders.

Suggested actions:

- Partner with research organisations and EDI consultancies to conduct industry-wide EDI assessments and track progress over time. Box 13 presents how the BioIndustry Association partnered with Diversio to produce a benchmark report on diversity and inclusion in the bioindustry.
- Include specific EDI modules in regular industry-wide surveys to gather relevant data and insights.
- Use the collected data to inform EDI strategies, assess the effectiveness of initiatives, and make informed decisions for future actions.
- Establish clear, measurable diversity and inclusion targets to drive continuous improvement across the sector. For instance, the WiM UK initiative aims to increase the participation of women in the sector to 35% by 2035. Similarly, the Automotive Council has committed to increasing the participation of women in the automotive sector to 30% by 2030.[52]
- Publicly report on the progress of EDI targets and initiatives, showcasing achievements and identifying areas for improvement.

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[52] Automotive Council (2023). *UK Auto Industry pledges to address diversity shortfall*.

BOX 13. BIOINDUSTRY ASSOCIATION: EVIDENCE-BASED ACTION

Established in 1989, the BioIndustry Association (BIA) represents over 600 members in the life sciences and biotech industry, ranging from universities and research centres to start-ups and pharmaceutical companies. In 2023 the BIA published a benchmark report on diversity, equity and inclusion to encourage other organisations in the sector to track their diversity and inclusion objectives as they innovate and scale.

Kate Barclay, Skills Strategy Consultant at the BIA

Insights from the report

The benchmark report was conducted in collaboration with Diversio, leveraging their expertise and proprietary methodologies in diversity data analytics. Key insights from the report include:

- **Gender representation.** UK life sciences and biotech is at parity with the overall representation of men and women. However, this is not seen equally through job roles and drops significantly at C-suite and CEO levels.
- **Ethnic representation.** Black employees are notably under-represented, particularly in leadership and digital and computational roles.
- **Inclusion.** There is a meaningful difference in inclusion experiences among different demographic groups within the UK life sciences and biotech sector. Women, people of colour, LGBTQ2+ individuals, and those with physical/cognitive/mental health conditions report lower inclusion metrics across all areas except career development, where all employees score low regardless of identity.

Key recommendations

Key recommendations from the report include:

- **For companies:** (i) Collect and benchmark diversity and inclusion data; (ii) develop and encourage inclusive leadership; (iii) pursue inclusive recruiting and hiring practices; and (iv) provide career mentoring and sponsorship among other programmes and policies.
- **For industry associations:** (i) Provide benchmark data; (ii) signpost partnerships; (iii) share best practices; and (iv) provide mentoring and sponsorship opportunities.

From data to action

The findings from the report have informed the BIA's diversity and inclusion activities. Examples include:

- Workshops on inclusive recruitment and hiring
- Partnership with Future Black Leaders to host a panel
- Women in Biotech network, offering in-person events and an online forum
- Women in Biotech mentoring programme, connecting, supporting and inspiring women across the biotech and life sciences sector.

Source: Interview with Kate Barclay, Skills Strategy Consultant at the BIA; BIA and Diversio (2023). *Diversity and Inclusion in UK Biotech.*

Principle 3. Promote and champion EDI best practices

Why is this important? Promoting and championing best practices in EDI initiatives can inspire other organisations to adopt similar practices, fostering a culture of continuous improvement. Sharing best practices helps to accelerate progress by providing proven strategies and tools that others can replicate, enhancing the inclusion and diversity of the entire industry.

Suggested actions:

- Organise workshops, webinars and forums to facilitate the exchange of EDI best practices and encourage collaboration among industry members.
- Establish awards or recognition programmes to celebrate organisations that demonstrate outstanding commitment to EDI.
- Provide members with EDI-related services to enhance their capacity to implement best practices. Consider leveraging strategic partnerships for this. Box 14 presents the example of Make UK and the EDI services they offer to their members.
- Share relevant EDI resources with your members, such as those being developed by the Women in Manufacturing initiative.

