

IASS-Blogpost

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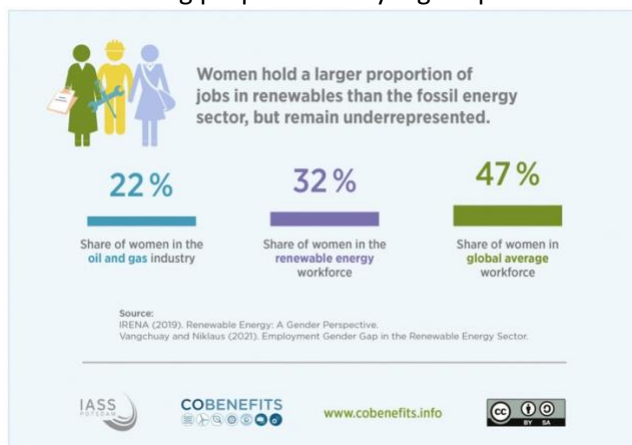
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[Dachzeile]

Opportunities and barriers for women in South Africa's energy transition

Women are underrepresented in the energy sector. Globally, women hold around one fifth of the jobs in the oil and gas industry and less than a third of the jobs in the renewable energy sector. The situation is similar in South Africa, where women account for just 31% of the employees of state-owned electricity utility Eskom and 21% of the workforce in the coal sector. Female underrepresentation is currently even worse in South Africa's renewable energy sector, where women account for only 14% of employees.

However, those female employees are usually better educated than their male colleagues (e.g., 67% of females compared to 49% of males at Eskom hold a post-matric qualification), which results in females holding proportionately higher positions despite being underrepresented in absolute terms.



Women hold a larger proportion of jobs in renewables than in the fossil energy sector, but remain underrepresented. IASS / Cobenefits

How women experience working in South Africa's power sector

Women working in high-skilled jobs in South Africa's energy sector tell similar stories. The way to higher education requires many to get a bursary, for which they have to be top students in school. While the women we talked to felt that they enjoyed the same opportunities as their male peers to

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go to university, they found that women are largely underrepresented in STEM subjects (science, technology, engineering, and math), a fact faced also in modern Western countries.

This trend continues once they start their career: women working in the power sector often find that they are both the only woman and the youngest person in the room, a situation that can make it difficult to feel like they belong and that their opinion matters. Vuyo Matiwane, Technical Project Development Manager at BTE Renewables, [forced herself to speak up at least once in every meeting to be heard and seen](#), even though she was scared to do so at first. Devaksha Maharaj, founder and Managing Director of IKIGAI Engineering, experienced being treated as an assistant and being asked to take notes, even when it was clearly someone else's job, so she learned to make sure that everybody understands who is the engineer in the room – "very gracefully", she says, in order not to step on anyone's toes.

Another difficulty lies in the lack of support for women. Lenah Mabusela, Power Engineer at Globeleq, states that even if women have the same qualification as their male peers, they still always need to prove their competence. "[Women are extremely capable. They do a lot with little resources](#)", she says. "Women don't need their hands held. They only need their seniors to treat them in the same professional way as they treat their male colleagues and give them the same opportunities." Unfortunately, in her experience, that is still not often the case. How do women deal with situations like this? Devaksha Maharaj advises women to stick together and get advice from women in similar positions. On the other hand, Mamoso May, CEO of Dorper Wind Farm, says [it takes men in power to speak on behalf of women to break up the male-female divide and foster mutual appreciation](#). Vuyo Matiwane never had a mentor herself but is now part of the mentoring programme "Energising Women to Advance the Energy Transition" organized by the Global Women's Network for the Energy Transition (GWNET) in partnership with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and wishes to guide other young and emerging female professionals in the renewable energy sector.

Having to choose between career and family

One of the most challenging issues for many women is the need to balance the demands of professional and family life. The province of Mpumalanga has a high teenage pregnancy rate, which represents a challenge in bridging the skills gap between males and females. Women without minor children have higher labour participation rates than those with minor children. It is evident that childcare responsibilities are a limiting factor for career development, particularly among women. Because of the high poverty rate among less qualified people in South Africa, women are obliged to work full time and must often shoulder the burden of managing a household and commuting long distances to childcare facilities alone. It is therefore crucial to provide childcare facilities near training centres and working hubs.

But also highly skilled women that have long working hours or whose job requires them to work on-site at power stations for longer periods struggle to find the time for a partner or a family because they don't get the support they would need. In fact, many of our interviewees perceive that women in South Africa are still expected to care for the children and do the housework on top of their paid job. Mamoso May was told by a former manager that he would not employ young women because they might get pregnant and miss work. As a result of this lack of support, many women sacrifice either their job or their personal life with the decision not to have children – or they postpone this decision until their forties. "Men don't have to choose – they can have both", Lenah says, pointing out the obvious imbalance between the gender roles.

