



Gender-Responsive and Inclusive Practices to Attract and Retain Young Women in the Clean Energy Sector



Summary

The Opportunity:

Advancements in the renewable energy sector have the potential to create sustainable and decent job opportunities for millions of people around the world, especially those who experience higher levels of unemployment, such as youth and, particularly, young women. In places like Sub-Saharan Africa where youth populations as well as renewable energy jobs are expected to grow the most, substantial potential exists to boost local economies through the development of the renewable energy sector and to provide clean energy to communities that have been left behind by traditional energy schemes.

The Challenge:

In places where the renewable energy sector is growing rapidly, formal education institutions, as well as public policies, are often slow to keep up with the changing skills demanded by industries. This creates a gap between local renewable energy workforce needs and the availability of qualified workers for emerging sectors. Moreover, gender inequities in the traditional energy sector risk being perpetuated in the clean energy sector without targeted interventions to support the advancement of women in science, technology, engineering and math (STEM) fields and clean energy professions.

KYA Energy Group's Solution:

The KYA Foundation was launched in October of 2022 by the KYA Energy Group, a solar solutions company based in Togo. The Foundation's goal is to expand access to education, training, and employment opportunities in renewable energy, with a focus on promoting gender equality in clean energy. The Foundation offers targeted support and training to young women interested in pursuing STEM education and clean energy career paths by providing scholarships, internships, and practical training courses. The KYA Foundation's activities operationalize Recommendation 5 from the Clean Energy Annex.

Impact to date:

In 2023, the KYA Foundation provided 13 internships to young men and women at KYA Energy Group, three scholarships to young women to pursue higher education STEM degrees, and practical training to 20 young women in solar and battery solutions in their first full operating year. As the Foundation continues to grow and build partnerships with donors and other clean energy companies, the Foundation's founders aim to increase the reach of this programming as well as develop the monitoring and evaluation of their programs to better communicate medium- and long-term impacts describing "what works" to support gender equality and youth empowerment in emerging renewable energy career fields.



Introduction to KYA Energy Group and Dr. Yao Azoumah

KYA Energy Group, together with its recently established KYA Foundation, is paving the way for solar solutions in Togo and across West Africa by advancing the deployment of renewable energy and developing inclusive learning-to-earning pathways to build a qualified, gender equitable workforce to support the sector.

Dr. Yao Azoumah, the Chief Executive Officer and Founder of KYA Energy Group, which launched in 2015, began his professional career as a university lecturer in energy engineering at academic institutions in western and northern Africa.

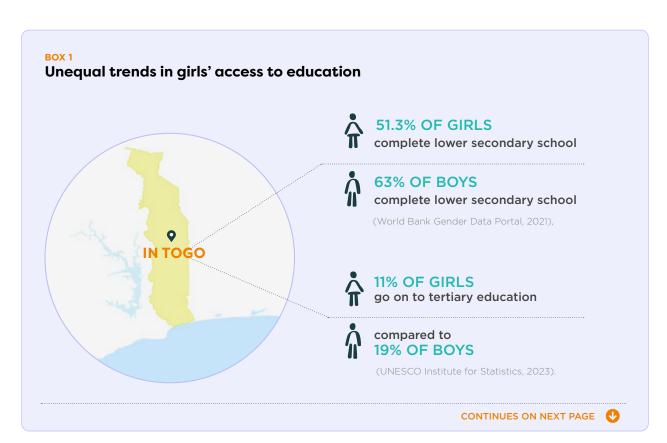
Throughout his experiences teaching STEM, Dr. Azoumah saw a great need to bring productive solar solutions to hard-to-reach populations, especially those in rural areas. In Togo, only 56% of the country has access to electricity, and the disparity between access for those living in urban areas (87%) and rural areas (7%) is stark (IRENA, 2023; Sustainable Energy for All, 2016).

In addition to providing locally sourced solar solutions and increasing access to sustainable energy sources in rural areas in Togo—as well as in Benin, Burkina Faso, and Mali, thanks to partnerships—Dr. Azoumah also wanted KYA Energy Group to promote the advancement of youth and women in renewable energy fields.



"Clean energy is not the future; clean energy is the reality in Togo. And when we talk about this reality, we can't leave behind young people, especially women."