Principle 4. Promote a diverse and inclusive image of manufacturing

Why is this important? The manufacturing industry has long been a cornerstone of economic growth and innovation, yet it often struggles with outdated perceptions that fail to reflect its evolving and dynamic nature. Promoting a diverse and inclusive image of manufacturing is essential to attracting a wider talent pool, fostering innovation and ensuring the long-term sustainability of the industry. By actively shaping public perceptions, the industry can showcase itself as a progressive and welcoming environment for individuals of all backgrounds, ultimately driving growth and competitiveness in the global marketplace.

Suggested actions:

- Lead by example, adopting EDI best practices within the association (see section 3.1).
- Engage in policy advocacy to promote diversity and inclusion in manufacturing and in public awareness efforts to disseminate the benefits of diversity and inclusion.
- Build trust through active community engagement, positioning the industry as an inclusive and welcoming career choice.
- Support initiatives that provide exposure to manufacturing careers for under-represented groups through internships, apprenticeships and mentoring programmes.
- Participate in efforts to improve the public perception of manufacturing, such as media campaigns and educational outreach. For example, the Institute of the Motor Industry launched the campaign "There's more to motor" to promote a more positive and exciting image of the sector and to showcase the diversity of jobs that the sector offers.[53]

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[53] https://moretomotor.org.uk/

BOX 14. MAKE UK: BEYOND COMPLIANCE INTO CULTURE

Make UK is the largest manufacturers' organisation in the United Kingdom, dedicated to fostering a supportive environment where UK manufacturers can thrive, innovate and compete. A cornerstone of Make UK's mission is promoting equality, diversity and inclusion (EDI) within the manufacturing sector.

Five key components of a successful EDI strategy

Whether organisations are just beginning their EDI journey or aiming to embed deep cultural change, the Make UK EDI team identifies five critical components for success:

- Clear goals
- Ownership and commitment from leaders
- Consistent and compliant data collection, management and reporting
- Employee input and engagement
- A framework of policies and training.

EDI support offering

Make UK provides a comprehensive range of EDI support services, including:

- Advice on delivering inclusive policies, leadership engagement and GDPR-compliant data collection and management
- Planning and strategy workshops
- Employee surveys
- Cultural change programmes
- Anti-bullying and harassment policy template and guidance notes
- Training and development, including a suite of micro videos (5–10 minutes) on topics such as unconscious bias, allyship, dyslexia, menopause, sexual harassment, and trans and gender diverse awareness.

Lessons learned

Based on their extensive experience, the Make UK EDI team recommends the following:

- *Focus on culture.* Genuine transformation occurs when there is an authentic commitment to changing the organisational culture. This requires involving the entire leadership team, not just HR, and consultation with employees.
- *Small initiatives, significant impact.* Cost-effective initiatives can drive substantial change. Effective measures include incorporating EDI training into employee induction, conducting employee surveys, ensuring diverse interview panels and using inclusive language in recruitment adverts. For example, offering part-time options in job advertisements can make roles more accessible to older individuals, those with caregiving responsibilities, and people with disabilities.

Source: Interview with Sharon Broughton, Judith Chapman and Nicola Kibble; Make UK (2024). *Equality, diversity and inclusion*.

3.3 Recommendations for a gender-responsive industrial strategy

Despite the evident under-representation of women, a recent study[54] found that gender inequalities are rarely addressed in industrial and innovation strategies in the UK and beyond. Of the 68 strategies and initiatives examined in this report, only 15 addressed gender inequalities, and all did so with a limited scope. Instead of conducting a thorough analysis of gender disparities across the various issues and priorities covered by industrial and innovation strategies, these approaches typically reference a specific gap without detailing measures to address it.

For example, the UK's 2017 Industrial Strategy highlights pay gaps and disparities in science, technology, engineering and mathematics (STEM) fields; the 2020 Research and Development Roadmap mentions gaps in access to finance; and the 2021 Innovation Strategy discusses gaps in patent activity. However, none of these strategies delve deeper into the issues.

