Worldwide millions lack access to modern energy services necessary for economic and social growth. Energy poverty takes a great toll on women, as they face more barriers to electricity access and bear many of the lack of access costs—from unpaid time and labor to gather cooking fuel and other household needs, to health risks associated with indoor smoke. The Decentralized Renewable Energy (DRE) sector, including solar home systems and mini-grids, has the potential to not only combat energy poverty but to also enable female empowerment by freeing up their time for more productive uses and improving their overall wellbeing.

Women are disproportionately affected by energy poverty, economically and health-wise: they face increased barriers to access and bear a greater burden from the lack of access to electricity and clean cooking.

- Women-led households identify the cost of the connection as a primary obstacle—compared to male-led households.
- Women spend twice as much time as men gathering cooking biofuels. In Uganda, women spend 3.4 hours each week acquiring fuels and preparing meals, 7.5 times more time than men. This limits women’s access to education and workforce participation.
- The lack of women’s authority in the household decision-making prevents the adoption of technologies, such as improved cook stoves, that can improve the environment and health, particularly for women.
- In sub-Saharan Africa (SSA), annually, roughly 490,000 premature deaths can be attributed to indoor air pollution from toxic cooking fuels, primarily impacting women and children.
- The COVID-19 pandemic highlighted the importance of women’s unpaid work in the care economy and the vulnerability of those without access to clean fuels and technologies.

According to recent data, teenage girls spend more time on household chores compared to boys, which can negatively impact their educational attainment.

Energy poverty is most evident in rural areas, where DRE is the least cost electricity supply and will help address gender inequalities.

- In 2020, 733 million people globally lacked access to electricity, a decrease from 1.2 billion in 2010. Despite this progress, 119 million urban dwellers and 584 million rural residents still lacked access. SSA continued to have the largest access deficit, with 568 million people without electricity in 2020.
- DRE systems, including solar home systems and mini-grids, are essential for expanding electricity access, especially in rural areas. Mini-grids are the most cost-effective solution for bringing power to 430 million people who currently lack access.
- DRE sector the least-cost solution for connecting the majority of those currently underserved.
- Access to energy is critical, but alone it cannot eliminate gender disparities. According to recent studies, gender inequalities will persist while women are excluded from household resource and financial decision-making, which impedes the ability of public policy to reduce disparities.
- Research shows that empowering women will expedite the shift to clean energy sources in Africa, due to the different utilization preferences between men and women.
POWER FOR ALL FACT SHEET

Decentralized Renewable Energy can help to address gender gaps

By the Numbers:

**490,000**

PREMATURE DEATHS ANNUALLY IN SSA THAT CAN BE ATTRIBUTED TO INDOOR AIR POLLUTION

**7.5x**

WOMEN SPEND 7.5 MORE TIME THAN MEN ACQUIRING COOKING FUELS AND PREPARING MEALS

**430 million**

PEOPLE FOR WHOM MINI-GRIDS ARE THE MOST COST-EFFECTIVE SOLUTION FOR ACCESSING POWER

Power for All’s Powering Jobs Census 2022 shows DRE companies have the most gender balanced workforce within the (male-dominated) energy sector, and create opportunities that directly address gender disparities.

» The energy sector is male dominated, with an anemic female participation of 16%, compared to 39% in the broader economy. In contrast, DRE has gender participation rates above 27% on average for SSA, and as high as 41% (in Kenya). This proves the potential of the DRE sector to provide equal opportunities for women and narrow the gender gap in employment.10

» In addition the DRE sector is a source of decent-paying off-farm jobs, particularly for rural youth, with average wage gaps on average smaller than national averages, and the smallest within peri-urban and rural areas. This suggests the DRE sector can boost economic development and reduce poverty, especially in areas where access to energy and job opportunities are limited.

» Women’s participation in the solar PV industry in full-time jobs worldwide is around 40%, with variations according to the type of job. Administrative-related jobs have the highest representation of women (58%), followed by non-STEM technical positions (35%), and STEM jobs (32%). However, the low representation of women in STEM needs to be addressed as these are typically higher-paid positions. Therefore, efforts to encourage women’s participation in STEM education and careers in the renewable energy sector will further promote gender parity in the field.11

» Eliminating barriers for women is critical and can be achieved by raising gender awareness, improving policies and regulations, implementing better workplace practices, and establishing support networks for training and mentorship.

Share the Message

» Tweetable message 1: The DRE sector is creating a path for women into the male-dominated energy industry, creating jobs that directly address gender disparities. With higher participation than the global energy sector, DRE can continue to narrow the gender gap and provide economic opportunities. #DecentralizedRenewableEnergy #GenderEquality

» Tweetable message 2: Gender equality is key to sustainable development. Women face significant barriers to accessing electricity and spend more time cooking due to traditional stoves. This harms their health, safety, and economic empowerment. Addressing energy disparities is vital for empowering women and achieving sustainable development. #GenderEquality #SustainableDevelopment #CleanEnergy #WomenEmpowerment

Sources:

5. https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health