

**Energy2Equal**  
Africa

# Women's participation in the renewable energy workforce in Sub-Saharan Africa

**IDENTIFYING BARRIERS AND OPPORTUNITIES  
FOR WOMEN AS LEADERS AND EMPLOYEES**



IN PARTNERSHIP WITH

**Canada**

 **IFC** | **International  
Finance Corporation**  
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*Creating Markets, Creating Opportunities*

### **About IFC**

International Finance Corporation (IFC)—a sister organization of the World Bank and member of the World Bank Group—is the largest global development institution focused on the private sector in emerging markets. We work with more than 2,000 businesses worldwide, using our capital, expertise, and influence to create markets and opportunities in the toughest areas of the world. In fiscal year 2021, we delivered a record \$35.1 billion in long-term financing for developing countries, leveraging the power of the private sector to help end poverty and boost shared prosperity.

### **About the Energy2Equal Program**

IFC is committed to working with the private sector to increase women's participation as leaders, employees, and entrepreneurs in corporate value chains. IFC, in partnership with the Government of Canada, launched the five-year Energy2Equal program in 2019, to reduce gender gaps in the Renewable Energy (RE) sector workforce in Sub-Saharan Africa (SSA) and increase research and data on the business case for women's participation.

Through Energy2Equal, IFC collaborates with large, medium, and small firms across SSA to close gender gaps and increase women's participation in the RE sector by sharing research and knowledge, as well as through a peer-learning platform, advisory services, and networking opportunities. At the end of the program, IFC expects that more companies will be equipped with the knowledge and tools to integrate and retain women in their workforce, and that more women will have professional opportunities in the RE sector.

### **About Econoler**

Econoler is an international consulting firm with 40 years of experience in the design, implementation, evaluation, and financing of energy efficiency and renewable energy programs and projects. Over the years, Econoler has contributed to developing and implementing about 4,000 projects in over 150 countries. Econoler has built its reputation thanks to the talents and innovation of its staff comprised of about 60 experts, including engineers, economists, financial specialists, marketing specialists, and professional statisticians.

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# ABBREVIATIONS

<b>AfDB</b>	African Development Bank
<b>AUC</b>	African Union Commission
<b>CEDAW</b>	Convention on the Elimination of All Forms of Discrimination Against Women
<b>CEO</b>	Chief executive officer
<b>EACREEE</b>	East African Centre of Excellence for Renewable Energy and Efficiency
<b>ECOWAS</b>	Economic Community of West African States
<b>ECREEE</b>	ECOWAS Centre for Renewable Energy and Energy Efficiency
<b>FCS</b>	Fragile and conflict-affected state
<b>FGD</b>	Focus group discussion
<b>GDI</b>	Gender Development Index
<b>GII</b>	Gender Inequality Index
<b>GOGLA</b>	Global Association for the Off-Grid Solar Energy Industry
<b>HCI</b>	Human Capital Index
<b>HDI</b>	Human Development Index
<b>HQ</b>	Headquarters
<b>HR</b>	Human resources
<b>IEA</b>	International Energy Agency
<b>IFAD</b>	International Fund for Agriculture Development
<b>IFC</b>	International Finance Corporation
<b>IRENA</b>	International Renewable Energy Agency
<b>GAP</b>	Gender action plan
<b>KII</b>	Key informant interview
<b>KPI</b>	Key performance indicator
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PV</b>	Photovoltaic
<b>SADC</b>	Southern African Development Community
<b>SACREEE</b>	SADC Centre for Renewable Energy and Energy Efficiency
<b>SDG</b>	Sustainable Development Goal
<b>SHS</b>	Solar home system
<b>SSA</b>	Sub-Saharan Africa
<b>STEM</b>	Science, technology, engineering, and mathematics
<b>WBG</b>	World Bank Group
<b>WBL</b>	Women, Business, and the Law Index
<b>WEF</b>	World Economic Forum

# FOREWORD

Millions of Africans have been lifted out of poverty over the last two decades. Despite this progress, 570 million Africans lack access to energy, and rapid population growth will fuel demand that is expected to rise steeply through 2040 (Blankenship and Golubski 2021). A major expansion of power systems is therefore urgently needed (IEA 2019a). Sub-Saharan African (SSA) countries have the opportunity to accelerate the deployment of renewable energy (RE) given the continent's vast renewable energy resources (sun, wind, water, and geothermal). RE is making it possible to reach remote areas through distributed generation including minigrids. RE is projected to supply up to 75 percent of SSA's new energy generation by 2040 (IEA 2019a).

The rapid expansion of the RE sector will require a larger skilled workforce, particularly in the private sector, and women are well placed to be a part of this labor force. RE also presents an opportunity for a just and inclusive transition that includes women and should see their participation in the workforce as leaders, employees and entrepreneurs increase.

The International Labour Organization found that, in Africa, when women held decision-making positions, some companies reported profit increases of up to 15 percent (ILO 2019). Further, there is evidence that "when women enter leadership positions in environmental decision-making, there is a trend towards shrinking emissions" (Collins 2019). The case for women in the workforce and at the centre of RE installation is clear, we should therefore seek to leverage the RE opportunity to draw women from the fringes of the sector to the forefront. There has been no better time to address the lack equal opportunities for women to work, lead, and invest in RE companies.

In 2019, IFC, in partnership with the Government of Canada, launched the five-year [Energy2Equal](#) program to increase research and stimulate greater women's participation in the energy sector. As part of Energy2Equal, IFC commissioned the international consulting firm, Econoler, to conduct a workforce study to assess the opportunities and challenges women face in working for private RE providers in SSA.

This study found that women comprise about a quarter of company board members, executives, and managers in the RE sector. While women comprised about one third of RE sector workers, they were largely concentrated in corporate support functions. Only 13 percent of women had higher-paying science, technology, engineering, and mathematics (STEM)-related jobs, and 16 percent held non-STEM, technical positions. Social norms, gender stereotypes, a lack of supportive company policies and practices, and legal barriers in some countries contribute to the lack of qualified women in technical roles and reduce the kinds of opportunities that women can pursue.

Companies can do more to strengthen the talent pipeline of women in the sector, including providing strong leadership from the top to embed gender equality in the corporate culture. Workplace policies and practices can also be strengthened to attract, retain, and promote more women.

Through the Energy2Equal initiative, we invite African RE companies to strengthen their competitiveness by increasing women's participation in the sector.

**Linda Munyengeterwa**  
**IFC Regional Industry Director for Infrastructure in Africa**

# EXECUTIVE SUMMARY

The rapid economic growth underway in Africa since 2000 has lifted millions out of poverty, and has supported expansion of the continent's middle class, but better living, working, and social conditions have fueled a surge in demand for energy. Nearly half of Africa's 1.2 billion people still lack access to power (AfDB 2018, IRENA 2019) and the continent is home to the world's fastest growing population. Thus, the demand for energy is expected to double by 2040 (OECD/IEA 2017, IRENA 2019).

Given the rapidly accelerating climate crisis across the world, countries must find ways to sustain their economies without relying on fossil fuels that increase carbon emissions and contribute to global warming. Climate change also disproportionately impacts women. Eighty percent of the people displaced by climate change are women (Habtezion, 2016). Despite women's smaller carbon footprint, women are more likely to experience homelessness, poverty, sexual violence, and disease as a result of the direct and indirect consequences of climate change (Jackson 2021). Thus, to meet the current and coming extraordinary demand for energy in Africa without aggravating the climate crisis, and negatively impacting even greater numbers of people, more renewable energy is needed.

Africa's RE sector is just taking off as a major job creation vehicle. In 2020, the International Renewable Energy Agency (IRENA) estimated that the RE sector employed 219,000 people in SSA, and about half of these jobs (110,000) were in the off-grid solar photovoltaic (PV) sector (IRENA 2020a). Also, according to a 2019 job census conducted in Kenya and Nigeria, decentralized RE solutions already employed as many people as the traditional utility power sector (Power for All 2019).<sup>1</sup> By 2023, the number of jobs in the RE sector is expected to double in Kenya, and multiply more than tenfold in Nigeria.

To meet this significant demand, RE companies in Sub-Saharan Africa (SSA) require a skilled workforce across the entire value chain, which includes project development, manufacturing, installation, operations, and maintenance.

Currently, the workforce in the RE sector is male dominated, particularly in technical and managerial positions, but as a key International Labour Organization (ILO) study shows, improving the gender balance in companies is good for business. In addition to enhanced financial performance, a large body of evidence demonstrates that having women in leadership positions, and a gender-balanced workforce, positively correlates with a company's innovation, resilience, quality of services, reduced financial and reputational risk, and improved environmental standards (EY 2019, Hewlett et al. 2013, Shook and Sweet 2019, IFC 2018). However, moving more women into RE managerial positions in SSA will continue to be constrained unless gender-specific obstacles are removed. If the RE sector fails to adopt a strong agenda to improve gender diversity at all levels, not only will the gender gap deepen as the sector expands, but company competitiveness and achievements could be held back.

Since there is little information available about the roles that women play in the RE sector in SSA, the International Finance Corporation (IFC), under its Energy2Equal initiative, commissioned Econoler, a global energy consulting firm, to undertake a study. The objective of this study was to better understand the challenges and opportunities that women face in the private RE sector in SSA, and to provide RE companies with recommendations on best practices. It also contributes new information to the global body of data on women in RE in SSA.

