

Where are the women in wind?

Mature and booming as it is, the European wind industry of 2010 remains overwhelmingly male. Chris Rose set out to investigate why this is, and what, if anything, needs to be done to rectify the balance.

At first glance, nothing seems amiss in the busy convention hall.

Thronged of motivated people are getting ready for the keynote speakers. There are handshakes, hellos and business cards. The agenda timetable is scrutinised.

The wind power conference seems like it will be another positive event. And yet, it takes a few minutes to realise something in the unfolding scene is slightly strange: it is overwhelmingly male.

The gender imbalance is underscored when the speakers – eight men and one woman – begin talking about how the wind power industry is trying to replace old, traditional power-generating players with new values for the 21st century.

Who among you has not let their eyes wander about a conference like the composite one just discussed and wondered why there aren't more women in attendance or on the podium? Wondered why it is mostly men who are the keepers of wisdom? Wondered why gender equality, such an ingrained legal and moral principle, has yet to make the same sort of inroads in the engineering- and technology-based wind power sector as it already has in law, medicine and the humanities?

In interviews for this article, several common threads became apparent. None of the female interview subjects complained about their jobs. None said they had experienced overt work-place sexism, discrimination or boorish behaviour because of their gender. All noted that the sector had been a good and nurturing fit for them.

Yet there was agreement that the low percentage of women in the sector was problematic. Their comments echoed a

Women working in the wind industry are still few and far between

Photo: Keenpress Publishing/Sisse Brimberg & Cotton Coulson



Are women's work choices still influenced by persisting gender stereotypes?

Photo: AWEA

2009 European Commission report on the necessity of attracting and retaining talented women in science and technology in order for our complex knowledge-based society to become “one of the motors driving the next stage of economic progress.”

Patrizia Kokot, a researcher at the London School of Economics' Gender Institute, notes it is important to stress that overall, women have made phenomenal strides in accessing the labour market. Women's employment rate across the European Union, for example, rose by about 7% in the past decade.

“This is great, however, a sizeable gender pay gap and a glass ceiling persist rather stubbornly,” said Kokot, who has been conducting research on women's career advancement to partnership in professional service firms in Germany and the United Kingdom. She notes that women's gender pay gap across the EU is still around 17% and has even increased in some countries over the past year.

Kokot said that one of the main problems for women at work remains the double burden of being the primary caregiver for children and frequently the elderly. Although men contribute more to the domestic needs of families than they used to, a higher percentage of women find themselves working longer days – both at their jobs and in their homes.

There are a few things companies can do to improve gender equality at work, Kokot said. Incorporating flexible working arrangements for both women and men to acknowledge childcare needs is one. Another is tackling benevolent workplace sexism, she noted. Mothers are often overlooked when it comes to assigning challenging projects as employers don't want to burden them, but at the same time, this means losing out on important opportunities.

Kokot pointed to one-on-one mentoring as a great way to help women navigate through their career paths because it provides guidance while also introducing them to a broader group of people. “Social capital is really important at work,” she said. “The wider the network, the wider the opportunities.”

Kokot recognised that women now equal or outnumber men in accessing higher education in various fields such as the arts and education, but are still a notable minority in fields such as maths, engineering and technology.

However, she said that is not because young women can't apply for programmes in those fields but because females are often constrained in their choices by persisting stereotypes of masculinity and femininity. This begins early in a child's schooling and influences his or her possible career choices when they attend university.

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Kokot said society benefits from gender equality at work and in the private sphere. “It's now our right to be included in all areas,” she said, but “it's also good for business ... It's a good idea to have a diversity of backgrounds to access a wide range of ideas and opinions at work.”

Even if the wind power industry is male-dominated, she said, as a relatively young sector, there are opportunities in creating more gender-neutral guidelines and steering away from existing limitations found in some more traditional industries.

“I think [the wind power sector] is an interesting new industry where we can look at improving the way we work,” Kokot said.

Kristen Graf is the executive director of Women of Wind Energy (WoWE), a New York City-based non-profit organisation that promotes the development and advancement of women.

The WoWE website notes the rapid growth of the wind industry holds great promise for careers for women.

“Historically, women have been under-represented in the wind industry,” the website notes. “This fact affects not only women in our field or contemplating it, but also the wind industry as a whole. How will wind energy reap the full advantage of women's talents, energy, and ideas?”

Graf, who has a background in engineering, knows well of the male-female equality divide.

She said more than 100 females came to WoWE's first annual luncheon in 2005. Last year that number had increased to over 400. Women in the organisation support and mentor each other as a way of building a more sympathetic community in the wind power industry, she said.