Based on international practice (see Annex 1), in this section we propose five recommendations for developing a truly gender-responsive industrial strategy, namely a strategy that accounts for its implications for women, men and non-binary people.[55]

- **Recommendation 1.** Embed gender analysis and inclusive consultations in policy development.
- **Recommendation 2.** Set gender equality targets and allocate adequate resources.
- **Recommendation 3.** Incorporate a gender perspective throughout all programmes and projects.
- **Recommendation 4.** Monitor and evaluate progress and review initiatives.
- **Recommendation 5.** Collaborate with other ministries and agencies to address gender disparities.

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[54] Anzolin, G., Castañeda–Navarrete, J. and Ribaudo, D. (2023). *How to make manufacturing charming again? It is everything, everywhere, all at once*.
[55] United Nations Industrial Development Organization, UNIDO (2021). *UNIDO Guide to Gender Analysis and Gender Mainstreaming the Project Cycle*.

Recommendation 1: Embed gender analysis and inclusive consultations in policy development

Why is this important? Conducting gender analysis is a crucial first step in creating a gender-responsive industrial strategy. It reveals disparities in women's and men's participation across various industries, fields and occupations; it highlights the differences in the benefits they derive from education and labour market participation; it identifies the barriers they encounter; and it uncovers gaps in access to funding, capital and business ownership. Additionally, comprehensive gender analysis can pinpoint existing data gaps that need to be addressed. Engaging with relevant stakeholders, including women's professional and business organisations, is an integral part of this process, ensuring that diverse perspectives are considered.

Suggested actions:

- Collaborate with research organisations and consultancies to identify relevant data and studies.
- Complement quantitative information with qualitative insights.
- Support efforts for gender-disaggregated data collection and analysis.
- Adopt international best practices for conducting gender analysis (see Annex 1).
- Consult with organisations representing women in various sectors to incorporate their experiences and insights.
- Ensure that the language used is inclusive and that the images represent a gender-balanced perspective.

Recommendation 2: Set gender equality targets and allocate adequate resources

Why is this important? Setting specific gender equality targets is essential for driving measurable progress towards closing gender gaps in industrial and innovation activity. Establishing gender equality targets also demonstrates a commitment to inclusivity and can serve as a benchmark for monitoring progress. Although, there is usually consensus on the relevance of narrowing gender gaps, less attention is paid to the resources needed to achieve this. Allocating adequate resources ensures that these targets are not just aspirational but achievable, providing the necessary support for initiatives that address gender disparities.

Suggested actions:

- Define SMART gender equality targets. For example, Germany's Future Research and Innovation Strategy has set a target of increasing the proportion of women in professorships from 27% in 2021 to 30% by 2025,[56] while the US Manufacturing Institute's Women MAKE America Initiative set the target to increase the percentage of women in manufacturing from 29% to 35% by 2030. [57]
- Ensure that sufficient financial, human and technical resources are dedicated to achieving these targets.
- Implement gender-responsive budgeting practices to ensure that financial resources are allocated in a way that supports gender equality objectives, assessing the impact of budgetary decisions on men and women differently.[58]
- Secure commitment from senior leadership to champion gender equality targets.

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[56] BMBF (2023). *Future Research and Innovation Strategy.*
[57] Manufacturing Institute (2024). *Women MAKE America Initiative.*
[58] The European Institute for Gender Equality and the BS ISO 538000 2024-05 Guidelines for the promotion and implementation of gender equality and women's empowerment provide guidance on gender-responsive budgeting.

Recommendation 3: Incorporate a gender perspective throughout all programmes and projects

Why is this important? Integrating a gender perspective across all programmes and projects ensures that gender equality is not an afterthought but a fundamental consideration in every stage of the policy process. This approach helps to reduce existing disparities and prevents the creation of new inequalities as programmes and projects evolve.