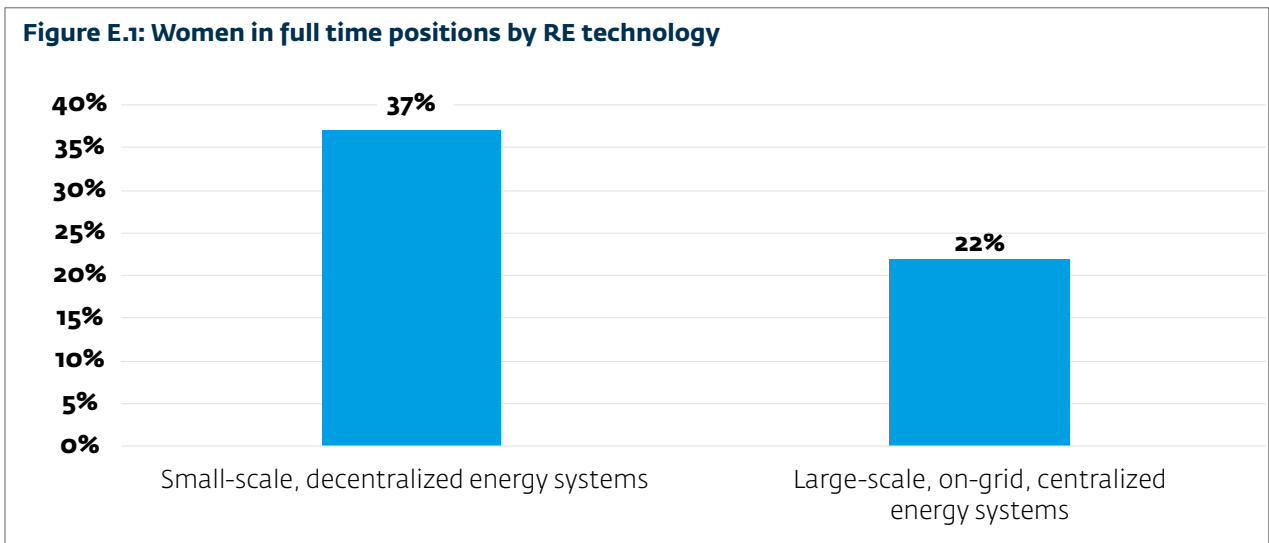
<sup>1</sup> *A decentralized energy system generates energy close to where it will be used, rather than at an industrial plant, and then sent through the national electricity grid. Decentralised systems typically use renewable energy sources, including solar, wind, small hydro, and biomass power. A decentralised energy system can increase the security of supply, reduce transmission losses, and lower carbon emissions (<https://www.edie.net/definition/Decentralised-energy/33>).*



Econoler’s research team surveyed 64 companies that provide both on-grid and decentralized solar, wind, hydro, biomass, and geothermal power. The team assessed the market in 10 SSA countries: Cameroon, Ethiopia, Kenya, Mali, Nigeria, Rwanda, Senegal, South Africa, Togo, and Zambia. Unless otherwise specified, references to SSA in this report refer to these 10 countries. The study focused on the employment of women in the private RE sector and did not assess the role of women as users of renewable energy. The key findings of the study are as follows:

### Key Findings

- 1. Women’s Participation by Type of RE Technology.** In the RE sector, women were more likely to be employed full-time (37 percent) in small-scale, decentralized RE systems (off-grid, standalone systems, and mini-grids), rather than in large-scale, centralized, on-grid infrastructure (large hydro, geothermal, and wind). In the latter, the percentage of women dropped to 22 percent (Figure E.1). This study found that companies involved in large-scale RE faced more challenges in attracting and retaining female employees due to the nature of the work. The main barriers to building a gender-diverse workforce were the distance from home to work,<sup>2</sup> challenging physical conditions, and the need for a high level of technical specialization.



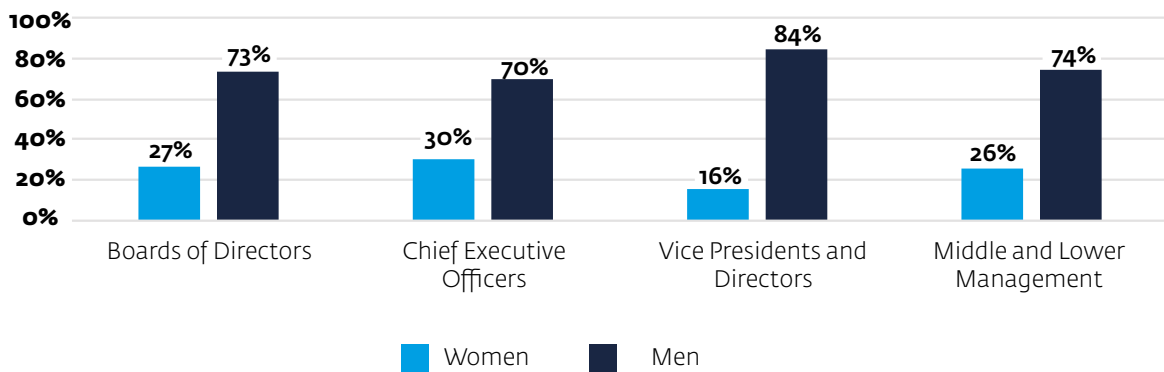
- 2. Women in Leadership Roles.** The ILO considers that a workforce is gender balanced when the composition is between 40 and 60 percent of either gender (ILO 2019). In RE companies in SSA, women comprised 27 percent of the members of boards of directors, 30 percent of chief executive officers (CEOs), 16 percent of vice presidents, and 26 percent of middle- and lower-level managers (Figure E.2).

2 *The work is often located in remote rural and isolated villages with limited services. This means that women cannot bring their family, or if they go, they work far away from their family.*

In comparison to other sectors and outside Africa, there were more women on the boards of RE companies in Africa (27 percent) than the G-20<sup>3</sup> country average (20 percent) and the African average (18 percent) (UN Sustainable Stock Exchanges 2021, The Board Room Africa 2021). Despite the progress RE companies have made, in 8 out of 32 companies surveyed for this study had no female board members.<sup>4</sup>

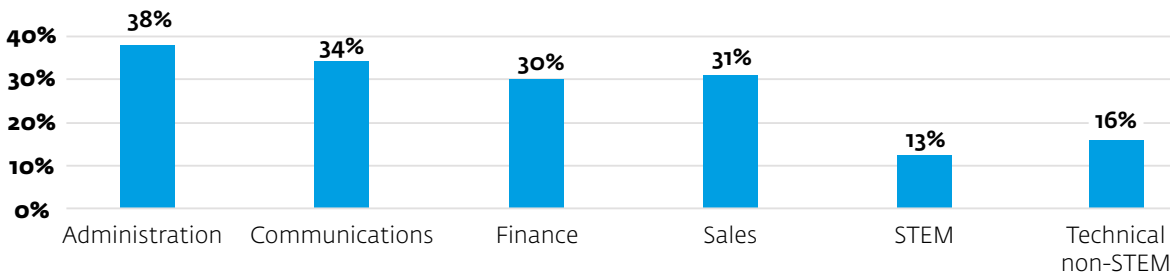
Looking at the percentage of women CEOs in publicly traded companies, SSA companies significantly outperformed their G-20 peers. In SSA, the percentage of women CEOs (in RE companies) was 30 percent versus 3.5 percent (in all sectors) in G-20 countries (UN Sustainable Stock Exchanges 2021).

**Figure E.2: Women in Leadership Roles**



- 3. Women in Technical and Non-technical Positions.** Women comprised about one third of RE companies' full-time employees, but they were concentrated in corporate support functions, rather than in the core business functions that are critical for feeding the leadership pipeline. The three departments with the highest proportion of female employees were administration (38 percent), communications (public relations) (34 percent), and sales (31 percent). However, women held only 13 percent of the positions that required a degree in science, technology, engineering, and mathematics (STEM), and 16 percent of non-STEM technical positions (such as environmental, health and safety, legal, and other standards) (Figure E.3).

**Figure E.3: Women in Technical and Non-technical Positions**



<sup>3</sup> The G-20 is an inter-governmental forum for international economic cooperation that is comprised of 19 countries and the European Union. Together they represent more than 80 percent of global GDP.

<sup>4</sup> Some companies had no boards.

## Key Barriers to Women's Participation in the RE Workforce

Despite the strong business case demonstrating that a gender-diverse workforce and leadership positively correlate with a company's improved financial performance, innovation, resilience, and quality of services, women still face persistent barriers to entering and progressing in the RE sector. The three most prominent challenges are workplace policies and practices, social norms and gender stereotypes, and legal barriers.

- 1. Workplace Policies and Practices.** The lack of gender-responsive workplace policies and practices were highlighted by managers and employees as a key barrier to women's recruitment, retention, and promotion in the RE sector. The main issues were the absence of a family-friendly workplace culture, gender bias in recruitment and promotion policies, sexual harassment and violence in the workplace, and lack of access to mentoring and training opportunities.
- 2. Social Norms and Gender Stereotypes.** Social norms and gender stereotypes affect women's participation in the RE workforce at different levels. In seven of the 10 countries studied, the rate of secondary school enrollment for females in SSA remains very low—at an average of 36 percent—and this limits the number of females who go on to enroll in university (World Bank 2020). Of the few females who do attend university, only a small segment enrolls in, and completes a STEM degree. Once women enter the job market, they encounter discrimination, including the widespread misconception that women are not suited for technical roles.
- 3. Legal Barriers.** In some countries in SSA, laws can restrict women's access to opportunities for good paying jobs in the energy sector. The World Bank's report, *Women, Business, and the Law 2021*, identified national laws in five countries (Cameroon, Ethiopia, Mali, Nigeria, and Senegal) that have some restrictions on how women can work in industrial jobs (mining, construction, factories, agriculture, energy, water, transportation and other). If women cannot access opportunities in core business functions in the RE sector, then their ability to reach leadership positions could be impeded.

## Key Recommendations for RE Companies in SSA

Companies can embrace the recommendations below to enhance women's participation in the RE sector.

Actions	Description
<b>Gender Balance in Leadership and the Workforce</b>	
<p>Provide a strong leadership endorsement of gender equality and diversity within the workplace</p>	<ul style="list-style-type: none"> <li>› The board, CEO, and senior management can effectively set the tone, and champion gender equality by <b>communicating a compelling business case, creating a company culture that embraces gender equality, and backing this with measurable targets of between 40 to 60 percent of either gender at all levels of the company</b>—the board, leadership, management, and workforce; across all departments; and especially in technical, higher-paying positions</li> <li>› Back company diversity targets with <b>key performance indicators (KPIs), a budget and dedicated resources</b>. Cascade KPIs down from the top to ensure that everyone works toward the same goals.</li> <li>› Establish a <b>diversity and social inclusion (D&amp;I) council</b> that promotes and monitors implementation of the <b>gender diversity strategy and gender action plan (GAP)</b>.</li> <li>› Support leadership and staff engagement in achieving gender equality with training, awareness-raising, and internal communication.</li> </ul>
<p>Support leadership and staff engagement</p>	<ul style="list-style-type: none"> <li>› <b>Engage senior leadership in gender equality initiatives</b>. Assign gender targets to senior leaders and include it in their performance evaluations.</li> <li>› Secure <b>men as allies</b> through the identification of male change agents and motivate them to act as ambassadors for gender equality.</li> </ul>
<p>Implement monitoring and evaluation</p>	<ul style="list-style-type: none"> <li>› Continuously monitor progress against targets and <b>report progress, backed by data, to the board regularly</b>.</li> <li>› Collect and analyze <b>sex-disaggregated data</b> at the company level. Develop a baseline, and ensure regular monitoring and evaluation based on sex-disaggregated data on employee satisfaction, training hours, positions in the company, use of parental leave, and the pay gap etc.</li> <li>› Track the use of dedicated <b>financial resources</b> to increase gender equality and diversity.</li> <li>› <b>Join voluntary initiatives</b> such as the United Nations Women's Empowerment Principles (WEPs) which can help benchmark and access new trends and best practices.</li> <li>› Undertake company gender diagnostics such as the Economic Dividends for Gender Equality Methodology (EDGE) or the Gender Equality European and International Standard (GEEIS) Label by Arborus.</li> <li>› <b>Publish</b> gender equality targets, indicators, and results in the company's annual report, sustainability reports, and on the company's website.</li> </ul>