Dr. Yao Azoumah



3

BOX 1 Unequal trends in girls' access to education

WHILE GLOBALLY

Biases and stereotypes continue to discourage young women from further studies and careers in STEM, with only:





18% OF GIRLS

pursuing tertiary education are studying STEM



Compared to 35% OF BOYS WORLDWIDE

(UNICEF, 2020).



Promoting Gender Equitable Clean Energy Transitions through the KYA Foundation

To pursue his vision of a gender equitable, well-developed clean energy sector in Togo and across West Africa, Dr. Azoumah and his colleagues at KYA Energy Group launched the KYA Foundation in October of 2022, creating an arm of the organization dedicated to expanding access to education, training, and employment opportunities in renewable energy.

Both Dr. Azoumah and the Foundation's Executive Director, Ms. Sylvie Shikpe, believe that women's

greater participation in the clean energy sector is necessary to develop the sector sustainably.

For Dr. Azoumah, his dream for Togo to embrace inclusive, prosperous development is only possible through the economic advancement of women, which the Foundation's activities seek to promote. Azoumah saw a great need to bring productive solar solutions to hard-to-reach populations, especially those in rural areas. In Togo, only 56% of the country has access to electricity, and the disparity between access for those living in urban areas (87%) and rural areas (7%) is stark (IRENA, 2023; Sustainable Energy for All, 2016).



"We have a clear picture that we need women to be seriously involved in the development of technology to achieve sustainability in the energy sector and empower women in our societies. Countries that have included women in the formal economy are developed countries, and we can't have the dream to become developed country if we leave women behind."

Dr. Yao Azoumah



KYA Foundation's Activities to Date

In 2023 - their first full year of operation - the KYA Foundation provided 13 internships to young men and women at KYA Energy Group, three scholarships to young women to pursue higher education STEM degrees, and practical training to 20 young women in solar and battery solutions.

As the foundation continues to grow and build partnerships with donors and other clean energy companies, Ms. Shikpe and Dr. Azoumah hope to greatly increase the reach of their programs. sector is necessary to develop the sector sustainably.



Internships for Young People at Clean Energy Companies

To support young people in finding career paths in renewable energy, the KYA Foundation provides internships to undergraduate and graduate students at KYA Energy Group, building their practical and professional skills through activities such as developing training plans, marketing strategies, and safety approaches for the company.

The internships last three months and may be renewed one time if interns are excelling in their roles. The Foundation often seeks to hire high-achieving interns at the end of their terms or recommend them to other institutions. Applications for internships are accepted monthly, and every month the Foundation receives 10-20 applications for three to five intern positions. In general, about 25-35% of the internships go to women, which Dr. Azoumah attributes to the lower proportion of women in STEM fields in higher education, an inequity he hopes to address through the Foundation's other activities.



"In general, in our country, we don't have many women who are doing engineering studies. There are very few of them in this area, that is one of the reasons why our Foundation is focusing on the gender issue and giving more opportunities to young women who could change the game."

Dr. Yao Azoumah

In the future, Dr. Azoumah and Ms. Shikpe would like to expand the number of young people, especially young women, with career support by increasing the number of internships the KYA Foundation can provide.



Scholarships for Women Pursuing STEM Fields

To promote the advancement of young women in higher education and especially STEM fields in Togo, the KYA Foundation provides scholarships that cover female students' tuition fees, school supplies, and monthly travel costs for the academic year.

In 2023, the Foundation was able to fund scholarships for three young women but need for financial support far outweighed funding availability with over 60 qualified applicants.
Recognizing limited funds as their biggest
challenge, Dr. Azoumah and Ms. Shikpe are leading
KYA Foundation's efforts to raise additional
scholarship funds from donors and partners so
they can expand the scholarship program in
the future.



Practical Training for Women without Technical Backgrounds

To help increase the proportion of young women working in the renewable energy sector, the KYA Foundation provides practical training to women on installing and maintaining stand-alone solar systems, as well as repairing and recharging lithium batteries. In 2023, the Foundation provided training to 20 women. While the initial plan was to accept training applications only from young women with technical backgrounds, Dr. Azoumah and Ms. Shikpe found that many young women without experience in STEM were applying. After receiving 65 applications for their first training, from young women with diverse backgrounds and experience, they decided to adapt their training model to make it accessible to applicants without technical backgrounds.

