

EngineeringUK response to the inquiry Equity in the STEM workforce

January 2021

About EngineeringUK

[EngineeringUK](#) is a not-for-profit organisation, which works in partnership with the engineering community to inspire tomorrow's engineers and increase the number and diversity of young people choosing academic and vocational pathways into engineering via programmes designed to excite young people about the variety and opportunity presented by a career in modern engineering. EngineeringUK aims to grow the collective impact of work across the sector to help young people understand what engineering is, how to get into it, and be motivated and able to access the educational and training opportunities on the way.

We also undertake research and work with partners in the engineering sector to influence government thinking in relation to the educational pipeline into engineering, and what systems, structures and funding need to be in place to enable all young people to decide whether a career in engineering is for them.

About our response

1. Our response focuses on the engineering sector only. We have drawn on data from latest data set of the Labour Force Survey, July to September 2020 to formulate our response. Our response makes a distinction between the
 - **Engineering workforce** – all those included in the EngineeringUK Standard Industry Classification (SIC) footprint (engineering industries) working in any occupation. Non-engineers working in engineering industries are included in the 'engineering workforce', for example Human Resource professionals working for manufacturing companies.and
 - **Engineering occupations** – occupations classed as 'engineering occupations' based the Standard Occupation Classification (SOC) 2010 according to the EngineeringUK engineering footprint. There are 'core' engineering occupations and 'related' engineering occupations.¹
2. In addition to the protected characteristics, we have also included data on socio-economic disadvantage as we at EngineeringUK understand there to be clear interdependencies between protected characteristics and socio-economic disadvantage in the engineering sector and believe that in order to identify potential solutions, one must take this into account.

¹ A full list of engineering SIC and SOC codes – both core and related – is [available here](#)

Questions

1. **What are the demographics of STEM workers in your organisation or sector? Are there gaps in the quality of evidence, monitoring or reporting?**
2. **Where is there inequity across the different protected characteristics and how are different communities impacted across different:**
 - a. **STEM disciplines or sector/subsectors**
 - b. **types of organisation (e.g. private, public, non-profit)**
 - c. **type of STEM activity (e.g. academic research, education, engagement, commercial, funding)**
 - d. **job levels and/or qualification.**
3. The engineering workforce is known to be less diverse than the UK working population in several ways, as the statistics based on the Labour Force Survey (LFS) regarding the demographics of the engineering workforce relating to protected characteristics below show.² The picture is, however, often complex and varies from one protected characteristic to another, the type of industry, whether we are look at the public or the private sector or whether we take into account any intersectionality with other protected or socio-economic characteristics.

Gender

4. Overall, 14.5% of those working in engineering occupations – across all industries – were women in 2020. Encouragingly, this represented a 2.5 percentage point increase from the 12% in 2018.
5. This varied depending on whether they were in the engineering workforce or not:
 - Just 11.2% of those in engineering occupations within the engineering workforce were women, compared to 22.0% of those in engineering occupations outside the engineering workforce

Public versus private sector

6. Women working in engineering occupations were more highly represented in the public sector:
 - In the private sector, 13.2% of those working in engineering occupations were women, compared to 29.2% of those in the public sector. However, the public sector comprised just 8.1% of all those working in engineering occupations.

Differences by industry

7. The gender makeup also varied by industry, with more women working in engineering occupations in ‘professional’ industries (19.9%), administrative (17.7%) and ICT (16.4%):

Figure 1 Employees working in engineering occupations by industry sector and gender – UK 2020

Sector	Male	Female	Total
A - Agriculture, forestry and fishing	15,108	6,890	21,998

² Information about the data

	68.7%	31.3%	100.0%
			0.4%
B,D,E - Energy and water	200,982	24,756	225,738
	89.0%	11.0%	100.0%
			3.6%
C -Manufacturing	1,242,370	162,570	1,404,940
	88.4%	11.6%	100.0%
			22.4%
F - Construction	1,315,213	77,608	1,392,821
	94.4%	5.6%	100.0%
			22.3%
G,I -Distribution, hotels and restaurants	440,096	66,337	506,433
	86.9%	13.1%	100.0%
			8.1%
H,J -Transport and communication	861,216	160,827	1,022,043
	84.3%	15.7%	100.0%
			16.3%
K,L,M,N - Banking and finance	819,561	227,745	1,047,306
	78.3%	21.8%	100.0%
			16.7%
O,P,Q - Public admin, education and health	323,056	165,567	488,623
	66.1%	33.9%	100.0%
			7.8%
R,S,T,U - Other services	126,748	14,485	141,233
	89.7%	10.3%	100.0%
			2.3%
Total	5,351,444	906,785	6,258,229
	85.5%	14.5%	100.0%