<b>Prepare Women to Enter Leadership Positions</b>	
Provide leadership skills training to women to prepare them for new roles and responsibilities	<ul style="list-style-type: none"> <li>› <b>Recruit women board members, executives, and management from other sectors, if needed.</b></li> <li>› Design and conduct targeted training and workshops for female employees, focusing on <b>leadership and other soft skills.</b><sup>5</sup></li> <li>› Create <b>leadership development plans</b> that enable women’s advancement to all leadership levels.</li> <li>› Use different types of training methods such as <b>job sharing</b><sup>6</sup> and <b>job-shadowing.</b><sup>7</sup></li> </ul>
<b>Recruitment Process</b>	
Conduct talent outreach	<ul style="list-style-type: none"> <li>› <b>Give presentations to university students enrolled in STEM programs</b> about career opportunities in the company, and the RE value chain. Promote STEM careers in primary and secondary schools.</li> <li>› <b>Offer scholarships</b> to women to pursue degrees in STEM fields.</li> <li>› Offer <b>internship opportunities and mentoring programs</b> to women enrolled in STEM programs.</li> </ul>
Implement a gender-responsive recruitment process	<ul style="list-style-type: none"> <li>› Conduct <b>unconscious bias training sessions</b> for all employees involved in the recruitment process.</li> <li>› Review <b>job descriptions</b> to make them competency-based and to reduce potential bias (for example, allocate more weight to education; require certain skills, rather than years of experience; limit the number of mandatory qualifications).</li> <li>› <b>Advertise jobs through women’s networks</b> and through a variety of media.</li> <li>› Establish minimum <b>targets for female applicants.</b> If that is not achieved, re-advertise the vacancy.</li> <li>› Design selection processes to <b>reduce unconscious bias</b> by using methods such as “blind” pre-screening of résumés that removes names and pictures and includes pre-defined selection criteria that values diverse skillsets.</li> <li>› Promote gender balance in interviews by <b>including women on short lists.</b></li> <li>› Introduce policies that support structured interviews that are conducted by <b>gender-balanced interview panels.</b></li> </ul>

<sup>5</sup> *Soft skills are non-technical skills that relate to how an employee works, and these strongly influence an employee’s career trajectory (Doyal 2020). In its report, The Future of Jobs Report 2020, the World Economic Forum identified the top 10 skills needed for the future and most are soft skills, which include problem solving, self-management, and working with people (WEF 2020).*

<sup>6</sup> *Job sharing is a flexible work arrangement in which two employees work part-time, with hours that add up to the work hours of a single full-time job (Conlan 2021)*

<sup>7</sup> *Job shadowing involves spending time following and observing a professional as she or he works. This can last from a few hours to several weeks (Doyle 2020).*

<b>Retention Strategies</b>	
<p>Implement approaches that encourage women to stay in the workforce</p>	<ul style="list-style-type: none"> <li>› <b>Provide opportunities to gain more experience.</b> This could include developmental assignments, job shadowing, stretch assignments, and working in teams, so women can learn on the job with peer support, mentoring, and coaching.</li> <li>› Publish internal opportunities to promote transparency and encourage women to apply.</li> <li>› Ensure that <b>field and office-based work are equally accessible</b> to women and men and are safe for women. Increase women's engagement in field work by adopting health and safety policies that consider the needs of women and men. Provide women with equal access to personal protective equipment; and access to a separate toilet, changing room, and shower.</li> <li>› Implement a <b>fair and unbiased performance management system</b> (set targets for each employee, hold an evaluation meeting with line managers at the end of the performance period, and exclude time for parental leave from evaluations).</li> </ul>
<p>Implement policies and procedures to prevent and address workplace bullying and sexual harassment and to support employees affected by domestic violence</p>	<ul style="list-style-type: none"> <li>› All leaders in the organization communicate authentically with employees about creating a respectful workplace, <b>role model respectful behavior</b> and support employees to report disrespectful behavior.</li> <li>› <b>Policies and procedures</b> are in place that support respectful workplaces by clearly articulating that disrespectful behavior will not be tolerated, giving examples of disrespectful behavior and its consequences, and identifying where to report disrespectful behavior and what support will be provided for affected employees.</li> <li>› <b>Create a safe workplace</b> for women and men, in both offices and field locations, that is free of bullying and sexual harassment, and where employees are encouraged to disclose domestic violence and seek support.</li> <li>› Implement <b>anti-workplace bullying and sexual harassment policies</b>, coupled with mandatory <b>training for all employees and managers on workplace bullying and sexual harassment</b>, which is taught by a qualified and skilled practitioner. Implement communications campaigns to raise awareness about workplace bullying and sexual harassment.</li> <li>› <b>Enforce policies</b> and strengthen the <b>internal justice mechanism</b> to build credibility and trust. <b>Hold managers</b> accountable for ensuring a safe workplace.</li> <li>› Provide multiple reporting channels - informal, formal and/or online, and at least one anonymous way to report. Ensure that whistleblowers and witnesses have protection from retaliation and provide appropriate and timely remedies for victims.</li> <li>› Act promptly to investigate and resolve all issues raised in a <b>safe and confidential manner by a trained team.</b></li> <li>› Ensure that any <b>disciplinary action taken is based on the outcome of the investigation</b> and proportionate to the impacts of the harassment.</li> <li>› <b>Promote awareness</b> so that employees know what action they can take if they experience, witness, or hear about disrespectful behavior.</li> <li>› Incidences and responses of disrespectful behavior are monitored and evaluated, and guidelines are reviewed as necessary.</li> </ul>

	<ul style="list-style-type: none"> <li>› Regularly conduct <b>anonymous workplace bullying and sexual harassment climate surveys</b> to monitor progress and rectify issues.</li> <li>› <b>Implement a domestic violence policy, train a team of focal points to provide a survivor-centred response, raise awareness about the issue and support employees affected</b> domestic violence (EBRD, IFC, and CDC 2020).</li> </ul>
Promote equal training and mentoring opportunities	<ul style="list-style-type: none"> <li>› Develop a <b>training plan for each employee</b> with clear goals and timelines. Make sure that women trainees can diversify and upgrade their skillset, and especially their technical skills, with formal university training, short courses, and certifications.</li> <li>› <b>Ensure that in-house training materials are bias-free</b> and support the company's gender equality values.</li> <li>› <b>Accommodate gender-specific restrictions</b> (such as family responsibilities) in training logistics and timing. For example, hold the training sessions during office hours, offer online participation, and on-demand, pre-recorded videos.</li> <li>› <b>Design high-quality mentoring and sponsorship programs</b> tailored to women at different career levels.</li> </ul>
Ensure equal pay	<ul style="list-style-type: none"> <li>› Adopt a formal and transparent <b>salary structure</b> and a salary equity policy.</li> <li>› Conduct periodic <b>gender pay gap analyses</b>, communicate the results and mitigation measures, and report publicly.</li> </ul>
Understand employees' reasons for leaving the company	<ul style="list-style-type: none"> <li>› Consider conducting <b>exit interviews</b> to understand reasons for departure and to address issues.</li> </ul>
Foster a workplace culture that balances work and family life	<ul style="list-style-type: none"> <li>› Develop and implement <b>robust parental leave policies for both parents</b> that pays at least two thirds of the regular salary for 14 weeks for the primary caregiver, and two weeks for the secondary caregiver. Provide policies that protect women from termination during pregnancy or absence while on leave. Guarantee the right to return to the same or equivalent position, paid at the same rate, at the end of maternity leave. These standards correspond to No. 183 of the ILO's Maternity Protection Convention (2000), and the European Commission's recommendation for paternity leave.</li> <li>› <b>Support returnee parents</b> with measures such breastfeeding breaks and lactation rooms with refrigeration, power outlets, and a sink.</li> <li>› <b>Invest in company-sponsored childcare programs</b> (ILO 2019, IFC 2020).</li> <li>› <b>Offer flexible work policies covering both hours and location</b>, especially in the wake of the COVID-19 pandemic and ensure that tele-commuting workers are not discriminated against, are compensated at the same level of pay, and have the same access to career progression opportunities.</li> <li>› Extend <b>health benefits to family members</b>.</li> </ul>

<b>Promotion Practices</b>	
<p>Establish a formal and transparent promotion process to counteract gender bias in promotion</p>	<ul style="list-style-type: none"> <li>› Implement a <b>fair and unbiased performance management system</b> (set targets for each employee; conduct an evaluation meeting with the manager at the end of the performance period; conduct an evaluation prior to the start of maternity leave; set new targets upon the employee's return from maternity leave; and prorate evaluation periods to only include the time the employee worked so the employee is not penalized for taking leave).</li> <li>› <b>Use best practices for promotion</b> such as competency mapping and gender-balanced promotion panels.</li> </ul>
<p>Promote career development plans for all employees</p>	<ul style="list-style-type: none"> <li>› Promote <b>career development plans</b> for all employees and review annually.</li> <li>› Provide <b>career reintegration plans</b> for returnee mothers.</li> </ul>
<b>Improve the Legal Framework</b>	
<p>Encourage and support regulatory reform</p>	<ul style="list-style-type: none"> <li>› <b>Advocate for legal frameworks</b> that promote equal access to opportunity, prevent discrimination, and enhance workplace benefits, such as parental leave for both parents.</li> <li>› <b>Support public and private investments</b> in STEM educational programs for girls and women.</li> </ul>



# 1. INTRODUCTION

## 1.1 Context

The 2015 United Nations Paris Agreement acknowledged that climate change is a common concern of humankind and that when taking action to address climate change, Parties should respect, promote, and consider gender equality and empowerment of women. Further, “Parties should consider the imperatives of a just transition of the workforce and the creation of decent work and quality jobs” (UN Paris Agreement 2015).

African countries are endowed with abundant natural resources for generating solar, wind, hydro, biomass, and geothermal power. As the RE sector scales up in Africa to meet the extraordinary energy needs, improvements in RE technologies and lower prices are driving growth. RE is projected to account for 75 percent of new energy generation and provide more than 40 percent of all of Africa’s power generation capacity by 2040 (IEA 2019a).

The rapid expansion of the RE sector will require a larger skilled workforce, particularly in the private sector, and women can help companies to meet this demand. It also presents an opportunity to promote a just and inclusive transition that can increase women’s participation in this new workforce as leaders and employees, as entrepreneurs in the supply chain, and as consumers that contribute to a unique and profitable market segment.