Suggested actions:

- Provide gender mainstreaming training to programme managers and staff to equip them with the skills and knowledge necessary to implement gender-sensitive approaches effectively.
- Encourage the active involvement of women in leadership and decision-making roles within all programmes and projects, ensuring their perspectives are represented.
- Integrate a gender perspective in public procurement processes.[59]
- Ensure that all communications related to programmes and projects are gender-sensitive, using inclusive language and imagery, and that dissemination activities target women's professional and business organisations and other organisations of under-represented population groups.
- Implement systematic collection and monitoring of gender-disaggregated data. For instance, the Made Smarter Adoption Research Project collected gender- and ethnicity-disaggregated data on leadership within participating firms. This approach revealed significant differences in technology adoption and the benefits reported by these groups.[60]
- Set clear targets to ensure balanced representation and participation of all genders in programmes and projects. For example, a programme could aim to have 30%–40% of its supported companies women-led or women-owned.
- Assess the potential impact of the programme on gender equality and gender relations, addressing any potential negative impacts.
- Include specific gender-related indicators in the criteria for assessing project proposals and outcomes to ensure that gender considerations are embedded in the evaluation process. For example, to promote institutional change, the European Union has included having a gender equality plan as an eligibility criterion to gain access to Horizon Europe. Gender balance among researchers involved in projects is also included as an assessment criterion for awarding funding.[61]

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[59] The European Institute for Gender Equality and the BS ISO 538000 2024-05 Guidelines for the promotion and implementation of gender equality and women's empowerment provide guidance on gender-responsive public procurement.

[60] Castañeda-Navarrete, J. and Leal-Ayala, D. (2021). *Made Smarter Adoption Research Project*. Report commissioned by the Department of Business and Trade. Cambridge Industrial Innovation Policy, Institute for Manufacturing, University of Cambridge.

[61] European Union (2021). *Horizon Europe*. *Gender equality*. A strengthened commitment in Horizon Europe. doi:10.2777/410001

Recommendation 4: Monitor and evaluate progress and review initiatives

Why is this important? Regular monitoring and evaluation are crucial to ensuring that gender-responsive initiatives remain on track, allowing timely adjustments to be made as needed. They also contribute to transparency and accountability, helping to build trust and encourage broader support for gender equality initiatives.

Suggested actions:

- Establish a monitoring and evaluation framework, clearly defining the frequency of reviews, relevant indicators and data sources.
- Leverage both quantitative and qualitative data to comprehensively assess progress.
- Publicly report on the progress made and highlight any opportunities or areas for improvement.
- Use the insights gained from monitoring and evaluation to refine and enhance gender-responsive strategies. This may involve setting new targets, reallocating resources or introducing new initiatives to address emerging challenges.

Recommendation 5: Collaborate with other ministries and agencies to address gender disparities

Why is this important? Addressing gender disparities requires coordinated efforts that extend beyond individual sectors and departments. As discussed in Section 1, this is particularly important because social care policies have a significant impact on women's participation in the labour market and the rebalancing of caring responsibilities. By working together, government organisations can ensure that policies are aligned and contribute to a more equitable industrial landscape.

Suggested actions:

- Establish inter-ministerial working groups to align efforts towards gender equality. Consider including industry actors in these groups.
- Identify and disseminate examples of gender-responsive policies and programmes, encouraging their adoption across different ministries and industries.
- Regularly review the outcomes of cross-ministerial and cross-sector collaborations to assess their impact on gender equality and make the necessary adjustments to improve effectiveness.

4. A call to action: from principles to pledges

The principles outlined in this report represent a foundational step towards fostering greater equality, diversity and inclusion (EDI) within the manufacturing sector. However, the true impact of these principles will be realised only through their implementation and adaptation to the unique contexts of individual companies and industry associations.

The Women in UK Manufacturing initiative invites all stakeholders – whether you are a large multinational corporation or a small enterprise –to engage with these principles, provide feedback and share your insights. Your input is invaluable in refining these guidelines to ensure they are practical, relevant and effective across the diverse landscape of UK manufacturing.

Moving from principles to tailored pledges

We encourage companies and industry associations to express their interest in transforming these principles into actionable pledges that reflect their specific needs and circumstances. By doing so, you will not only demonstrate your commitment to advancing EDI within your organisation but also contribute to a broader and collective effort to drive meaningful change across the industry.

How to get involved:

- **Provide feedback:** Review the principles proposed in this report and share your thoughts on how they can be improved or adapted to better suit your organisation's needs.
- **Express interest in pledges:** If you are interested in developing tailored EDI pledges based on these principles, please reach out to us. We are eager to collaborate and support you in this endeavour.
- **Commit to action:** Once your pledges have been established, publicly commit to them and share your progress. This transparency will inspire others and help to build momentum towards a more inclusive and diverse manufacturing sector.