Job level

8. Women in engineering occupations were also slightly underrepresented in the most senior positions (12.9%), as well as drastically underrepresented in the 'Skilled trade occupations' (just 2.6%):

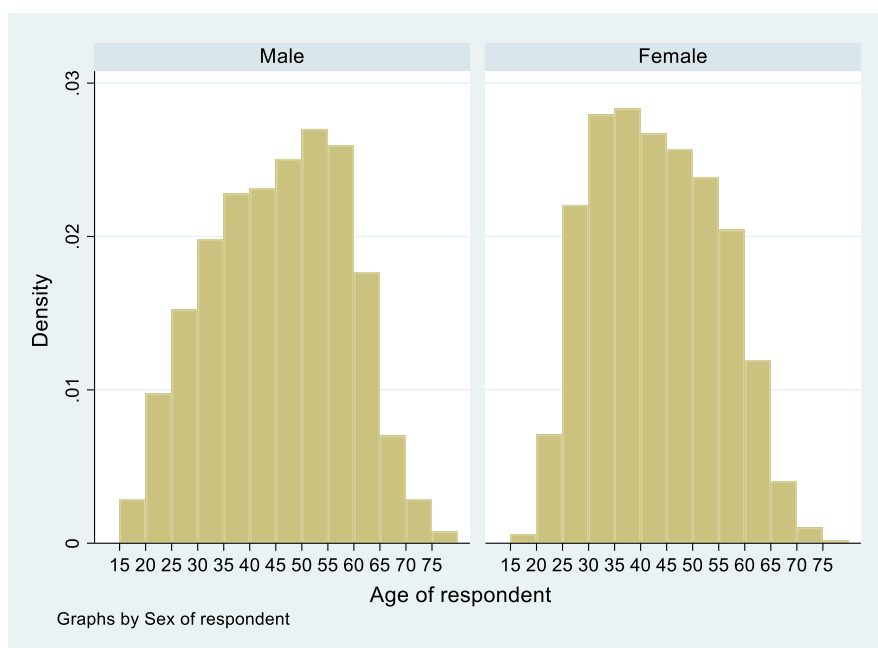
Figure 2 Employees working in engineering occupations by seniority and gender – UK 2020

Group (main job)	Male	Female	Total
Managers, Directors and senior officials	575,586	84,990	660,576
	87.1%	12.9%	100
Professional Occupations	1,821,198	471,282	2,292,480
	79.4%	20.6%	100
Associate Professionals	529,641	203,535	733,176

	72.2%	27.8%	100
Skilled Trades Occupations	1,864,361	49,847	1,914,208
	97.4%	2.6%	100
Process, Plant And Machine operatives	560,658	97,131	657,789
	85.2%	14.8%	100
Total	5,351,444	906,785	6,258,229
	85.5%	14.5%	100

9. However, this under-representation in senior roles may be related to the fact that women working in engineering occupations tended to be younger than men in general, as evidenced in **Figure 3**, below.

Figure 3 Age profile (distribution) of those working in engineering occupations across all industries by gender – UK 2020



10. The graph on the left shows the age distribution of men working in engineering, with a higher density of men in the 45-50, 50-55, and 55-60 age brackets. The graph on the right shows that women working in engineering tended to be younger, with the highest density of women in the 30-35, and 35-40 age brackets. The height of the two graphs **do not represent the total number** of men or women in the sector, but instead the proportion of men and women in each age bracket as a percentage of the overall total.

Ethnicity

11. In 2020, employees from minority ethnic backgrounds were slightly underrepresented in engineering occupations, in comparison to the overall workforce in the UK.