Adjusting the trainings to serve young women without technical backgrounds required adapting the training content to fit the trainees' unique learning needs. Dr. Azoumah's experience as a university lecturer, which he shares with some of his colleagues at KYA Energy, was key in the development of appropriate curricula and training materials for the Foundation's newfound training participants. With dedicated instructors, the right level of support, and hands-on learning opportunities, Dr. Azoumah and Ms. Shikpe found that the young women admitted to the KYA Foundation's training courses were able to succeed in the trainings and become proficient in solar installations and maintenance.



"The lesson we derived from this experience is that now we consider those who have backgrounds other than electrical or technical backgrounds. We found that doing trainings in more practical ways helps young women who are unemployed to jump into learning about solar systems and join us in our work."

Dr. Yao Azoumah

The KYA Foundation's experience in their first year of providing technical trainings to 20 young women is an excellent example of the potential for non-formal training programs to serve as a much-needed bridge between formal education and renewable energy career paths, providing specific, technical skill-building opportunities to young

people, especially young women, who are coming to the field from a diversity of backgrounds, often not in STEM. The KYA Foundation is building on the success of their inaugural training cohort in 2024 with a goal of reaching at least 60 young women.





What's Next for the KYA Foundation?



Funding Challenges and Promising Partnerships

Across the activities the KYA Foundation undertook in their inaugural year of operation, funding was the primary limiting factor in being able to serve all the young people who were interested in participating. KYA Energy Group had dedicated 12 million FCFA (around US\$20,000) of their own revenue to support the Foundation, but this is not enough to grow and expand access to their programming. Dr. Azoumah is optimistic about the potential to forge new partnerships

and find additional donors in the region for the Foundation, saying how "there are many companies or institutions who want to encourage this vision. They are maybe not able to implement it, but they are sensible about the vision we are developing." As the Foundation creates more partnerships and garners more support, the hope is that greater attention will be paid to creating more equitable opportunities for young women across the renewable energy sector.



Importance of Measuring Impact

To help clarify the KYA Foundation's vision to others, Dr. Azoumah recognizes the need to communicate the impact that the scholarships, internships, and trainings are having on participants' educational attainment and employment outcomes, remarking: "If you have a clear picture like this, even in the local ecosystem, people will join."

At a larger scale, improving the monitoring and evaluation of the Foundation's operations can help the clean energy sector, as well as education and training providers, better understand how to support bridging programs like these and eventually integrate similar approaches into formal education.



Addressing Structural Change toward Gender Equity in the Clean Energy Sector

In addition to creating pathways for young women to access skill-building and job opportunities in renewable energy, changes in the industry must also take place to ensure that women, once they enter the field, are supported to advance and lead. Women's participation in the renewable energy sector at present tends to be concentrated in non-technical roles, and women are underrepresented in higher level management roles (see Box 4 of the Clean Energy Annex). As the KYA Foundation

grows, Dr. Azoumah and Ms. Shikpe would like to provide more insights and resources to the field on how to best support women in STEM and in renewable energy career paths. Dr. Azoumah feels confident that KYA Energy Group offers promising career paths for women and aims to ensure that the KYA Energy Group and KYA Foundation can mutually reinforce one another in modeling and promoting gender equity in the renewable energy sector.





In an ecosystem where public and government support for renewable energy is lagging, Dr. Azoumah, Ms. Shikpe, and their colleagues at KYA Energy Group and the KYA Foundation highlight the significant contributions that private and non-profit organizations can have in promoting an inclusive and just clean energy transition.

By expanding access to training and employment opportunities to underrepresented groups such as young women and growing a local renewable energy workforce, KYA hopes to establish an inclusive, clean energy sector in Togo, serving as a role model across West Africa — and one day, the entire continent. Dr. Azoumah envisions a future in Africa where women's representation in the renewable energy sector is equal, if not greater than men's.



"We want this story to begin in Togo," he says. "My dream is to be one of the contributors to make this happen."

Dr. Yao Azoumah

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