Together, we can turn these principles into actionable pledges that will shape the future of UK manufacturing. Let's work collaboratively to ensure that every company, regardless of size or sector, has the opportunity to contribute to and benefit from a more equitable and inclusive industry.

Please use this QR code to provide your feedback and express your interest in sharing EDI pledges aligned with these principles.

Appendix A. Organisations consulted

- ADS
- Almond Engineering
- Amari Metals
- Automate UK
- Automotive Council UK
- British Stainless Steel Association
- CapAir Systems
- Centre for Process Innovation
- Daver Steels Ltd
- GAMBICA
- HCM Engineering Ltd
- Hobart UK
- Institute of the Motor Industry
- International Flavors & Fragrances
- Johnson Matthey
- Kuka Systems UK Ltd
- Lestercast Ltd
- Make UK
- Mestec Ltd
- MRT Castings Ltd
- Nissan Sunderland
- Odgers Berndtson, Inclusion
- Priorclave Ltd.
- Professional Polishing Services
- Q5D
- Sherwood Scientific Ltd
- Stellantis
- STEM Returners
- Teledyne UK Ltd
- The Boro Foundry Ltd
- The Pathway Communication Company
- UK BioIndustry Association
- Women With Metal

Appendix B. Review of best practices

TABLE B.1 REVIEW OF GUIDELINES AND COMMITMENTS FOR DIVERSITY AND INCLUSION IN UK MANUFACTURING

Name	Organisation	Type of resource	Highlights
The UK Automotive Diversity and Inclusion Charter (2022)	Automotive Council UK	Charter	• Create a respectful and inclusive company culture for all colleagues. • Embed DE&I policies into company values and ensure they are reflected in all communications. • Improve recruitment practices and targeting to remove bias, encourage diversity of applicants and increase the diversity of talent pipelines at every level. • Create a flexible working environment for all, with a focus on delivery. • Support career opportunities and progression for every employee, through training, talent management, mentoring and sponsorship programmes. • Appoint a board-level DE&I champion to lead change from the top and implement line manager training • Engage and collaborate with our suppliers and the wider automotive sector to champion diversity, equity and inclusion and share best practice. • Collect DE&I data, and report and publish progress annually to the Automotive Council.
Shifting Gears: How to close the gender gap to drive business performance (2023)	Automotive Council UK	Practical guide	Practical suggestions on: • Recruitment, how to make processes more inclusive and how to attract a more diverse pool of applicants. • Retention, including flexible working and support for carers • Progression, how to make selection processes more inclusive, while encouraging talent to apply for promotions • Culture and leadership, how to create a respectful and inclusive company environment, starting from senior leaders.
Driving towards inclusion: Sector report (2024)	Institute of the Motor Industry	Recommendations	• Targeted recruitment and outreach • Inclusive workplace cultures and policies • Enhanced visibility and mentorship • Flexible working arrangements • Support for career advancement • Improving accessibility of apprenticeships • Regular monitoring and reporting • Employee resource groups • Leverage technology for inclusivity

Name	Organisation	Type of resource	Highlights
UK manufacturing diversity & inclusion guide (2021)	Made Smarter Innovation Network	Recommendations	Practical steps on how to: • Improve diversity in the manufacturing workforce • Ensure technologies developed by – and adopted in – manufacturing are inclusive • Consider the unintended effects of technology on workforce diversity.
Manufacturing our recovery through inclusion (2021)	Make UK	Guiding principles	• Define your EDI ambition and publish this through an EDI statement owned and championed by senior leaders in our business. • Create a truly inclusive culture by building a workforce reflective of the working population, and your local community. • Share best practices with your peers and learn from those who have made positive change. • Adapt and review your EDI work by embedding a culture of learning throughout your business.
The EDI Engine. Evidencing the business benefits of equality, diversity and inclusion (EDI) in engineering (2024)	Royal Academy of Engineering	Recommendations	• Collect data to evaluate your company's EDI practices. • Leverage external resources and expertise to guide your efforts. • Adopt a leadership-driven, strategic approach. • Set ambitious yet realistic goals tailored to your company's needs, resources and capabilities. • Cultivate a culture that embeds EDI.
Diversity and Inclusion in UK Biotech (2023)	UK BioIndustry Association	Recommendations	• Collect and benchmark diversity and inclusion data. • Leaders champion action. • Inclusive recruiting and hiring practices. • Career mentoring and sponsorship.
Women in Aviation and Aerospace Charter (2018)	Women in Aviation and Aerospace Charter	Charter	• Have one member of the senior executive team who is responsible and accountable for gender diversity and inclusion. • Set internal targets, where appropriate, for gender diversity in senior management. • Publish progress annually against any targets in reports on their website. • Try to ensure that the pay of the senior executive team is linked to delivery against any internal targets on gender diversity and inclusion.