- 9.9% of those working in engineering occupations across all industries were from minority ethnic backgrounds, compared to 12.2% of those in non-engineering occupations

Breakdown different ethnic groups

12. Those from Asian and Asian British backgrounds made up the largest single minority ethnic group of those working in engineering occupations:

Figure 4 Employees in the UK by ethnic group and whether working in engineering or non-engineering occupations – UK 2020

Ethnic group	Non-engineering occupations	Engineering occupations	Total
White	24,363,733 87.3%	5,640,055 90.1%	30,003,788 87.8%
Mixed or multiple ethnicity	410,615 1.5%	72,577 1.2%	483,192 1.4%
Asian or Asian British	1,769,102 6.3%	363,066 5.8%	2,132,168 6.2%
Black, African, Caribbean or Black British	972,254 3.5%	107,270 1.7%	1,079,524 3.2%
Other ethnic group	393,324 1.4%	75,261 1.2%	468,585 1.4%
<i>Minority ethnic Total</i>	<i>3,545,295</i> <i>12.7%</i>	<i>618,174</i> <i>9.9%</i>	<i>4,163,469</i> <i>12.2%</i>
Total	27,909,028 100%	6,258,229 100%	34,167,257 100%

Job level

13. There was also a difference in those working in senior positions in engineering occupations by their ethnicity, with those from BME backgrounds underrepresented in the 'managers, directors and senior officials' category, as well as the 'skilled trade occupations' category:

Figure 5 Minority ethnic employees working by seniority and minority ethnic marker – UK 2020

Occupation group	Minority ethnic Percentage - Eng occupations	Minority ethnic percentage - Non-eng occupations
Managers, Directors and senior officials	7.7%	11.5%

Professional Occupations	14.6%	14.7%
Associate Professionals	10.1%	10.1%
Skilled Trades Occupations	5.7%	9.0%
Process, Plant And machine operatives	7.4%	16.4%

Difference by industry

14. There was a further difference in ethnic composition of engineers depending on what industry they worked in, with minority ethnic groups making up higher proportions of employees in 'transport and communication' (16.5% minority ethnic), banking and finance (11.9%) and 'Public admin, education and health' (11.5% minority ethnic).

Figure 6 Employees working in engineering occupations by industry sector and minority ethnic marker – UK 2020

Sector	White	Minority Ethnic	Total
A - Agriculture, forestry and fishing	15,108	6,890	21,998
	100.0%	0.0%	100.0%
			0.4%
B,D,E - Energy and water	200,982	24,756	225,738
	92.0%	8.0%	100.0%
			3.6%
C -Manufacturing	1,242,370	162,570	1,404,940
	92.6%	7.5%	100.0%
			22.4%
F - Construction	1,315,213	77,608	1,392,821
	95.0%	5.0%	100.0%
			22.3%
G,I -Distribution, hotels and restaurants	440,096	66,337	506,433
	88.6%	11.4%	100.0%
			8.1%
H,J -Transport and communication	861,216	160,827	1,022,043
	83.5%	16.5%	100.0%
			16.3%
K,L,M,N - Banking and finance	819,561	227,745	1,047,306
	88.1%	11.9%	100.0%
			16.7%
O,P,Q - Public admin, education and health	323,056	165,567	488,623
	88.4%	11.6%	100.0%
			7.8%
R,S,T,U - Other services	126,748	14,485	141,233

	91.0%	9.0%	100.0%
			2.3%
Total	5,351,444	906,785	6,258,229
	90.1%	9.9%	100.0%

Public versus private sector

15. The ethnic composition of engineers working in the public and private sector was similar, although engineers from minority ethnic groups were slightly underrepresented in the public sector:

Figure 7 Employees in engineering occupations in all industries in the public and private sector by ethnic group – UK 2020

Ethnic group	Private sector	Public sector	Total
White	5,165,438 90.0%	462,553 91.8%	5,627,991 90.1%
Mixed or multiple ethnicity	66,548 1.2%	6,029 1.2%	72,577 1.2%
Asian or Asian British	340,171 5.9%	21,571 4.3%	361,742 5.8%
Black, African, Caribbean or Black British	98,941 1.7%	8,329 1.7%	107,270 1.7%
Other ethnic group	69,820 1.2%	5,441 1.1%	75,261 1.2%
<i>Minority ethnic Total</i>	<i>575,480</i> 10.0%	<i>41,370</i> 8.2%	
Total	5,740,918 100	503,923 100	6,244,841 100

Source: ONS, Labour Force Survey Jul – Sept 2020

Ethnicity and gender

16. Interestingly, there were a higher proportion of women working in engineering occupations in minority ethnic groups (23.6% female) than there were for White engineering employees (just 13.5% female):