Research has shown that closing gender gaps improves business performance. As the RE sector and workforce grows, women can play a key role in improving company competitiveness. There is strong evidence that gender diverse companies perform better than companies that are not gender diverse. One key study by the International Labour Organization (ILO) researched African companies and found that gender diverse companies experienced notable gains in profitability, with the 30 percent of companies that track gender diversity reporting a profit increase of 10 to 15 percent (ILO 2019).

In addition to enhanced financial performance, a large body of evidence demonstrates that having a gender balanced board, leadership team, and workforce, positively correlates with a company’s innovation, resilience, quality of services, reduced financial and reputational risk, and improved environmental standards (EY 2019, Hewlett et al. 2013, Shook and Sweet 2019, IFC 2018). However, women are under-represented in the RE sector, and their presence will continue to be limited unless gender-specific obstacles are removed. If the RE sector fails to adopt a strong agenda to improve gender diversity at all levels, not only will the gender gap deepen as the sector expands, but company performance and achievements in the sector could be limited.

**“When positioned as leaders, women are more likely to use their power to reduce emissions in a number of ways, from starting renewable energy companies to choosing sustainable options and minimizing household fossil fuel use” (Collins 2019).**

## 1.2 Research Objectives and Methodology

Since detailed information and data on gender equality in private RE companies in Sub-Saharan Africa (SSA) are scarce, the International Finance Corporation (IFC), under its Energy2Equal initiative, commissioned a gender workforce study in the RE sector. The goal of the study was to learn more about the status of women in the RE workforce and in leadership positions to better understand barriers and opportunities to women's full participation in the sector. Along with identifying gender gaps, this study also contributes new data to the body of knowledge on the RE sector in SSA. The specific objectives of the study were to provide data on women's participation in the RE sector's workforce in SSA, identify the main challenges and opportunities women experience, and identify best practices for removing barriers to women's participation in the sector.

Out of 46 SSA countries, a sample of 10 countries was selected for the study (Cameroon, Ethiopia, Kenya, Mali, Nigeria, Rwanda, Senegal, South Africa, Togo, and Zambia). The countries were selected based on (1) diversity in the main types of RE generation (on-grid and off-grid), (2) the maturity of private RE providers, and (3) a range of socio-economic and gender equality levels. Three fragile and conflicted states (FCS) were also included. The research team surveyed 64 companies that are active in on-grid and decentralized solar, wind, hydro, biomass, and geothermal power.

This study employed a mix of qualitative and quantitative research methodologies to collect primary and secondary data and information, and also included a literature review. Primary data from the 64 RE companies were collected between February and March 2021 through online surveys, key informant interviews, and focus group discussions. Most of the companies surveyed (40 percent) were based in West Africa, 19 percent in East Africa, 19 percent in Southern Africa, and 6 percent in Central Africa. The majority of survey respondents (62 percent) worked for companies with fewer than 30 employees, while large companies with more than 100 employees comprised a small fraction (15 percent) of the total respondents.

A total of 64 companies were invited to respond to the employers' survey. To encourage honesty and accuracy in the responses, companies' responses were anonymous. While some of the companies invited to participate in the study were IFC's partner companies in the Energy2Equal initiative, the identity of these partners is unknown in the survey. A multi-branch survey method posed different sets of questions to company representatives and employees. A total of 132 survey responses were received. Corporate-level data was provided by 71 respondents on women's participation in the workforce, and on the company's internal labor policies and practices. Employees (97 respondents) answered a separate survey that gathered their perceptions of gender equality within the company, as well as in the RE sector. Some of the questions were optional, and not all the respondents chose to answer all survey questions. The number of respondents to each question is indicated in the footnotes.

Women comprised nearly half (48 percent) of the respondents to the employee survey, and more than 75 percent of these respondents were between the ages of 25 and 44. Key informant interviews were conducted with CEOs and managers from 16 companies to understand the status of gender diversity, identify the barriers and opportunities women employees experience, and company best practices. To gather insights on women's opportunities and challenges, focus groups were organized, virtually, and in-person, with employees from four companies. (Additional information on the research methodology and the limitations are presented in Appendix I).

## 2. THE BUSINESS CASE FOR GREATER DIVERSITY

### 2.1 The Opportunity

Pursuing gender equality is a smart business decision for energy companies. There is strong evidence that having a significant proportion of women in the workforce, including in leadership positions, positively correlates with a company's increased profitability, innovation, decision-making, resilience, and greater ability to gauge consumer needs, which improves the quality of service (ILO 2019, EY 2019, Hewlett et al. 2013, Shook and Sweet 2019, IFC 2018) (Figure 2.1). IFC found that having a more gender balanced board and leadership team resulted in stronger environmental, social, and governance (ESG) performance and this leads to better performance (IFC 2018). This trend has been observed in many industries, including male-dominated sectors, such as energy.

RE companies require a skilled workforce, and as employment in the sector remains largely male-dominated, recruiting women can help to broaden talent pipelines and address the need for skilled workers. Globally, women are the key decision makers when it comes to household energy choices (Collins 2019). RE companies could benefit from having more women on staff to advise on market trends and on the design of production and distribution strategies. Opening opportunities for women entrepreneurs in distribution networks could help companies to reach the women's segment of the energy market.

**Figure 2.1: Positive Results When More Women are in Leadership Positions**



- **Increased Profitability:** A comprehensive analysis of the boards of directors and leadership teams of the top 200 electricity utilities in the world found that having a higher percentage of women on boards translates into higher returns on equity and investment, with the top 20 most diverse utilities outperforming the bottom 20 companies (EY 2016).

- **Better Ability to Gauge Consumer Needs and Increased Innovation:** “Utilities are in the midst of a major transformation driven by renewable generation, digital technologies and changing consumer expectations” (EY 2019). Continuous innovation and differentiation in a world characterized by disruption is not only essential for energy companies to maintain a competitive edge, but also to survive (EY 2019).
- Gender diversity has been linked with increased innovation because “gender-diverse teams maximize the power of different opinions, perspectives, and cultural references,” and this positions companies to better gauge consumer needs and respond with innovations that will resonate with end users (EY 2019). There is evidence that utilities that have improved gender equality are able to leverage different perspectives to unlock better solutions and are able to adapt to change and make decisions twice as fast, thereby boosting innovation (EY 2019). Gender-equal leadership is a critical ingredient for utilities to innovate, and there is evidence that gender-diverse companies are 70 percent more likely to get innovative ideas to market (EY 2019, Hewlett et al. 2013).

A study by Accenture, which surveyed over 18,000 employees in 27 countries, found that in comparison to companies that had the “least equal” mindsets, innovation was six times higher in companies that treat women and men more equally, and where the workplace culture “helps everyone advance to higher positions” (Shook and Sweet 2019).

- **Improved Decision-making:** The Women’s Forum 2021 Barometer found that in G-20 countries, women are doing more to tackle climate change than men (Westendarp 2021). Women were more likely than men to take action to reduce their carbon dioxide levels to improve the sustainability of the planet and to reduce the impact of climate change on future generations (Women’s Forum 2021).

## 2.2 External Challenges that Impact Business Opportunities

There is ample evidence indicating significant benefits from achieving a gender-diverse organization. The ILO defines gender balance as 40 to 60 percent of either gender in the general workforce, or in senior management. The ILO found that when the overall workforce is gender balanced, women are likely to be better represented in middle, senior, and top management positions (ILO 2019).

Despite strong evidence about the benefits of having a gender-diverse workforce, women in the energy sector face persistent barriers that prevent them from accessing opportunities. For many women, their challenges begin early in their lives. Young girls, more often than their brothers, are expected to help care for siblings and undertake domestic responsibilities. More than two thirds of adolescent girls (64 percent) in seven of the countries featured in this report, do not enroll in secondary education. Of the few women who earn university degrees, some may encounter legal barriers that prevent them from accessing opportunities in the energy sector. Of the women who do work in the energy sector, some experience gender stereotyping and gender-based violence, which makes it challenging for RE companies to recruit and retain women in core business functions.

Interestingly, several quantitative and qualitative studies (discussed below) have shown that clean energy access is linked with more girls completing primary education, women earning better wages, and a reduction in gender-based violence.

**Unequal Access to Education and the Low Female Enrollment Rate in STEM fields:** The rates of educational attainment for girls, and especially the rate of girls transitioning to high school and tertiary education in SSA remains low, which directly impacts the number of qualified women who can work in the energy sector. In Cameroon, Ethiopia, Kenya, Mali, Rwanda, Senegal, and Togo, the female secondary school enrollment rate is only 36 percent. South Africa is an outlier, leading the way, with 79 percent of girls enrolling in secondary school (World Bank database). The educational pipeline is losing girls at an alarming rate, and fewer girls are able to go on to university (World Bank 2020). Worldwide more women (43 percent) are enrolled in tertiary education than men (37 percent); however, in Sub-Saharan Africa the reverse is true; the gross enrollment rate in tertiary education was 8 percent for women and 10 percent for men (World Bank database). Patriarchal norms and socio-cultural practices pre-determine that men, rather than women, will receive support for enrolling in higher education.

Of the few women who enroll in university, very few select science, technology, engineering, and mathematics (STEM) programs. Women who enroll in technical or engineering programs are viewed unfavorably (Maduekwe et al. 2019). UNESCO found that in SSA, the gender gap is especially large in disciplines such as mathematics, engineering, and computer science (UNESCO 2015, UNESCO Institute for Statistics 2019). In SSA, as a result of women's low post-secondary enrollment rates and, especially women's low enrollment in STEM degrees, the pool of women with the qualifications to enter the RE workforce in technical roles is very small.

**Legal Barriers.** In some countries in SSA, laws can restrict women's access to opportunities for good paying jobs in the energy sector. The World Bank's report, *Women, Business, and the Law 2021*, identified national laws in five countries (Cameroon, Ethiopia, Mali, Nigeria, and Senegal) that have some restrictions on how women can work in industrial jobs (mining, construction, factories, agriculture, energy, water, transportation and other). If women cannot access opportunities in core business functions in the RE sector, then their ability to reach leadership positions could be impeded.

**Women in Technical Roles and Stereotypes:** When women take jobs in the energy sector, they face the common misperception that they are unfit for technical roles. Even when women have had more technical education and experience than their male counterparts, they are often deemed less competent than men. (Baruah 2017). In a survey conducted in 34 African countries, about one third of respondents said that they did not believe that women could be as capable leaders as men (Chingwete et al. 2014). These stereotypes not only impede women's optimal participation in core functions in RE, but these stereotypes also challenge women's authority as effective leaders.

**Sexual Harassment and Violence Against Women:** Representatives from the energy sector and civil society organizations in SSA report that sexual harassment and violence against women is a significant issue in the workplace. Several studies have found that women who work in male-dominated industries are more prone to be victims of sexual harassment at work (Tejada 2018, McLaughlin et al. 2017). Ensuring that employees, irrespective of gender, have a safe place to work so that they feel supported and can reach their full potential, is essential for recruiting and retaining women in the RE sector.