TABLE B.2 REVIEW OF RESOURCES FOR WOMEN'S EMPOWERMENT AND GENDER EQUALITY DEVELOPED BY INTERNATIONAL ORGANISATIONS

Name	Organisation	Type of resource	Overview	Highlights
BS ISO 538000 2024-05 Guidelines for the promotion and implementation of gender equality and women's empowerment (2024)	British Standards – International Organisation for Standardisation	Standard	A six-step methodology to adapt and implement gender equality: i. Analyse the organisation's status ii. Identify stakeholders iii. Identify relevant gender equality issues and their potential impact iv. Prioritise gender equality issues v. Draw up the gender equality action plan vi. Engage external stakeholders.	• Detailed list of relevant information and indicators needed to assess the organisation's status on gender equality • Governance guidelines, including the appointment of gender advisor(s) and/or gender focal point(s) • Guidelines for the provision of gender-responsive goods and services and gender-responsive budgeting • Guidelines for gender-inclusive internal and external communication • Guidelines for the development of a grievance mechanism to prevent, detect and respond to gender-based violence
Women's Empowerment Principles (WEPs) (2010)	United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), UN Compact	Principles/ guidelines	Seven key principles for businesses on how to empower women in the workplace, marketplace and community: i. Establish high-level corporate leadership for gender equality. ii. Treat all women and men fairly at work – respect and support human rights and non-discrimination. iii. Ensure the health, safety and wellbeing of all women and men workers. iv. Promote education, training and professional development for women. v. Implement enterprise development, supply chain and marketing practices that empower women. vi. Promote equality through community initiatives and advocacy.	• Applicable to businesses of all sizes and sectors, providing flexibility in implementation according to specific needs and contexts. • Companies that sign the WEPs publicly commit to advancing gender equality and can showcase their efforts on the WEPs platform. • Access to tools, case studies and resources to help companies effectively implement the principles and track their progress. • Roadmap for companies to address workplace challenges and promote gender equality across their value chain, from products and services to marketing and community engagement.

Name	Organisation	Type of resource	Overview	Highlights
			vii. Measure and publicly report on progress to achieve gender equality.	
Economic Dividends for Gender Equality Certification (EDGE) (2011)	EDGE Certified Foundation	Certification	A global certification for gender equality, evaluating corporate practices and providing a benchmark for improvement. It measures gender equality performance in companies, focusing on four pillars: i. Representation at all levels of the organisation ii. Pay equity iii. Effectiveness of policies and practices iv. Inclusiveness of the culture.	• The certification process provides organisations with a clear roadmap for improvement, including specific recommendations for advancing gender equality in the workplace. • The certification process includes data analysis of gender pay gaps and employee surveys on gender equality. • It offers three certification levels valid for up to 2 years, based on gender equality implementation.
UNDP Gender Equality Seal for Public and Private Enterprises (2015)	United Nations Development Programme (UNDP)	Certification	Certification recognising organisations for their efforts and achievements in promoting gender equality and women's empowerment. It provides a benchmark for assessing gender equality performance and promotes best practices in eight dimensions: i. Governance and strategy ii. Remuneration iii. Professional development iv. Work–life balance and care v. Recruitment and selection vi. Gender-based violence, sexual and sex-based harassment prevention and management vii. Marketing and communication viii. Supply chain management.	• To implement the Gender Equality Management System, companies conduct a self-assessment, develop gender-sensitive capacities, adopt a gender equality policy and execute an action plan to eliminate inequalities in the workplace. • Certification is awarded after third-party verification, with a Gender Equality Seal (GES) granted by national governments and partners. • Companies are recognised with a bronze, silver, or gold seal based on their achievement level.