Figure 8 Employees in engineering occupations by ethnicity and gender – UK 2020

Ethnic group	Male	Female	Total
White	4,879,325	760,730	5,640,055
	86.5%	13.5%	100%
Mixed or multiple ethnicity	55,050	17,527	72,577
	75.9%	24.2%	100%
Asian or Asian British	282,651	80,415	363,066
	77.9%	22.2%	100%
Black, African, Caribbean or Black British	86,658	20,612	107,270
	80.8%	19.2%	100%
Other ethnic group	47,760	27,501	75,261
	63.5%	36.5%	100%
<i>Minority ethnic Total</i>	<i>472,119</i>	<i>146,055</i>	<i>618,174</i>
	76.4%	23.6%	100%
Total	5,351,444	906,785	6,258,229
	85.5%	14.5%	100%

Disability

17. Disabled people were also underrepresented in the engineering workforce in 2020, with 11.1% of those in engineering occupations being disabled, compared to 14.8% of those in non-engineering occupations.³

Figure 9 Employees in the UK workforce by engineering occupational marker and disability status – UK 2020

Group	Not Equality Act disabled	Equality Act Disabled	Total
Non-engineering occupations	22,235,334	3,864,453	26,099,787
	85.2%	14.8%	100%
Engineering occupations	5,540,246	692,717	6,232,963
	88.9%	11.1%	100%
Total	27,775,580	4,557,170	32,332,750

³ In this briefing, we use the 2010 Equality Act definition of disability, in line with government publications on the UK Labour force.

	85.9%	14.1%	100%
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Public versus private sector

18. A far higher proportion of those working in engineering occupations in the public sector were disabled than those in the private sector, with 10.7% of engineers in the private sector registered with a disability, compared to 16.0% of those in the public sector.

Figure 10 Employees in engineering occupations by private or public sector marker and disability status – UK 2020

	Not equality Act Disabled	Equality act disabled	Total
Private	5,105,871	611,267	5,717,138
	89.3%	10.7%	100.0%
Public	422,003	80,434	502,437
	84.0%	16.0%	100.0%
	5,527,874	691,701	6,219,575
	88.9%	11.1%	100.0%

Industry sector

19. There was a large variation in terms of disability status between different industry sectors. In particular, 20.3% of engineers working in Agriculture, forestry and fishing were disabled, and 17.6% of engineers working in public admin, education and health were disabled.

Figure 11 Employees in engineering occupations by industry sector and disability status – UK 2020

Sector	Not Equality act disabled	Equality act disabled	Total
A - Agriculture, forestry and fishing	15,108	6,890	21,998
	79.8%	20.3%	100.0%
			0.4%
B,D,E - Energy and water	200,982	24,756	225,738
	88.2%	11.8%	100.0%
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K,L,M,N - Banking and finance	819,561	227,745	1,047,306
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O,P,Q - Public admin, education and health	323,056	165,567	488,623
	84.6%	15.4%	100.0%
			7.8%
R,S,T,U - Other services	126,748	14,485	141,233
	91.6%	8.4%	100.0%
			2.3%
Total	5,351,444	906,785	6,258,229
	88.9%	11.1%	100.0%

Source: ONS, Labour Force Survey Jul – Sept 2020

Social mobility and socio-economic classification

20. Much of the lack of diversity observed in the engineering workforce is underpinned by the social background of those in engineering occupations, with a complex interplay between socioeconomic background, gender, ethnicity, and seniority.

Engineering – along with the overall labour force – suffers from a lack of upwards social mobility.

21. Data from the 2020 LFS showed that:

- In engineering occupations 70.9% of those from advantaged backgrounds obtained a managerial or professional position by age 30-39, compared to 59.9% of those from intermediate backgrounds, and 48.0% of those from disadvantaged backgrounds.

This means that people working in engineering occupations fared better than the overall workforce, where this problem prevails across all occupations:

- Across all occupations, of those aged 30-39, 66.6% from advantaged backgrounds had secured a managerial or professional position, compared to 53.1% from intermediate backgrounds, and 38.4% from disadvantaged backgrounds

22. This differed significantly depending on the individual's gender and ethnicity, as displayed in Figure 12 below. Figure 12 shows that in engineering occupations women – both White women and those from BME backgrounds – are far less likely to be working in intermediate, professional or managerial occupations by age 30-39 than men.

23. For non-engineering occupations, the difference is far less stark, and White women are more likely than BME men to be in intermediate, professional or managerial occupations by age 30-39 (see figure 13).