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Photo: Suzlon



engineering and technology backgrounds leave their careers long before retirement. There is an extraordinary drop-out rate for women, Graf points out, compared to men.

“A lot of careers are built around the life cycle of men,” Graf says, while women wrestle more with family [and] work-place balance issues.

She said that by the time men are reaching for executive careers in their mid-30s to early 40s, many women are dealing with the needs of both young children as well as their jobs and simply don't have the extra time required for work-place advancement.

Graf added many women in the wind power culture, as in other science- and technology-based sectors, are likely to feel some sense of isolation or non-acceptance simply because they have so few female colleagues.

Barbara Savini has a PhD in aerospace engineering and currently works for Garrad Hassan and Partners in Bristol, where she is an engineer helping to design controllers for wind turbines.

A scheduled presenter at the European Wind Energy Conference (EWEC) 2010, which is taking place from 20 to 23 April in Warsaw, Savini said that during the four university years she studied wind power and the close to two years she has been in the industry she has not experienced any gender equality issues that have held her back.

Savini says she does not know what can be done to get far many more women involved in, and promoted in, the industry.

“Honestly I don't know. I think it also depends on the specific area in [the] wind power industry,” Savini said. “For example, I work in a very technical area and the lack of women is also due to the fact that few women choose to get an engineering degree and apply then for a technical job.”

Alanna Wall, another scheduled EWEC presenter, also has a PhD in aerospace engineering and works for Canada's Institute for Aerospace Research in Ottawa conducting wind tunnel experiments.

Wall isn't sure if there are fewer women in the wind power industry than in other male-heavy sectors.

“I'm not really sure it's different. Traditionally it's a male-dominated field,” said Wall.

“I'm often in meetings where I'm the only woman. It happens often.”

Wall says the lack of females in the industry has not hampered her in any way. She does add that the wind industry would benefit by having more balanced perspectives and voices that improved gender equality could provide.

Amy Parsons, a conference manager at EWEA, has witnessed the gender chasm so many times that she is no longer surprised.

“Looking out across a room of around 50 people, I realise once again that the phrase ‘good morning, ladies and gentlemen’ is not appropriate here,” Parsons says. “The only woman in the room is me. So, I adjust my welcome, and make a joke of it to break the ice. That's not to say that our conference, or indeed our industry, is completely



Photo: EWEA

There are roles for men and women throughout the industry, from factory floor to project development



Photo: EWEA/Brolet

devoid of women – rather that they are a relatively rare breed.”

What surprises Parsons is that females are so noticeably absent in an industry which prides itself on being progressive and innovative.

“Fossil fuel industries have always been overwhelmingly male, and it’s probably not a model we should be emulating. If we can be groundbreaking and forward-thinking when it comes to our product, why not also break the mould in terms of who researches, produces and distributes it?”

Although she is relatively new to the wind industry, EWEA research officer Athanasia Arapogianni who comes from Greece also wonders why so few women gravitate to the sector.

A mechanical engineer, Arapogianni remembers that about 70% of the students in her first undergraduate maths class at the National Technical University of Athens were male. Again, during her master’s course in renewable energy, approximately 70% of the students were men.

She has asked herself many times why so few women get involved in sectors like wind power that require handling, processing and producing technical and practical information.

“For me, the reason [goes] back to the past,” Arapogianni who says.

“Historically women were excluded for many years from any scientific source of knowledge. Starting from religious reasons, women could not have access to any group or community which was involved in researching and producing new knowledge. The picture has changed obviously since many decades ago. Several women became famous for their contribution to the physical sciences. But even now, women are not equal as men in terms at least of quantity in this sector.”

She says many women believe that they can’t make it in an industry that requires an educational background in maths, sciences and technologies.

“For some weird reason, they think that it is impossible. Men are considered to have a more analytical

way of thinking and acting ... but [that] does not mean that women can’t do it.”

Jan Blittersdorf has been the chief executive officer of NRG Systems, a successful Vermont company that manufactures wind measurement equipment, for the past five years.

Blittersdorf has often realised she was the only women present at a wind-power-related event. “That is the story of my life,” she said. “It’s not a complaint, but it’s typical.”

She said the lack of women in the wind sector is a problem that needs to be dealt with. “It definitely needs to be talked about,” she said. “What would be nice is if the wind industry could be an example.”

Blittersdorf said women have to be more assertive about acknowledging their own skills but systems also have to be established at wind power workplaces to recognise their efforts.

“I think the leadership is needed on the males’ part to recruit and retain women,” she added.