Except for Mali, all the SSA countries included in this study have laws on sexual harassment, but enforcement of these laws is often weak. With more women joining the male-dominated workforce, prevention of sexual harassment is necessary through effective corporate policies; however, there is limited transparency about this issue. An IFC study found that in Nigeria, half of the 30 most capitalized publicly traded companies publish information about their policy that explicitly condemns sexual harassment and gender-based violence (IFC 2021).

## 3. RESEARCH FINDINGS

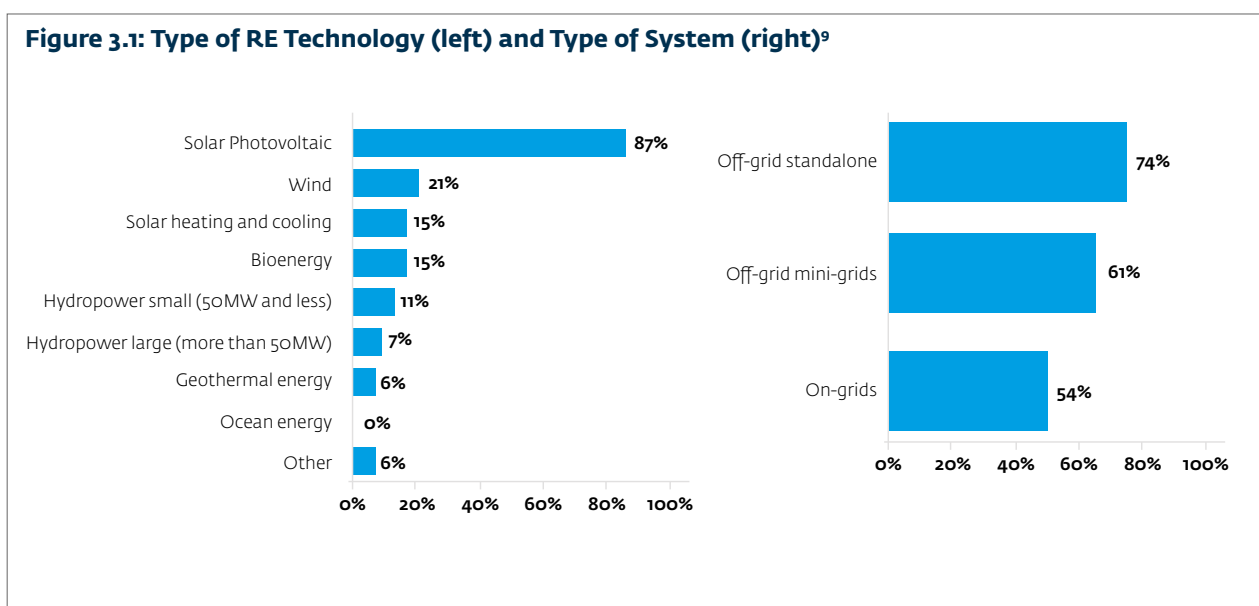
Findings from this study show that the RE sector in SSA continues to be male dominated, although it is more inclusive than the traditional energy sector (Figure 3.2) (IRENA 2019). Women in the RE sector are underrepresented in technical positions<sup>8</sup> and in management, and women face barriers that prevent them from accessing jobs and advancing professionally. This section summarizes the findings from the survey responses of the RE company managers and employees, as well as the insights gathered from key informant interviews (KIIs) and focus group discussions (FGDs). This section also presents sex-disaggregated data on women's participation in the RE workforce, highlights the main barriers to increased gender diversity in the sector, and analyzes how COVID-19 has impacted women's employment.

### 3.1 Women's Participation in the Private RE Workforce in SSA

The findings below provide information on women's representation by type of technology; the ratio of women in leadership roles, and across departments and positions; and company recruitment and retention trends.

#### 3.1.1 Type of RE System

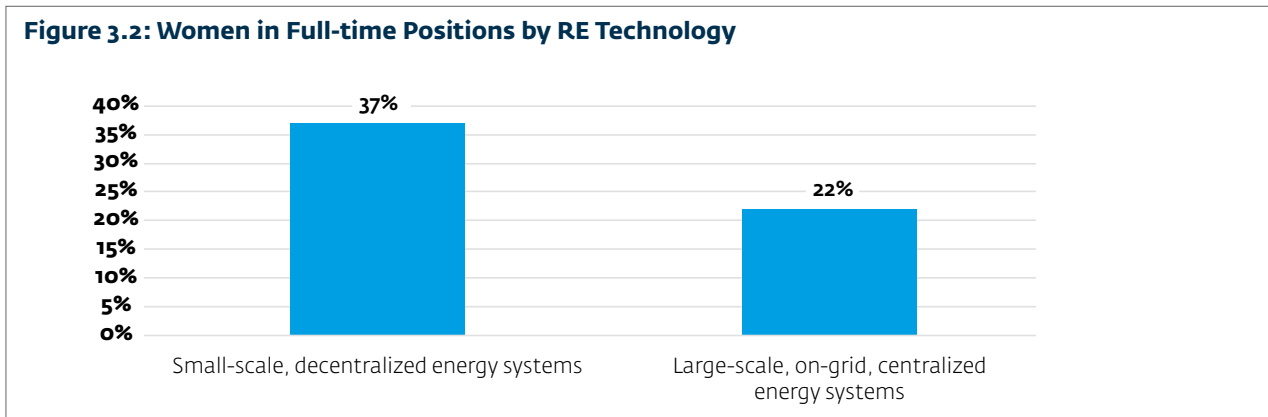
**Types of RE technologies and systems.** The majority of the 64 companies studied (87 percent) were providers of solar photovoltaic (PV) power. This was followed by companies generating power from wind (21 percent), and companies generating hydropower (both large- and small-scale hydro) (18 percent) (Figure 3.1). Most companies (65 percent) specialized in only one type of RE technology, while 35 percent combined two or more types of technology. Most of the companies operate off-grid systems, either as a standalone system or as a mini-grid, although on-grid companies comprised slightly more than half (54 percent) of the companies in this study.



<sup>8</sup> Science, technology, engineering, and mathematics (STEM) positions (e.g., engineering/technical support)

<sup>9</sup> Questions: (1) "What type of renewable energy technology does your company specialize in?" (2) "Which of the following types of systems does your company specialize in?" Sample size (n=71).

More women were employed full-time (37 percent) in small-scale, decentralized RE systems (off-grid, standalone systems, and mini-grids) than in large-scale, on-grid centralized systems (large hydro, geothermal, and wind) (22 percent) (Figure 3.2).<sup>10</sup> The latter finding is consistent with a recent IRENA study, which found that women comprised 32 percent of the RE workforce and 22 percent of the oil and gas industry (IRENA 2019).

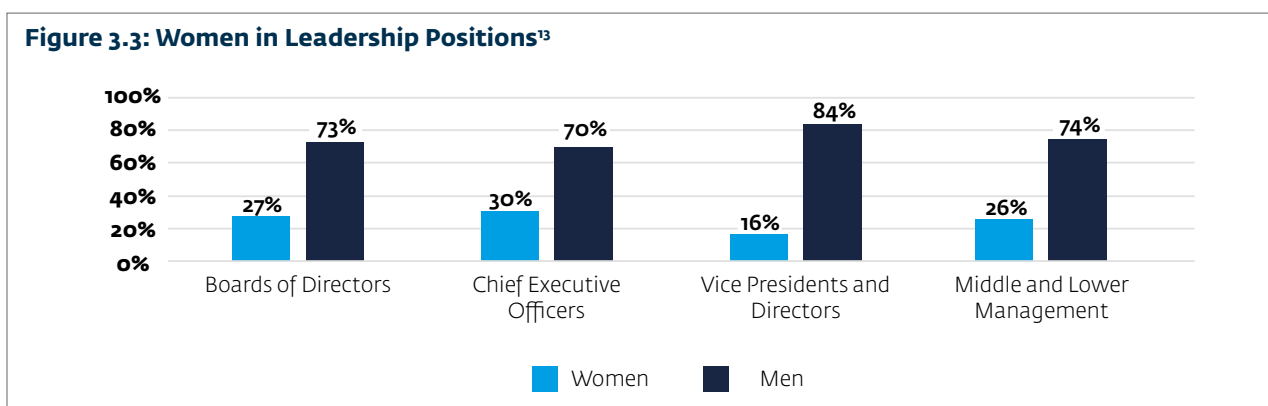


The interviewees explained that companies involved in large-scale RE faced more challenges in attracting and retaining female employees due to the nature of the work. The main barriers to building a gender-diverse workforce were the distance from home to work,<sup>11</sup> challenging physical conditions, and the need for a high level of technical specialization.

### 3.1.2 Women in Leadership Roles

Women in the RE sector comprised 27 percent of company board members (Figure 3.3). This was a notable increase compared to a 2016 McKinsey study of the African energy and materials sector, which found that women comprised 13 percent of board members in African companies (Devillard et al. 2016).

In comparison to other sectors and outside Africa, there were more women on the boards of RE companies in Africa (27 percent) than the G-20 country average (20 percent) and the African average (18 percent) (UN Sustainable Stock Exchanges 2021, The Board Room Africa 2021). Despite the progress RE companies have made, 8 out of 32 companies surveyed for this study had no female board members.<sup>12</sup>



10 Sample size (n=35). Note: Small samples for sub-groups: decentralized energy systems (n=19) and on-grid energy infrastructure (n=5).

11 The work is often located in remote rural and isolated villages, with limited services. This means that women cannot bring their family or if they go, they work far away from their family.

12 Some companies had no boards.

13 Question: "If yes, what is the proportion of women who are members of the board of directors? (%)" Sample size (n=32). Question: "What is the share of women who are Chief Executive Officers, Vice Presidents and Directors, and Middle and Lower Manager?" Sample size (n=35).

When looking at executive positions, women comprised, on average, 30 percent of chief executive officers (CEOs), 16 percent of vice presidents and directors, and 26 percent of middle- and lower-level managers (Figure 2). This means that women held an average of 24 percent of managerial positions in the RE sector. Comparing CEOs across sectors, McKinsey found that 6 percent of African CEOs were women (Moodley et al. 2019), while a UN study found that 3.5 percent of women from the leading publicly traded companies in G-20 countries were women (UN Sustainable Stock Exchanges 2021).

In this study, the lower rate of women serving as vice presidents can be explained by the lack of women in talent pipelines, as demonstrated by the under-representation of women in mid-level management, and on boards of directors (IEA 2019b). This lower representation is due to a gap in promotions to leadership roles. This could be due to a company culture that results in women being promoted less often, or women's reluctance to take on more demanding leadership roles. The lack of qualified female candidates to fill senior management positions in the private RE sector was often raised in interviews as a major obstacle to increasing the number of women in leadership roles. While mentoring and sponsorship can play an important role in preparing women for leadership, 18 percent of the companies surveyed had a mentoring program in place, and 15 percent had a women's network.