Figure 12 also shows that in engineering occupations, the effect of parental occupation on employment outcomes is slightly larger than for non-engineering occupations, demonstrated by

the steepness of the lines in Figure 12. The drop off between 'intermediate' and 'disadvantaged' backgrounds in the engineering occupations chart means those from disadvantaged backgrounds are comparatively less likely to obtain intermediate, professional or managerial positions in engineering than they would be in non-engineering occupations.

Figure 12 Predicted probabilities of individuals working in an intermediate, professional or managerial occupation at ages 30 to 39, by engineering occupational marker, social background, gender and ethnicity – **engineering occupations** – UK 2020

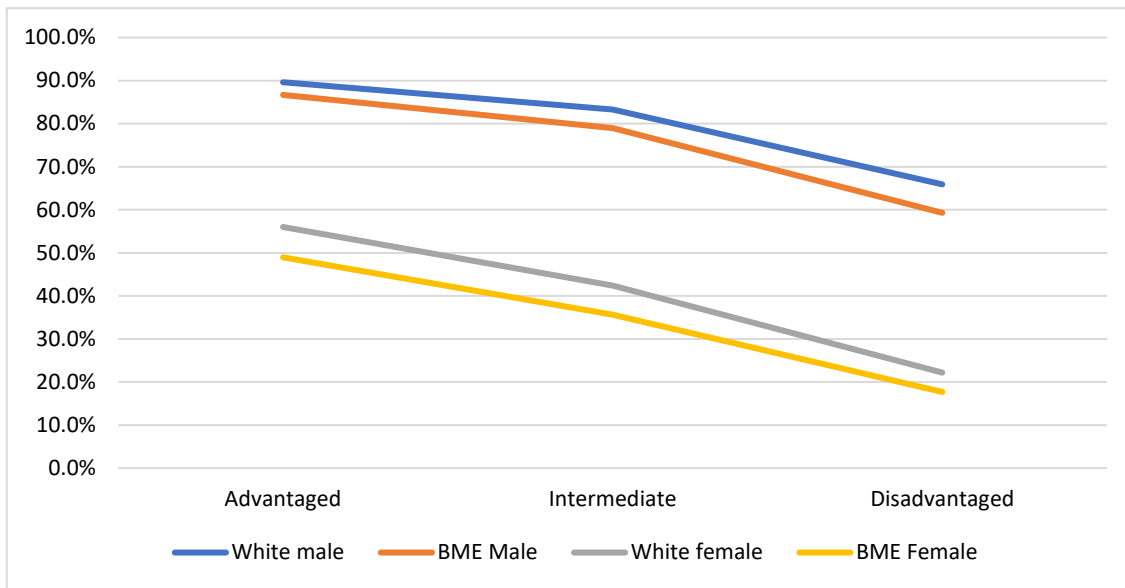
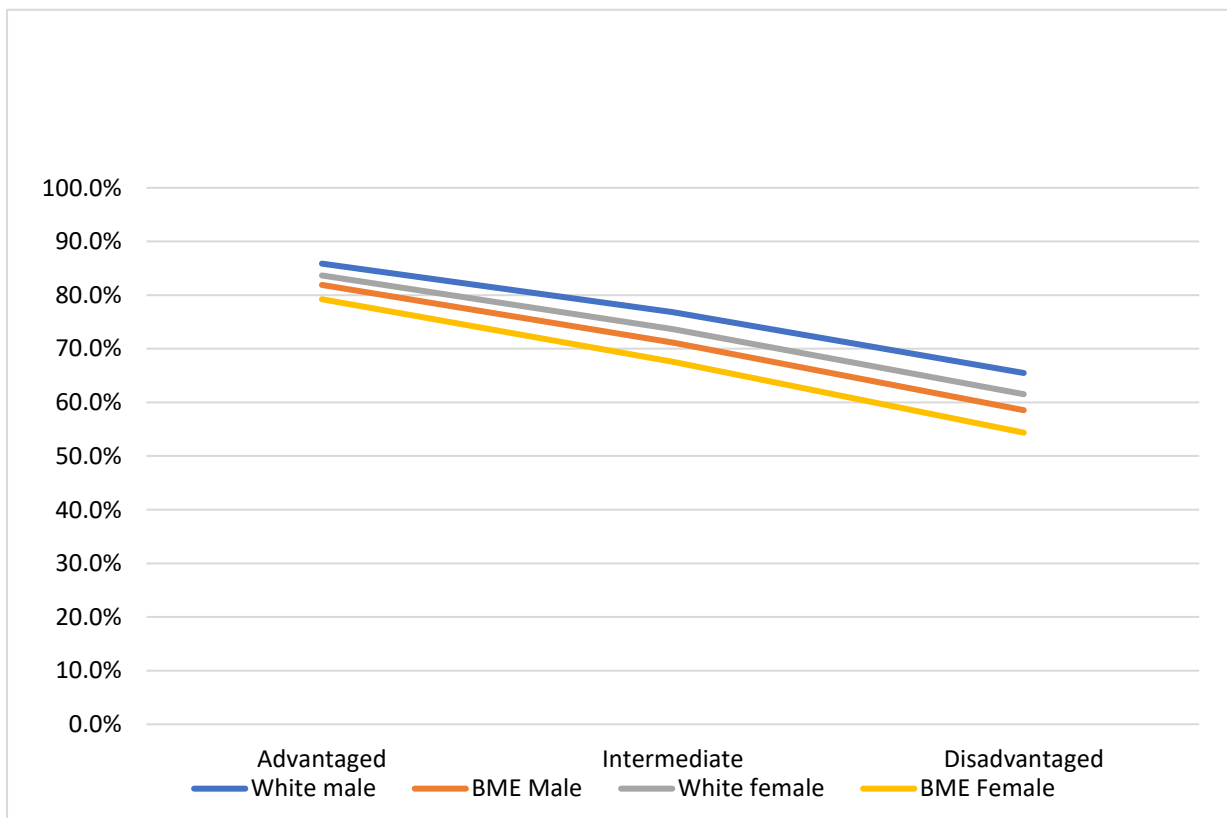


