

# Are Women Avoiding the Renewable Energy Sector?

**W**omen still comprise a small portion of the renewable energy workforce, and more so in emerging clean energy markets such as the UAE's, where their involvement is mostly limited to administrative and marketing roles.

Even in the United States, one of the world's most mature clean energy markets, women hold just under 30 percent of jobs in this sector, a noticeably lower share than the 48% of jobs they hold across the economy as a whole, according to a 2013 report by the Institute for Women's Policy Research.



Rama Hadeed

## Demanding positions

"Women still face many challenges in the professional field worldwide and in the GCC particularly," says Rama Hadeed, a photovoltaic systems engineer at Solarpraxis MENA, the regional branch of the German solar engineering group.

"With long working hours and short maternity leave compared to European countries, the main challenge they face is the work-life balance while establishing their own families," she says.

Among the reasons for women's avoidance of the renewable energy sector is the nature of the associated jobs, which typically require extraordinary hours. "Engineering and managerial positions need a full-time commitment with extra hours that women are not usually able to perform due to their other responsibilities," highlights Hadeed.

According to the Renewable Energy and Jobs Report 2013, published by the Abu Dhabi-based International Renewable Energy Agency (IRENA), in industrialised countries, the share of female employees in the sector is estimated to be as low as 20-25%, with most women working in administrative and public relations positions.

## Soft and tough fields

These unbalanced employment ratios most likely stem from the approach taken in education as well as the woman's upbringing and cultural background.

"I think this goes far back to the

schooling system in the region where tradition and culture are highly maintained, and according to these, women are required to be good housewives," says Angela Melkonian, business development manager at Building Energy, an Italian renewable energy producer which recently opened its MENA office in the UAE.

"So a woman would choose a career that allows her not to consume too much energy at the workplace in order to cater for her family after the working hours," she elaborates. Because of this dilemma, a large number of women are opting for communications and public relations-related jobs over careers in science, technology, engineering and mathematics.

"Both education at home and at school guide women towards the humanities and the 'soft' fields, because they are considered the soft gender – the one who cares for her children and her husband," notes Melkonian, who studied mechanical engineering at the American University of Beirut to broaden up her career options.

Where as men are steered towards the 'tough' fields, she adds, because according to tradition they should reflect the manly figure – one that provides security and financial stability to the family.

## The inspiration

Since renewable energy is based on majors such as electrical and mechanical engineering, women's tendency to avoid these disciplines consequently hinders their ability to take on influential roles within the sector.

"A degree in engineering would provide you a vast selection of fields to choose from. I was always interested in pursuing a humanitarian career, one that gives benefit to the society and the environment. I chose the renewable energy career path because this field has become essential to our and the future generations' presence on the planet," reveals Melkonian.

As a business development manager, she finds her position especially rewarding due to being located in the Middle East region, where solar conditions are excellent, hence, work is on a successful and profitable business model for both the off-taker and her company.

"There are daily progress and exciting developments not to be missed. Many international players are opening regional offices in Dubai, like ourselves, where they can monitor the region's activities. In my position, I am in contact with a variety of business profiles, and it's great to perceive that there is a huge appetite and interaction in this field from all sectors."

Similarly, Hadeed's interest in renewable energy was ignited during college days, when she felt a concern over the environmental impact of energy usage. "I made my decision to specialize in renewable energy engineering, and my family has supported me unlimitedly."

Currently undertaking a master of science in renewable energy engineering at Heriot-Watt University, Hadeed holds a bachelor of engineering from Damascus University – a degree that took five years to complete. She then kickstarted her career by joining a solar PV module manufacturing line in Syria as quality assurance engineer.

But not all women feel the same way about engineering jobs, as many designations require extensive travel

to remote construction sites and sometimes a relocation altogether, which can be difficult to reconcile with other priorities.

### Times are changing

Fortunately, the picture is gradually changing with private sector and government-led initiatives that encourage women to pursue their ambitions. The Women in Solar group, for instance, was set up by the Middle East Solar Power Association to inspire, mentor, and connect women who have an interest in renewable energy.

Led by an advisory board of six exceptional women, the initiative has partnered with non-profit education provider Solar Energy International to provide the Heather Andrews Scholarship for women, while offering selected mentees the chance to benefit from the industry knowledge of a mentor through the group's mentoring program.

On a state level, a great deal can be done, from financing training and vocational apprenticeship programs, to ensuring that opportunities are equally accessible to both genders. The latter can be achieved through regulations that promote gender mainstreaming and eliminate discrimination during recruitment.

"Renewable energy companies could be encouraged to establish at least informal targets for the share of women among their employees, and perhaps specifically among their technical, engineering and management staffs," recommends the IRENA report.

However, it adds that the case for such an approach is strongest where government funding plays a critical role, such as in stimulus spending or public procurement in support of renewable energy, or where

companies benefit from financial incentives.

### Where the UAE stands

As an active participant in the Clean Energy Education and Empowerment (C3E) women's initiative, the UAE is already committed to advancing women's participation in the clean energy revolution.

In fact, the UAE was one of eight countries that launched the C3E at the first Clean Energy Ministerial back in 2010, represented by the Directorate of Energy and Climate Change, Masdar, and Masdar Institute of Science and Technology.

Masdar Institute is a great example of the strides being taken to engage women in this sector. In 2013, the graduate-level, research university boasted 35% female students, and its Young Future Leadership mentorship program comprised 45% women.

Overall, women accounted for an impressive 66% of government workers in the UAE, with a third of them in senior positions, according to figures from the Ministry of Interior. The number of female university graduates in the UAE is also among the highest in the world – nearly 70% of total graduates in the country.

"The mix of genders in this field would cultivate diversified perspectives and enrich the sector," stresses Melkonian, adding that governmental authorities could launch home working initiatives for local women to incite them to take a first leap in the clean energy field. Then, a "thousand miles journey starts with a single step"

- Heba Hashem