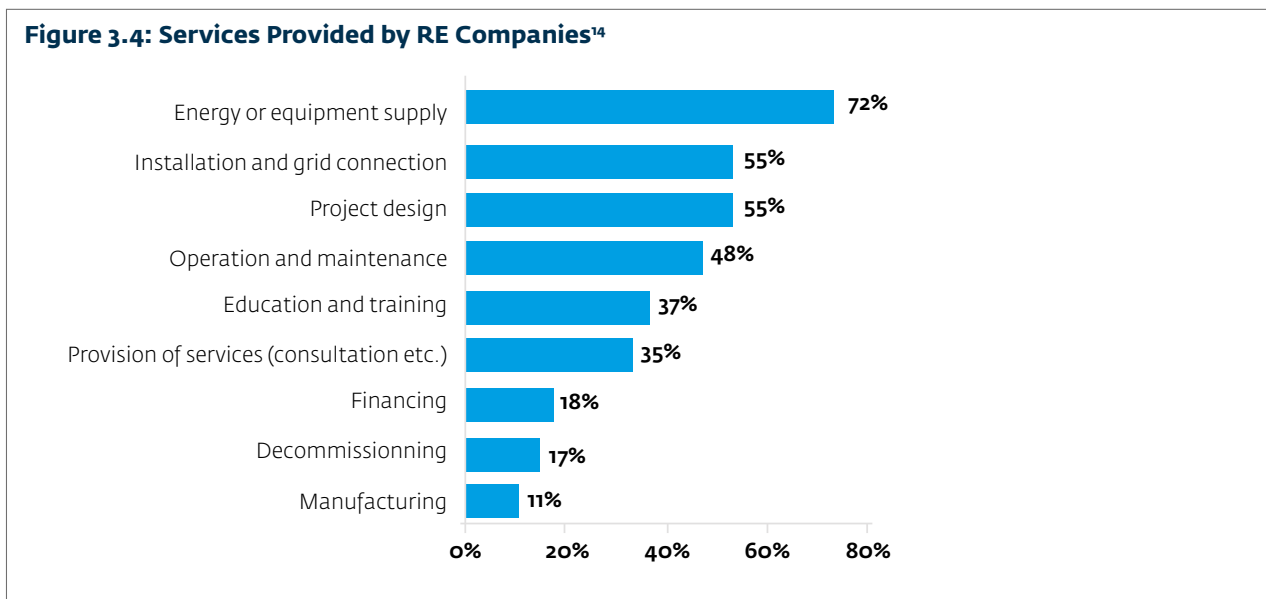
**“By creating opportunities for women in senior level positions, they can serve as role models for other women in the future. Further, having men in senior positions as allies is crucial for helping women navigate their way in the workforce.”**

*(Female manager, wind industry)*

### 3.1.3 Women in Technical and Non-technical Positions

Looking at the workforce, the companies surveyed had, on average, 32 percent of women in full-time employment, and this mirrored the same percentage as the findings from IRENA's 2019 gender workforce study.

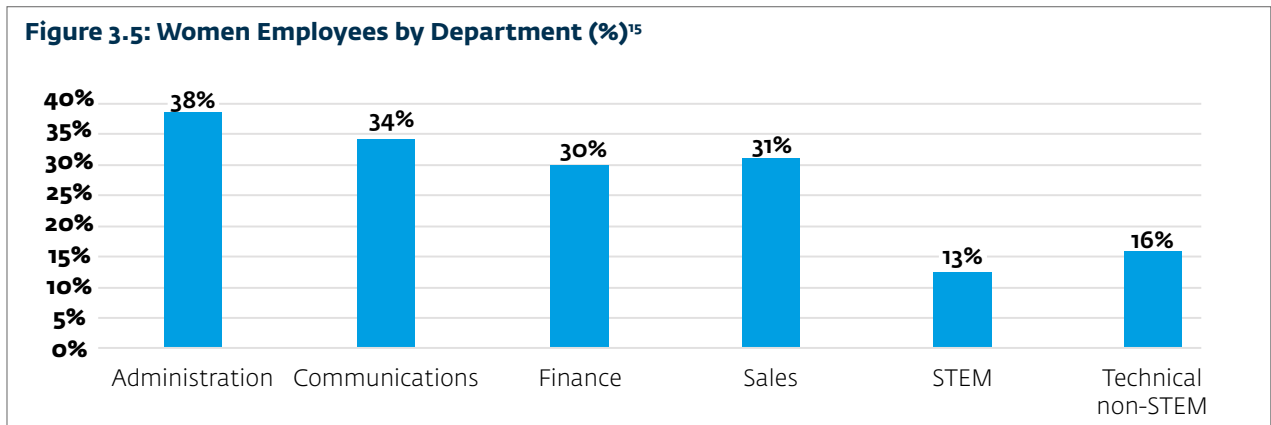
Figure 3.4 shows the broad range of opportunities where women can be employed in the RE sector. The three main services in which companies were active, were energy or equipment supply (72 percent), installation and grid connection (55 percent), and project design (55 percent) (Figure 3.4).



<sup>14</sup> Question: “What type of services does your company provide?” Sample size (n=71).



However, when segmented by department, most female employees were concentrated in corporate support functions (Figure 3.5). The three departments with the highest proportion of female employees were administration (38 percent), communications (public relations) (34 percent), and sales (31 percent). Women held 13 percent of STEM positions (engineering/technical) and 16 percent of technical non-STEM positions (environmental, health and safety, legal, regulatory, and standards experts).



This occupational segregation is common globally in the male dominated private sector, including in the traditional energy sector, where more than half of senior women occupy administrative roles rather than core business roles, which typically have higher decision-making power and better compensation (Moodley et al. 2016).<sup>16</sup>

The KIIs and FGDs also revealed that women are more frequently assigned to “safe, feminine” office-based functions in corporate administrative and support services. Both male and female managers and employees explained that women “naturally” prefer office work for reasons that include: “women are better suited to administrative work, women lack the physical fitness for energy sector jobs, women prefer jobs that are comfortable, and women want to work in a location that is close to their family.”

To increase gender diversity in their workforce, some companies adapted their recruitment strategies by allocating administrative positions only to women. However, this unconscious bias inadvertently increased occupational segregation within the workforce. Occupational segregation arises from many factors, including gender stereotypes, women’s family responsibilities, and legal barriers.

15 Question: “What is the share of women in administration, communications, finance, sales, STEM, technical and non-STEM positions?”  
Sample size (n=35).

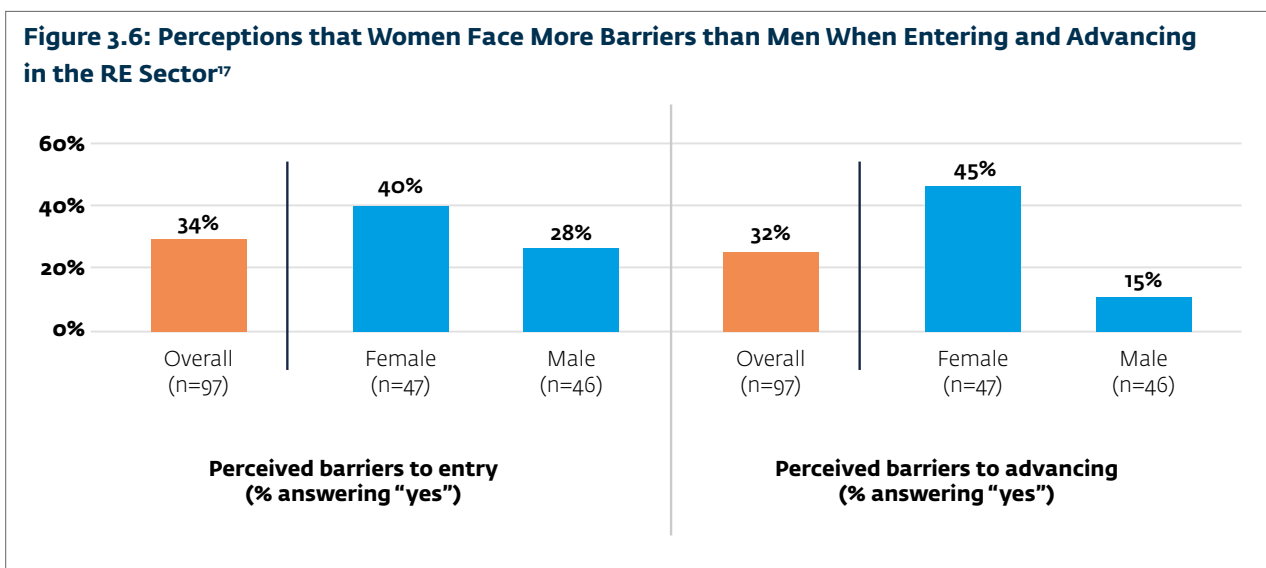
16 A line position is a position that has authority and responsibility for achieving the major goals of the organization (for example, technical operations, risk management, and finance). While corporate support roles provide specialized expertise and assistance to line positions (for example, human resources (HR), communications, administration, and legal services).

### 3.2 Barriers to Women’s Participation in the RE Workforce in SSA

This study found that barriers to women’s participation in the RE sector exists both at the recruitment stage and as their career progresses. There were stark differences between women’s and men’s perceptions about the barriers that women encounter at different stages of their career. This section presents these different perceptions, and then discusses the main barriers that female respondents said they encounter.

Regarding perceptions, company managers and employees were asked, “In your experience, do you perceive that women seeking to enter the renewable energy sector face additional barriers compared to men in your company?” Forty percent of female respondents said that they believe that women face additional barriers at the entry level, compared to 28 percent of male respondents (Figure 3.6).

When a similar question was posed about women facing additional barriers as they advance in their careers in RE, there was a difference of 30 percentage points between female and male respondents. However, men were more likely than women to answer, “I don’t know” (13 percent versus 6 percent) (Figure 3.6).