Figure 13 Predicted probabilities of individuals working in an intermediate, professional or managerial occupation at ages 30 to 39, by social background, gender and ethnicity – **non-engineering occupations** – UK 2020



3. Where are there evidenced inclusive behaviours and policies within different organisations, subsectors, sectors and countries on:

a. Recruitment; and/or

b. Retention

24. As the data outlined in the response to questions 1 and 2 above shows, there are significant challenges for groups with protected characteristics and those from lower socio-economic backgrounds in the engineering sector. This starts at the point of entry and generally continues throughout the careers of the individuals.
25. Improving diversity in the engineering sector will be dependent on a range of factors, and will be hugely dependent on including inspiring and enabling more young women, young people from ethnic minorities, disabled people and those from lower socio-economic backgrounds to even consider a career in engineering early on in their lives and throughout education. This will require young people having access to good careers provision, inspiring STEM teachers and a diverse range of role models early.
26. However, if we look at the workforce level only, an important element in the effort to increase diversity across the board and ensure progression in what has traditionally been a white, male profession are inclusive working practices. Inclusive working practices will not only ensure that anyone regardless of their gender, ethnicity, disability status, age or socio-economic background will feel at home working for an engineering company and will have the opportunities to develop and move into managerial roles, inclusion also benefits the organisation. A recent report by the Royal Academy of Engineering found that ‘the more included engineers feel, the more likely they are to understand business priorities, be confident about speaking up on improvements, mistakes or safety concerns, and see a future for themselves in engineering.’⁴
27. How inclusive the engineering sector is perceived to be is, it seems, dependent on which group you ask, with ‘[w]hite male engineers feel[ing] that the culture of engineering is more inclusive than female engineers who in turn feel that it is more inclusive than engineers from black, Asian and minority ethnic (BAME) backgrounds.’⁵ This in itself can present a problem when trying to address issues around inclusivity.
28. There are a number of widely accepted approaches to recruitment, retention and working practices that can be adopted and which in turn will support improving diversity within the engineering sector. We have listed some of these below but would also like to refer to the Royal Academy of Engineering’s submission to this inquiry, which we support, and which will provide more detail on this.