UN Women Private Sector Accountability	UN Women	Framework/ toolkit	A framework for private-sector companies to enhance accountability and transparency in their gender equality efforts. A self-assessment tool providing key performance indications and a	• The tool includes 35 indicators presented as questions in areas such as:
				    i. WEPs commitment
				    ii. Gender wage gap policies

Name	Organisation	Type of resource	Overview	Highlights
Framework (UNW-PSAF) (2015)			reporting mechanism for companies to demonstrate their commitment to gender equality.	iii. Women's board representation iv. Grievance mechanisms for discrimination and harassment, and v. Procurement from women-owned businesses.
Empowering Women at Work: Company Policies and Practices for Gender Equality (2020) Empowering Women at Work Policies and Practices for Gender Equality in Supply Chains (2020)	International Labour Organisation, UN Women	Guidelines	Practical recommendations for companies and their supply chains to implement, focusing on six key areas: i. Equal opportunity in employment and occupation ii. Equal pay iii. Prevention of violence and harassment iv. Work–life balance and equal share of care responsibilities v. Women in leadership vi. Future of work.	• Case studies of companies successfully implementing gender equality initiatives across these six key areas, including real-world examples of promoting gender equality in their supply chains • Comprehensive guiding principles provided for each of the key areas and specific guidelines tailored to addressing gender equality within supply chains • Tools and frameworks for assessing current practices and implementing improvements
Women's Empowerment in Global Value Chains: A Framework for Business Action to Advance Women's Health, Rights, and Wellbeing (2016)	Business for Social Responsibility (BSR)	Framework/ guidance	A holistic approach to women's empowerment focusing on the structural underlying factors that hinder women's progress, based on eight building blocks: • Access to safe and equitable employment opportunities • Access to and control over economic resources and opportunities • Education and training • Social protection and childcare • Access to and control over reproductive health and family formation • Freedom from the risk of violence • Voice in society and policy influence • Freedom of movement.	• Establish business case: understand impact and benefits, determine value creation, consider socio-economic context. • Set priorities: tailor criteria, engage stakeholders, assess value chain stages, explore synergies. • Identify action opportunities: assess current performance, consider feasibility, nurture partnerships. • Integrate and implement: set goals and targets, foster inclusion, measure and report outcomes.

TABLE B.3 REVIEW OF RESOURCES FOR WOMEN'S EMPOWERMENT AND GENDER EQUALITY DEVELOPED BY GOVERNMENTS AND TRADE ASSOCIATIONS IN FRANCE, ITALY, IRELAND, SINGAPORE, THE USA AND AUSTRALIA

Name	Organisation	Type of resource	Overview	Highlights

Professional Equality Index (2019)	French government (France)	Index/ measurement	A mandatory tool for assessing and promoting gender equality in French workplaces, focusing on pay equity, promotions, and parental leave	• All companies with more than 50 employees should complete it.
				• Includes five indicators:
				  i. Gender pay gap
				  ii. Difference in the rate of individual increases
				  iii. Difference in the rate of promotions (only for companies with more than 250 employees)
				  iv. Number of employees that received a pay rise following their maternity leave
				  v. Parity among the top 10 highest salaries.

Gender Equality Certification (GEC) (2021)	Presidency of the Council of Ministers, Department for Equal Opportunities (Italy)	Certification	A national certification that encourages companies to adopt gender equality practices in employment, pay equity and leadership roles	• It is valid for 3 years and subject to annual monitoring.
				• Incentives are provided to companies that complete the certification process.
				• Six evaluation areas:
				  i. Culture and strategy
				  ii. Governance
				  iii. Human resources processes
				  iv. Growth opportunities and the inclusion of women in the company
				  v. Gender pay equity
				  vi. Parental protection and work–life balance.