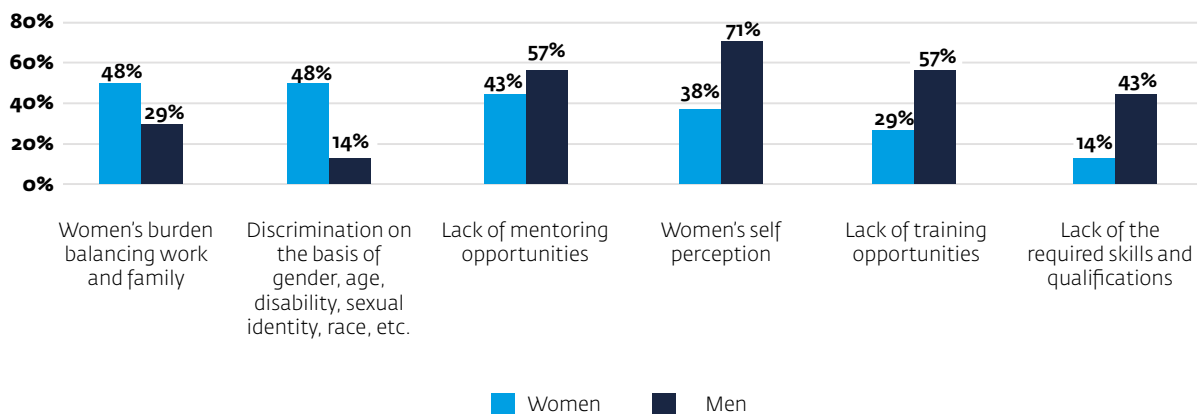
The women employees identified three main barriers to entering the RE sector: (1) societal and cultural norms, (2) the lack of gender diversity targets, and (3) the prevalence of male-bias in hiring practices (Figure 3.7). Respondents identified the main barriers to women’s career progression as (1) balancing work and family, (2) gender discrimination, and (3) a lack of mentoring opportunities. Interview and focus group participants confirmed the prevalence of these barriers at different stages of women’s careers in the RE sector (Figure 3.8). These barriers are discussed in more detail below under societal norms and gender stereotyping and workplace policies and practices.

<sup>17</sup> Four survey respondents preferred not to indicate their gender and, thus, were not included in the sex-disaggregated data.

**Figure 3.7: Barriers to Women Entering RE Careers (Perceptions)<sup>18</sup>**



**Figure 3.8: Barriers to Women's Career Advancement (Perceptions)**





### 3.2.1 Social Norms and Gender Biases

#### Societal Misperceptions about Women in Technical Roles

It is noteworthy that more women than men identified factors that have little to do with women's suitability for the job, while the men were more likely than women to list factors that imply that women are less capable (not sufficiently trained, lack the necessary skills, and/or women's poor self-perception) (Figures 3.7 and 3.8). Similar thinking was identified when the data were broken down by position, with managers more likely to identify barriers linked to women's abilities than was the case with employees (Figure 3.9).

<sup>18</sup> Questions: (1) "Select the three main barriers to women's entry in the renewable energy sector. Select only three." Sample size (n=33). Note: Small sample sizes for sub-groups: female (n=19) and male (n=13). (2) "Select the three main barriers to women's career's advancement. Select only three." Sample size (n=31). Note: Small sample sizes for sub-groups: female (n=21) and male (n=7).

**Figure 3.9: Perceptions of Women and Men on Barriers Facing Women at Different Career Stages<sup>19</sup>**

Entry-level		Career progression	
<p><b>Female respondents</b></p>  <ol style="list-style-type: none"> <li>1. Social/cultural gender norms</li> <li>2. Lack of diversity targets</li> <li>3. Male-biased hiring practices</li> </ol>			<ol style="list-style-type: none"> <li>1. Balancing work and family</li> <li>2. Gender-based discrimination</li> <li>3. Lack of mentoring opportunities</li> </ol>
<p><b>Male respondents</b></p>  <ol style="list-style-type: none"> <li>1. Lack of STEM background</li> <li>2. Lack of awareness of opportunities</li> <li>3. Women's self-perception</li> </ol>			<ol style="list-style-type: none"> <li>1. Women's self-perception</li> <li>2. Lack of training opportunities</li> <li>3. Lack of mentoring opportunities</li> </ol>

Male respondents identified women's self-perception as the number one barrier to their career progression, which reflects a gender stereotype that is rampant in the RE sector. In the focus groups one male worker declared: "There are equal opportunities, but women's mindset is a barrier. This is why they don't apply much for opportunities." Managers (irrespective of gender) also pointed to women's self-perception as the primary barrier to their career progression, rather than identifying a systemic barrier (such as discriminatory policies and procedures). These data not only expose the gender bias in upper management, but they also show that many RE companies in SSA do not take gender issues seriously enough, and that more could be done to address this problem.

These issues are rooted in societal and cultural norms, which women respondents said was the principal barrier preventing their entry in the RE sector, while discrimination based on gender prevents women from advancing in the sector. Traditional societal and cultural norms perpetuate a vicious cycle of gender-based division in the roles and responsibilities of women and men.

### 3.2.2 Workplace Policies and Practices

The lack of gender-responsive workplace policies and practices were highlighted by company managers and employees as a key barrier to women's recruitment, retention, and promotion in the RE sector. The main issues identified were the lack of a family-friendly workplace culture, gender discrimination in company hiring and promotion practices, sexual harassment and gender-based violence in the workplace, and lack of access to mentoring and training opportunities.

#### Lack of a Family-friendly Workplace Culture

There is a strong business case for family-friendly workplace policies, including parental leave, because parents who have corporate support perform better, and are more committed to their work, and this improves company performance (Adatti et al. 2014). Thus, effectively supporting employees who have care responsibilities can give their companies a competitive advantage. Having family-friendly workplace policies also helps companies to retain and develop female talent, which is more cost-effective in the long term. Supporting both parents so that they can share the responsibilities for caring for a new child is also an important step in reducing gender discrimination based on motherhood, and in encouraging women's continued participation in the workforce (Cline 2019).

<sup>19</sup> Questions: (1) "Select the three main barriers to women's entry in the renewable energy sector. Select only three." Sample size (n=33). Note: Small sample sizes for sub-groups: female (n=19) and male (n=13). (2) "Select the three main barriers to women's career advancement. Select only three." Sample size (n=31). Note: Small sample sizes for sub-groups: female (n=21) and male (n=7).

In SSA, women still bear the largest share of family responsibilities, including childrearing, and women in this study identified the lack of a family-friendly workplace culture as a critical obstacle. Although the 10 SSA countries covered in this study have laws on parental leave and their return to work, and companies have relevant policies, employees are not always receiving these benefits.

### **Maternity, Paternity, and Parental Leave**

The ILO's Maternity Protection Convention, 2000 (No. 183) provides that a woman is entitled to a period of maternity leave of not less than 14 weeks, at a rate of pay that is at least two-thirds of her regular salary. The ILO convention also protects women from dismissal during pregnancy, during maternity leave, and in the period following a woman's return to work.

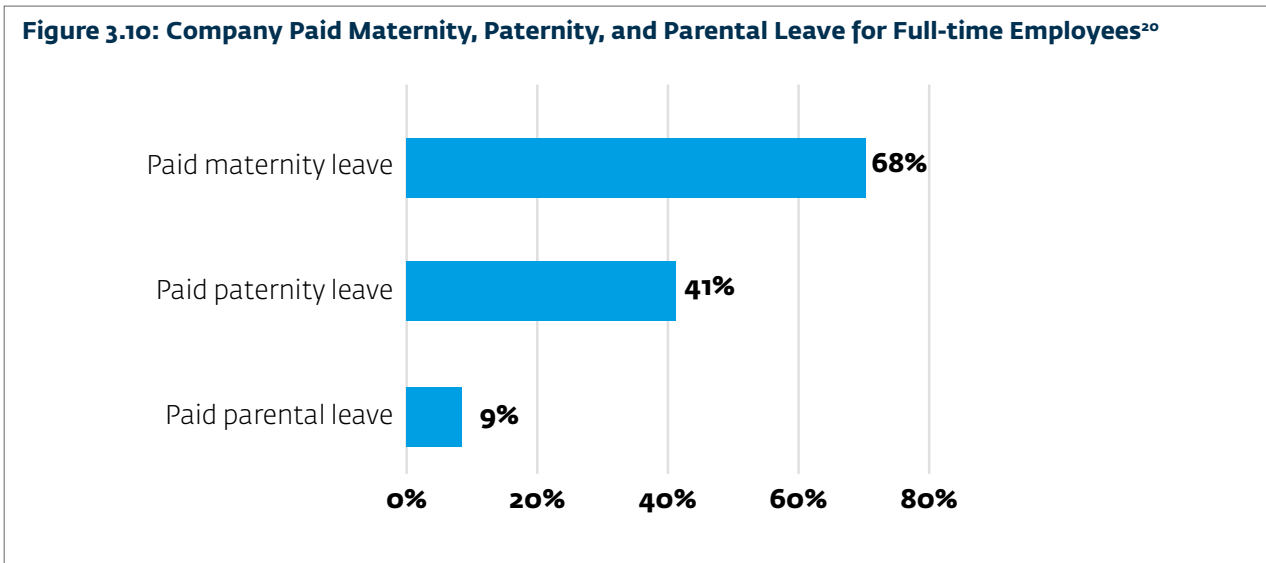
All 10 of the SSA countries covered in this study have a law compelling employers to offer maternity leave (fully or partly paid), however, in three countries the leave is shorter than the amount of time specified in the ILO Convention. In Nigeria and Rwanda maternity leave is 12 weeks and in Kenya it is 13 weeks (World Alliance for Breastfeeding Action 2019).

Regarding paternity leave, while there is no comparable international legal convention such as the one for women, the European Commission recommends that paternity leave consist of at least two weeks of leave for the secondary caregiver at the same rate of pay, and this is considered best practice. Of the 10 countries covered in this study, 90 percent have provisions for paternity leave; however, the duration is low with seven countries requiring less than one week (World Alliance for Breastfeeding Action 2019).

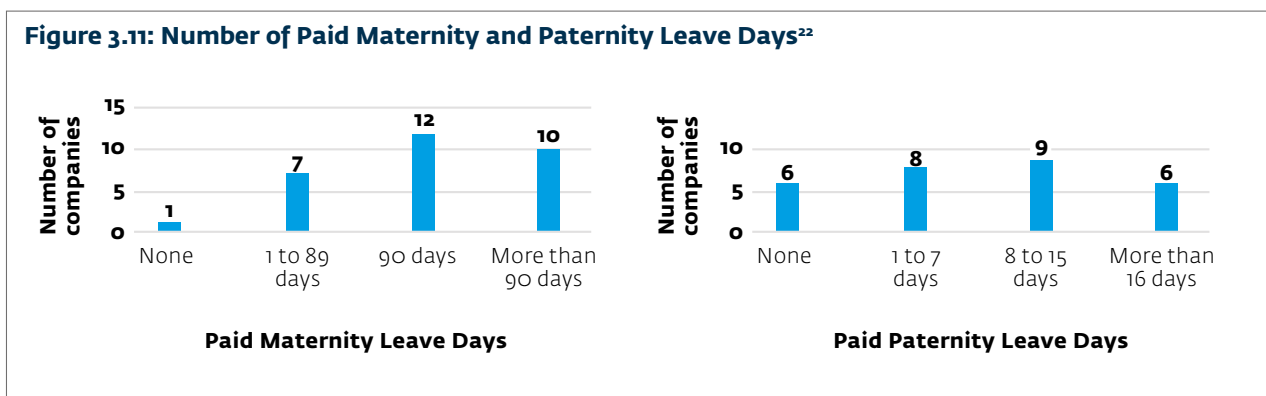
**100%**  
of the studied SSA countries  
legally require paid  
maternity leave.