What works

a. A strategic approach to improving diversity

29. It is important that organisations and companies prioritise inclusion and diversity and do so with a long-term view. There are a number of frameworks, such as the Ten Steps programme⁶ or the

⁴ <https://www.raeng.org.uk/publications/reports/creating-cultures-where-all-engineers-thrive>

⁵ <https://www.raeng.org.uk/publications/reports/creating-cultures-where-all-engineers-thrive>

⁶ <https://www.raeng.org.uk/publications/other/diversity-progression-framework>

Royal Academy of Engineering's progression framework, which support organisations to monitor their own progress over time through benchmarking⁷, and a number of organisations who have clear Equality, Diversity and Inclusion Strategies in place. Continued data gathering needs to be part of such an approach.

b. Transparency

30. Having clearly defined pay structures and grades is understood to have a big impact on the gender pay gap.⁸ And transparent progression structures as well as recruitment processes that focus on the capability of the individual candidate ensure that existing biases are more difficult to perpetuate. Gender pay gap reporting, which is a requirement for companies with more than 250 employees, has been a great driver for improving transparency, but must be accompanied by a credible action plan.⁹

c. Flexibility

31. Being flexible in recruitment approaches can make a big difference in who an organisation attracts to apply. As the example below shows, stepping outside a rigid view of what will make a

Cummins' approach to gender balanced recruitment

Stuart Proctor, Recruitment Manager Cummins

In 2015, we challenged our regional technical groups with increasing the gender diversity of our engineering workforce. Our aim was to exceed the UK engineering average of 8 to 10% women by finding new ways of delivering gender balanced recruitment. We decided to focus on our student and graduate opportunities – an area where we hoped we could make a big difference quickly.

Our approach was two-pronged: we examined our recruitment processes to identify any unconscious biases that could have been impacting our hiring decisions, and we focused our attention on increasing the number of suitably qualified women applying to the business, since this was consistently low. We quickly concluded that we needed to shift our focus from looking for candidates who could fill business openings immediately, to identifying high calibre individuals who we could develop to meet the future needs of the business.

Making this distinction allowed us to be more inclusive in our approach to candidate sourcing. For example, we looked at the gender split and volume of students graduating from both the 'traditional' engineering degree subjects (mechanical, electrical, automotive, aerospace) and 'associated' STEM degree subjects such as maths, physics and chemistry. It became clear that including associated STEM degree subjects within our candidate searches increased the potential female representation by over 40,000 per year or 800%.

Altering our advertising strategy allowed us to attract a broader candidate pool. The selection process delivered a 50:50 gender mix on graduate offers. The best candidates were hired and in 2016 and 2017 37% were female.

(EngineeringUK briefing: Gender disparity in engineering, 20??)

⁷ <https://www.wisecampaign.org.uk/what-we-do/expertise/industry-led-ten-steps/what-is-the-ten-steps/>

⁸ <https://www.raeng.org.uk/publications/reports/closing-the-engineering-gender-pay-gap>

⁹ <https://www.gov.uk/government/collections/gender-pay-gap-reporting>

good engineer, has meant that Cummins has been able to attract many more female graduates to their company than previously.

32. In addition, offering flexibility in terms of working hours is also an effective tool supporting greater diversity in the workforce, not just engineering or STEM. 'It can help parents return to work, reduce the gender pay gap, help people with fluctuating health conditions stay in work and help carers to balance their work and caring responsibilities.'¹⁰¹¹

Workplace culture

33. It is not just enough to recruit a more diverse workforce, keeping them is vital. For this to happen, it is important for companies and organisations to have an inclusive workplace culture. Inclusion is more than just inviting groups to the table; it is what happens at the table and whether those at the table have a similar experience. This workplace culture must be holistic and supported by leadership¹². People must be encouraged to speak-up, and we must ensure that we are ready to listen, so that all the voices within an organisation are heard.

d. Role models

34. Role models are important as they can inspire others to follow suite. Ensuring that a commitment to diversity is truly visible and celebrated will have an impact on who organisations attract. The importance of role models has been studied in some detail, both in the educational as well as the workplace context.¹³

3. Are there policies or activities undertaken by the UK Government, or its agencies, that advance or inhibit equity and inclusive cultures within the STEM workforce?

35. Creating more inclusive workplace cultures and encouraging different recruitment practices is to a large extent the responsibility of organisations and companies. It requires leaders who understand the benefits of a more diverse workforce to drive change in their own organisations and to ensure that they take their existing workforce with them, embedding inclusive behaviours in everything they do.
36. However, government frameworks or policies can and do have a clear impact on how businesses or organisations behave and what they consider to be important. A good case in point is the Equal Pay Act and more recently the Public Sector Equality Duty, the rules around flexible working, gender pay gap reporting, the reasonable adjustments policy and the Disability Confident scheme, with some of these frameworks, policies or programmes being more or less binding. Also useful for diversity have been such developments as flexible and part-time apprenticeships, opening up this route for more disabled people as well those who may have caring responsibilities.