Charter "Let's Feminise the Aeronautics and Space Professions" (2024)	Airemploi Association and other professional federations (France)	Charter	A charter for promoting gender equality in aeronautics and space professions	• Implement a policy promoting diversity and contribute to the observatory of gender equality in the aviation, aeronautics, space and airport sectors. • Identify target professions to be feminised and share annually (with partners who have signed the charter) the evolution of the feminisation rate in these professions. • Share best practices in terms of diversity, combating stereotypes and promoting career paths.

Name	Organisation	Type of resource	Overview	Highlights
Elevate (2021)	Business in the Community Ireland (Ireland)	Pledge	A pledge to improve diversity and inclusivity in Irish workplaces	• Record the diversity profile of the workforce. • Participate in a BITCI report, which will publish the diversity profile of the collective workforce of all signatory companies. • Annually develop one tangible action that ensures the recruitment or retention of diverse talent and report on the impact of this action. • Increase ambition on the equality, diversity and inclusion agenda. • Collaborate with fellow signatories to learn and create solutions for social impact.

Uplifting women in the workforce (2021)	Singapore Business Federation (SBF) (Singapore)	Recommendations	12 recommendations for businesses, government and other stakeholders to enhance women's participation and advancement in the Singaporean workforce	• Company-level recommendations include:
				  i. Ensure senior management buy-in
				  ii. Adopt the relevant Tripartite Standards
				  iii. Recalibrate processes and communicate extensively.
				• Eco-system-level recommendations include:
				  iv. Pilot clustered returnship programmes
				  v. Augment targeted peer support networks for returnees
				  vi. Establish networks to support and mentor women entrepreneurs.
				• National-level recommendations include:
				  vii. Embed inclusive terms within support policies
				  viii. Increase support for family care leave
				  ix. Foster a supportive environment for women's enterprise programmes.
				• Individual-level recommendations:
				  x. Be receptive to new opportunities and pathways
				  xi. Embrace continuous learning
				  xii. Communicate and manage expectations pre-emptively.

SG Women in Tech (SGWIT) Corporate Pledge (2021)	Infocomm Media Development Authority (IMDA) in partnership with the tech industry (Singapore)	Initiative/pledge	A flexible pledge and commitment by companies to create a conducive environment for women tech professionals	• Rather than a standardised set of principles, the pledge encourages companies to tailor their commitments to their specific circumstances and needs. • It provides a list of companies and their pledges. • Companies pledged commitments across various areas: attracting, retaining and developing women in tech talent.

Name	Organisation	Type of resource	Overview	Highlights
In Her Own Words Breaking the Glass Ceiling Is Good for Business (2023)	Manufacturers Alliance Foundation (USA)	Recommendations	Actionable recommendations for manufacturing companies to create more inclusive workplaces	• Flexibility and paid family and medical leave • Being intentional about recruiting and interviewing • Updating your mentoring programme and assigning sponsors • Auditing and building female bench strength • Being transparent about career ladders, job descriptions and salary bands • Making intimidation, harassment and discrimination zero-tolerance zones • Considering incentives and data transparency • Getting leadership on board
Manufacturing Institute's Women MAKE America 35x30 Campaign (2022)	Manufacturing Institute's Women MAKE America, Deloitte (USA)	Recommendations	Evidence to support the Women MAKE America 35x30 campaign, which aims to increase the percentage of women in manufacturing from 29% to 35% by the year 2030	• Analyses progress made towards increasing women's representation in manufacturing over a decade • Identifies opportunities for increasing female representation • Recommendations for industry and policy-makers, including flexibility, work–life balance and DEI training • Highlights the impact of mentorship and sponsorship programmes
Women in Manufacturing Strategy (2023)	Queensland government (Australia)	Recommendations	A framework to support the attraction and retention of more women in the Queensland manufacturing industry	• Create Diversity and Inclusion Toolkit to increase women in manufacturing. • Develop mentoring and leadership for women in manufacturing. • Promote advanced manufacturing capabilities to young women at primary and high school, including industry technical competencies. • Partner with universities to highlight manufacturing careers to students. • Showcase women's roles in manufacturing through a promotional series.

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