

As the world continues to grapple with the ongoing and pressing issue of climate change, it has become increasingly apparent that the role of the engineer is of utmost importance. Consulting engineers, in particular, are at the forefront of design and construction of infrastructure that can withstand and adapt to the impact of climate change, as well as the development of sustainable technologies that can help reduce emissions and mitigate further damage to the environment.

However, like many other industries, the consulting engineering sector is currently experiencing a shortage of skilled workers, with women being significantly under-represented in this highly-skilled profession. Attracting more young talent is essential if we are to respond to the climate emergency. Against this backdrop, the gender gap is both a cause for concern and an opportunity, especially as we need all the talent and diversity we can get to address the challenges of climate change.

#### EFCA Conference

Now, as the European Federation of Engineering Consultancy Associations (EFCA) prepares for its forthcoming conference on “*Delivering Climate resilience: How the European green deal, digitalisation and harmonised standards present*

*opportunities for engineering consultancies*” and General Assembly in Rome (31 May to 1 June 2023), it is an opportune time to reflect on women in engineering.

Here, Inés Ferguson President-elect of EFCA, places a special focus on Ireland and the EU, and considers what can be done to bridge the gender gap and promote greater diversity and inclusivity in the field.

#### Persistent gender gap

Sarah Ingle, the former Secretary-General of the Association of Consulting Engineers of Ireland (ACEI), emphasises the importance of women in engineering and the positive impact they can have on sustainability and society: “As the first woman in Ireland to graduate with a degree in Production Engineering from Technological University Dublin (formerly DIT), I strongly advocate engineering as a great career opportunity for women to help address sustainability concerns for our planet and make a real difference to society. Women bring special traits, skills and ways of working to projects, and a diverse team of engineers and other professionals will always produce the most successful outcome.”

However, recent data suggests that women remain significantly under-represented in the engineering workforce, both in Ireland and internationally. In Ireland, only 12% of engineers are female, while the figures for the United States, Australia and India are 13%, 14% and 14% respectively. That said, there is some good news. Eurostat data from 2022 suggests that the representation of women in engineering and science jobs is on the rise across all EU countries. Data shows that at third-level education, 23% of engineering graduates in Ireland are female. For the ACEI this shows the long distance to travel by the profession to attract and retain female talent in engineering.

The disparity not only limits opportunities for women but also has broader societal impacts. It can



Inés Ferguson President-elect of EFCA.

discourage future generations of girls from pursuing careers in engineering, as they may not see women represented in the field. There is a lack of female leadership, especially in management positions. For example, in the heavy construction sector, which includes civil engineering, only 1% of CEOs are female.

#### EFCA community ‘bridges the gap’

EFCA and its community is committed to promoting diversity and inclusivity in the industry. At national level in Ireland, the ACEI’s new strategy “Bridging the Gap” identifies diversity in the consulting engineering profession as a key strategic objective. As a result, the ACEI will be delivering a series of existing and new initiatives over the coming five years to move the dial in diversity. These will include, *inter alia*, increasing female participation across all committees within the Association, executing a “see it to be it” social media campaign featuring leading women in the sector, and collaborative initiatives with other bodies in the profession, for example, in ensuring that girls-only secondary schools provide STEM subjects.

To support these national efforts, EFCA believes that the European Year of Skills 2023 presents a unique opportunity to promote engineering as a viable career option, especially for women, from an early age. By dismantling the barriers that limit

diversity and inclusivity in the engineering industry, we can better equip it to tackle future challenges and create a brighter future for all.

As part of the “EU Pact for Skills”, EFCA has made a commitment to address these challenges through various initiatives, including workshops, capacity-building training, and the Future Leaders’ Competition. These efforts aim to promote STEM education, inspire and engage young people in engineering, and equip engineers with the necessary skills to thrive in a rapidly-evolving digital landscape.

#### Change of EFCA Presidency

At EFCA’s imminent conference and General Assembly in Rome, Inés Ferguson, Director of Business Development at TYP SA and the current EFCA President-Elect, will take over the presidency from Benoit Clocheret, the outgoing EFCA president. This is a significant milestone as Inés will become the first-ever female president of EFCA. Ferguson is a strong advocate for diversity in engineering and will use her term as president to further this goal. She says: “Diversity raises the performance of the consulting engineering industry. In particular, female talent brings greater flexibility, collaboration and communication. This drives new solutions, integrates teams and promotes partnerships to inspire a positive change.”

By attracting and retaining talented individuals, promoting innovation and creativity, and motivating the upcoming generation of young engineers and construction professionals, the industry can establish a better future where everyone has an equal chance to excel in their chosen field.

EFCA believes that by promoting diversity and inclusivity in the field, and by encouraging young people, especially women, to enter the field of engineering, we can design a future, climate-resilient, built environment and make a significant impact. ■

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