Being her own boss and having the support of her husband, Devaksha Maharaj can plan her working hours around her children's needs, but most women don't have this opportunity. Vuyo Matiwane

notes that reduced working hours are not common in the country but could help women with families to stay in their jobs, earn an income, and not fall behind. Day-care centres at the workplace or being able to work from home would also be a good start to make the sector more family friendly, as well as breastfeeding stations at power plants for young mothers working on-site. Women who start a family often also lack financial security: at the moment, South African employees are only entitled to four months of unpaid maternity leave, leaving many mothers only with the option to apply for unemployment benefits.

Opportunities for women

Despite these barriers: what benefits and opportunities do women working in the energy sector see for themselves and other women? Lenah Mabusela says she chose engineering because it was considered a stable career. Mamoso May values the social aspects of her work: South Africa's renewable energy procurement policy is unique globally in its emphasis on providing benefits for communities in the vicinity of projects. With parts of the revenue of the wind farm managed by May, school toilets could be fixed, and the programme runs health tests for kids and supports promising students to enable them to go to university.

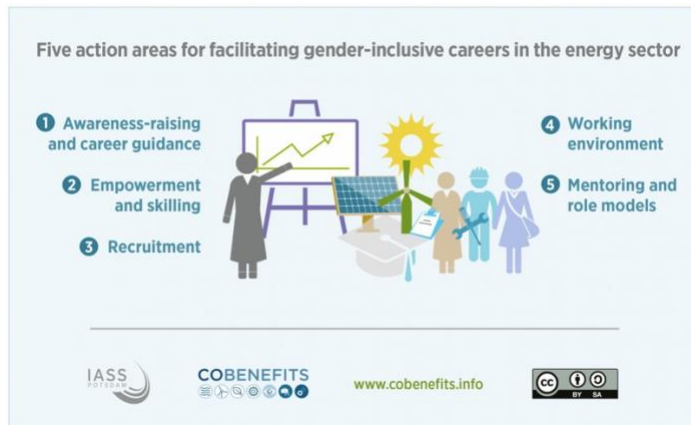
Bertha Dlamini, Founding President of African Women in Energy and Power (AWEaP), explains that her interest in energy stems from the opportunities and dignity that it allows people and communities: "[Access to electricity enables access to information, to quality education, to health care, and an overall better quality of life.](#)" With a current electrification rate of 85%, many people in the country are still excluded from these benefits, and the rate is much lower in the rest of Sub-Saharan Africa.

STEM careers are a traditionally male dominated field. How can girls and women be persuaded that there is a place for them in the field? Devaksha Maharaj's IKIGAI courses introduce children as young as two years to STEM subjects: "It is important to get the kids interested in the topic at a very young age. [And they need to learn that women can do these jobs, too](#) – which is why we go into schools and talk to them, so they can see us", she explains. Vuyo Matiwane recommends implementing information campaigns and mentorship programmes in high school, when teenagers begin making decisions about their future jobs.

Transitioning towards more equality

There are practical aspects that need to be considered to make women feel comfortable and safe working on-site, such as protective gear, gloves and shoes in women's sizes, and gender-segregated bathrooms. But the real challenge lies in overcoming the less-visible barriers for women in a male-dominated sector. "Patriarchy is deeply embedded in the core of our society. But you cannot force change in mental models. You need to make a business case for women", says Bertha Dlamini. In other words: men in power need to see the benefits of employing and working together with women if they are to change their views.

"The country is transforming. It is a good time to make a positive change for women in the power sector" – these words by Bertha Dlamini express a view shared by many. A relatively new sector, renewable energy offers opportunities for women to participate, as it is not weighed down by the "male industry" structures that dog the old energy industry. Energy transitions towards renewables result in new career opportunities that do not require as much heavy physical work as coal mining, for example. The bulk of job creation in renewable energy is within the high-skilled labour group (estimated as 68 – 80%), so upskilling and higher education are pre-requisites for women to be part of the energy transition. Women could be educated and empowered by establishing dedicated programmes at TVET (technical and vocational education and training) colleges and by providing childcare facilities close to training centres.



Five fields of action to facilitate gender-inclusive careers in the energy sector IASS / Cobenefits

Although the renewable energy sector is currently male dominated, leading organisations in the sector are providing mentorship and coaching to enable women to take on leadership roles. One of them is the Gender Diversity Working Group, a collaboration between SAWEA and SAPVIA that also includes WE Connect, a non-profit organisation focusing on female empowerment within the renewable energy sector. AWEaP offers energy sector orientation webinars and other targeted interventions to introduce women to the value chains that drive electricity production and help them identify entrepreneurial entry points, as well as integrate women-owned and -led companies into local and global supply chains in the energy and power sector.

There is also increasing political support for women in the energy sector. The Energy Sector Gender Ministerial Advisory Council, founded in 2021, has the role of monitoring the participation of women in the energy sector and reporting to the minister and his executives. And the Prime Minister of Mpumalanga, Refilwe Mtshweni-Tsipane, emphasized on the side lines of the Mpumalanga Energy Summit 2022 that many women have the skills needed to transform the energy system in her province: "Our women are capable. For far too long, they have been disadvantaged. I advocate for women to be at the centre of the energy transition."

This article is based on research within the COBENEFITS project and interviews with women working in high-skilled jobs in the energy sector in South Africa, conducted in May and June 2022.