¹⁰ <https://www.cipd.co.uk/news-views/news-articles/flexible-working>

¹¹ <https://eige.europa.eu/publications/gender-equality-index-2019-report/flexible-working-arrangements>

¹² <https://www.theengineer.co.uk/diversity-engineering-burnsmdonnell/>

¹³ 3 e.g. Microsoft. 'How role models are changing the face of STEM in Europe,' April 2018; Young et. al. 'The influence of female role models on women's implicit science cognitions,' Psychology of Women Quarterly, 2013; Hermann et. al. 'The effects of a female role model on academic performance and persistence of women in STEM courses,' Basic and Applied Social Psychology, September 2016, <https://diversityq.com/role-models-for-diversity-at-your-workplace-1003987/>

37. It is therefore vital that the government continues to build on these rights and policies and steers away from reducing any protections offered through these measures. Doing so greatly risks undermining the advances on diversity that have taken place so far.

a. Where could policy change or sector action lead to addressing the equity of opportunity within the UK's STEM workforce?

38. A number of the programmes or policies that have been introduced to address inequality in the workplace and in accessing it are only advisory and need to be strengthened to have a real impact on encouraging and keeping a more diverse workforce, including a more diverse engineering workforce.

Disability Confident Scheme

39. Many in the disability sector have long argued that the Disability Confident scheme needs to be strengthened¹⁴ to ensure that it has an impact on employers taking on more disabled people. Changes to the Disability Confident Scheme were promised at the end of 2019 but were never taken forward¹⁵.

Pay gap reporting

40. Concerns have been raised that gender pay gap reporting was paused in 2020 due to the pandemic, at a time when the impact of the pandemic was and continues to be acutely felt by women¹⁶. We would therefore recommend for pay gap reporting to resume as soon as possible. There have also been calls for the pay gap reporting to be extended to include disability and ethnic minorities, two groups for whom such requirements currently do not exist. According to a study by PwC from September 2020, ethnicity pay gap reporting has increased, with almost one quarter of businesses reporting to have done so without further regulations.¹⁷ However, more could and should probably be done to encourage greater transparency in workplaces.

Create opportunities young people from all backgrounds

41. Although this consultation does not focus on diversity at the education level, we think it is important to mention that we can only have a more diverse engineering workforce, when there is a more diverse group of young people wanting to become engineers, who understand the pathways into engineering and can access them.

Sector action

42. Embracing these programmes and policies and making them the norm in the engineering sector, whether or not the government chooses to make them compulsory, will undoubtedly have a positive impact on diversity. The engineering sector, which has struggled to attract a diverse workforce, must work particularly hard to create more inclusive working cultures. This is why, as a sector, it must not only look to report on ethnicity and disability pay gaps, but also embrace policies such as 'flexible working from the start', acknowledging that good engineers do not all

¹⁴ https://www.mencap.org.uk/sites/default/files/2019-07/Access%20all%20areas_0.pdf

¹⁵ <https://www.disabilitynewsservice.com/dwp-scraps-plan-to-strengthen-disability-confident-after-just-four-days/>

¹⁶ For example - <https://www.bbc.co.uk/news/business-55002687>;

https://warwick.ac.uk/newsandevents/pressreleases/first_results_from_new_study_examining_the_impact_of_covid-19_on_working-class_women_in_the_uk_published_today1

¹⁷ <https://www.hrmagazine.co.uk/article-details/ethnicity-pay-gap-reports-rise-in-2020-1#:~:text=The%20percentage%20of%20businesses%20calculating,5%25%20of%20companies%20in%202018>

fit the same mould, but given the right working environment, can be as valuable to a business as anyone else working in the sector.

5. What are the impacts of COVID-19 on equity for STEM workers (including job and income security, contract type etc) in the short- and medium-term? Which communities, groups, organisations or sectors are being most impacted?

43. EngineeringUK will be publishing a research briefing on the equality implications of Covid on the engineering workforce in early summer 2021, which will seek to examine the pandemic's impact on the representation, recruitment, and progression of underrepresented groups in engineering occupations and industries. We would be happy to share this with the APPG in due course.

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For more information on our research, go to our website [here](#).