This study gathered data from companies to assess the extent of their family-friendly workplace. Most companies (68 percent) offered paid maternity leave to their full-time employees, 41 percent offered paid paternity leave, and 9 percent offered paid parental leave (Figure 3.10). Notwithstanding the legal requirements for maternity leave, this study appears to have identified a gap between the requirements and implementation.

This study also found that multinational RE companies have leave policies that vary according to the laws of the country where the employees are based. This results in a corporate patchwork of employee benefits that differs by country. As a result, across a company, employees do not get the same level of support in balancing work and family life, even though they work for the same organization. Other studies have found that parent companies can help "lift the bar" by offering parental leave benefits that exceed national legal requirements, and then implementing the same benefits uniformly across the company (IFC 2021).



Regarding the number of paid days for maternity leave, one company did not offer any maternity leave, 22 companies offered 90 days or more, and seven companies offered fewer than 89 days (Figure 3.11). As for paternity leave, about half of the 64 companies had more than eight days of paternity leave, while eight companies had about one week. Six companies did not offer paternity leave. Regarding parental leave, which was defined as parents taking care of a newborn or a newly adopted child, half of the companies did not offer it, and four companies offered more than 16 days.<sup>21</sup>

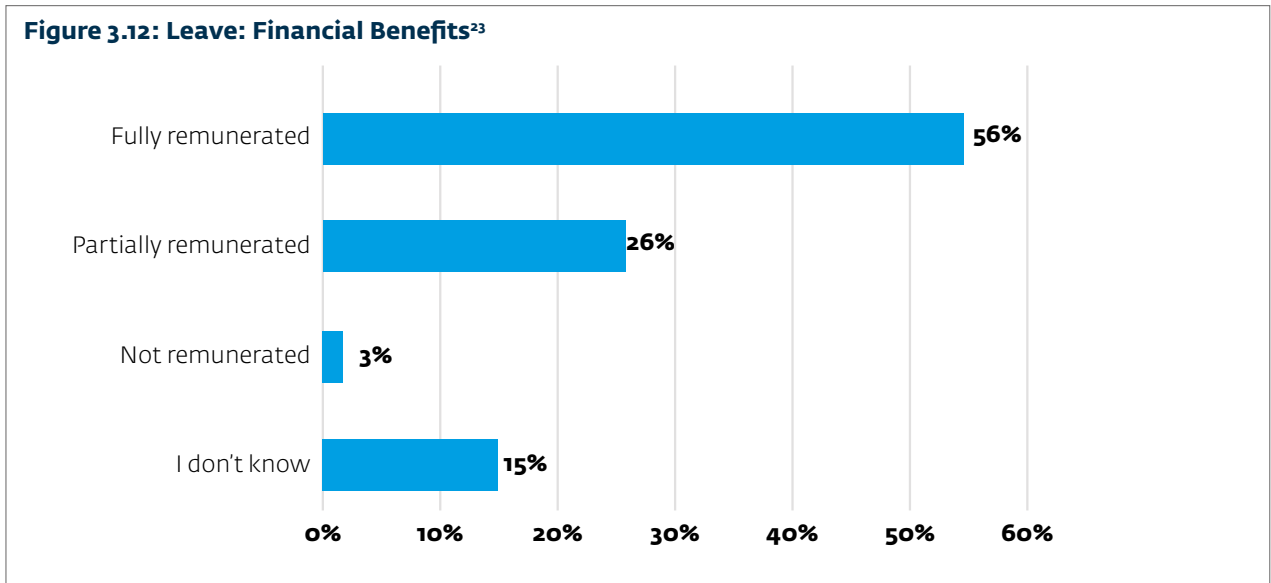


When employees were asked about their experience with parental leave, their responses showed that taking maternity, paternity, or parental leave often resulted in a financial burden for the employee. Only 56 percent of the leave was paid at 100 percent of the employee’s rate of pay (Figure 3.12). Thus, the financial benefits provided to mothers and fathers in the RE sector do not appear to align with the law in SSA countries.

<sup>20</sup> Question: “Which of the following benefits/programs are available to FULL-TIME employees of your company? Select all that apply.” Sample size (n=35).

<sup>21</sup> Question: “How many days are permitted by the company for parental leave?” Sample size (2n=21).

<sup>22</sup> Question: “How many days are permitted by the company: for maternity leave, for paternity leave, and for parental leave?” Sample size (n=30).



The survey data show that 47 percent of female employees had taken maternity leave in the previous three years, while only 21 percent of male employees had taken paternity leave over the same period.<sup>24</sup> Interviewees explained that women took more leave than men because they bear the majority of care responsibilities. They also noted that social norms and company culture do not encourage men to take childcare-related leave.

Both the quantitative and qualitative data collected in this study suggest that taking maternity leave does not hamper women’s return to work in the RE sector. The company survey revealed that over the past three years, on average 1.5 women went on maternity leave, and 1.4 women returned from maternity leave and were still employed one year later. The interviews also found a 100 percent return rate from maternity leave. There was no evidence of significant discriminatory practices. All the managers interviewed except one (15 out of 16 managers) mentioned that women were assured that they could return to the same position when they returned from leave.

Nevertheless, around 40 percent of the interview respondents stressed that despite the existence of corporate policies, taking long-term leave (including maternity leave) impacted the career progression of the woman and they reported having fewer opportunities for career advancement in the RE sector. Hence, while maternity leave does not impact the retention of women employees, it does appear to impact their ability to be promoted.

**47%**  
of female employees took  
maternity leave over the past  
three years.

**21%**  
of male employees took  
paternity leave over the past  
three years.

**100%**  
return rate from  
maternity leave

<sup>23</sup> Questions: (1) “What are the employee’s financial benefits for maternity, paternity, and/or parental leaves?” (2) “If the maternity, paternity, and/or parental leaves are fully or partially remunerated, who pays for the financial benefits of maternity, paternity, and/or parental leaves?” Sample size (n=35).

<sup>24</sup> Question: “Rank the three most common leaves taken by FEMALE/MALE employees over the past three years.” Sample size (n=35).

### Corporate Support for Returnee Parents

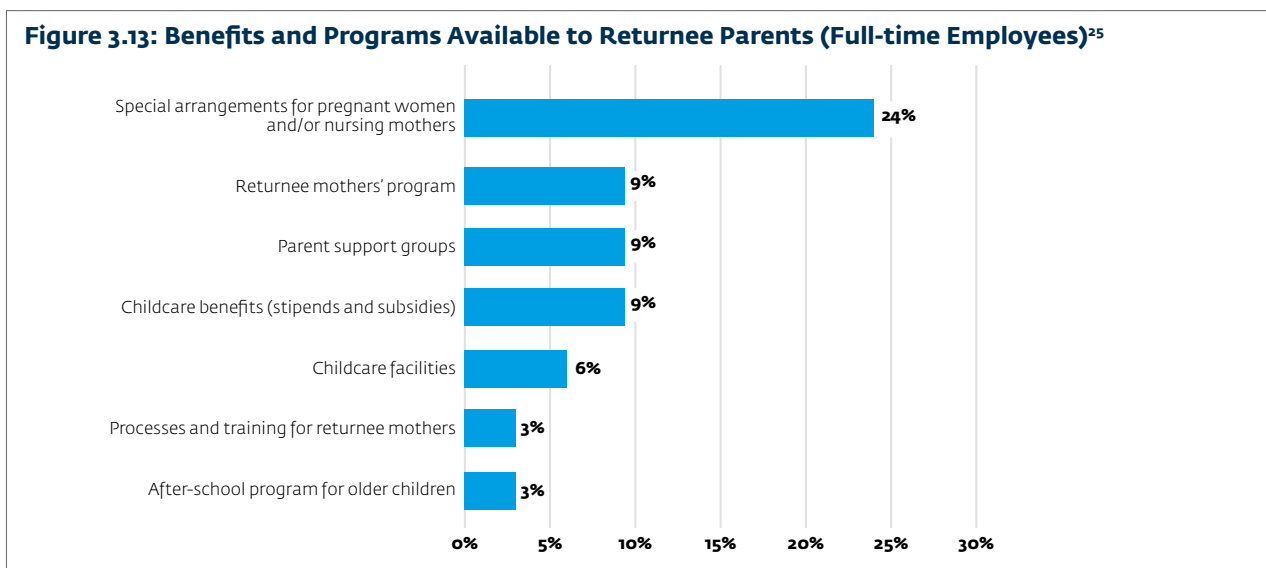
The World Health Organization (WHO) recommends that infants be exclusively fed breast milk for the first six months of life and should continue to be given breastmilk for at least two years (WHO n.d.). The ILO Maternity Protection Convention, 2000 (Number 183) establishes that a woman has a right to paid daily breastfeeding breaks, the duration of which is to be determined by national law. In 9 of the 10 SSA countries studied, the national legal framework provides for breastfeeding breaks of 60 minutes per day (World Alliance for Breastfeeding Action 2019). However, in Ethiopia, neither the Labour Proclamation 2019 nor the Public Health Proclamation 2020 Act have any provisions for breastfeeding mothers (Kebede 2021).

**80%**  
of the 10 countries studied,  
breastfeeding breaks are  
mandated by law.

In Mali, employers with more than 25 women are required to have lactation rooms at the workplace or nearby, while in Cameroon, the requirement applies to companies that employ more than 50 women (Droit Afrique 2021, ILO Database n.d.).

Looking at the companies studied, the survey data show that little support is provided to returnee parents and parents of young children. The most common corporate benefit (24 percent of companies) was providing special arrangements for nursing mothers, which included establishing a lactation room in the company's premises, and/or providing breastfeeding breaks to enable breastfeeding or pumping during working hours (Figure 3.13). The proportion of companies offering support to breastfeeding mothers was low, given that 80 percent of all SSA countries have legislation requiring companies to support breastfeeding (World Alliance for Breastfeeding Action 2019). However, since most employees surveyed (62 percent) work for companies with fewer than 30 employees, and large companies with more than 100 employees comprised only a small fraction of respondents (15 percent) most of the companies may be below threshold established by the legal requirements.

Moreover, fewer than 10 percent of the companies researched in this study provided other benefits to returnee parents. These possible benefits include a returnee mothers program (9 percent), parent support groups (9 percent), childcare financial benefits (9 percent), childcare facilities (6 percent), processes and training to support returnee mothers (3 percent), and after-school programs for older children (3 percent) (Figure 3.13).

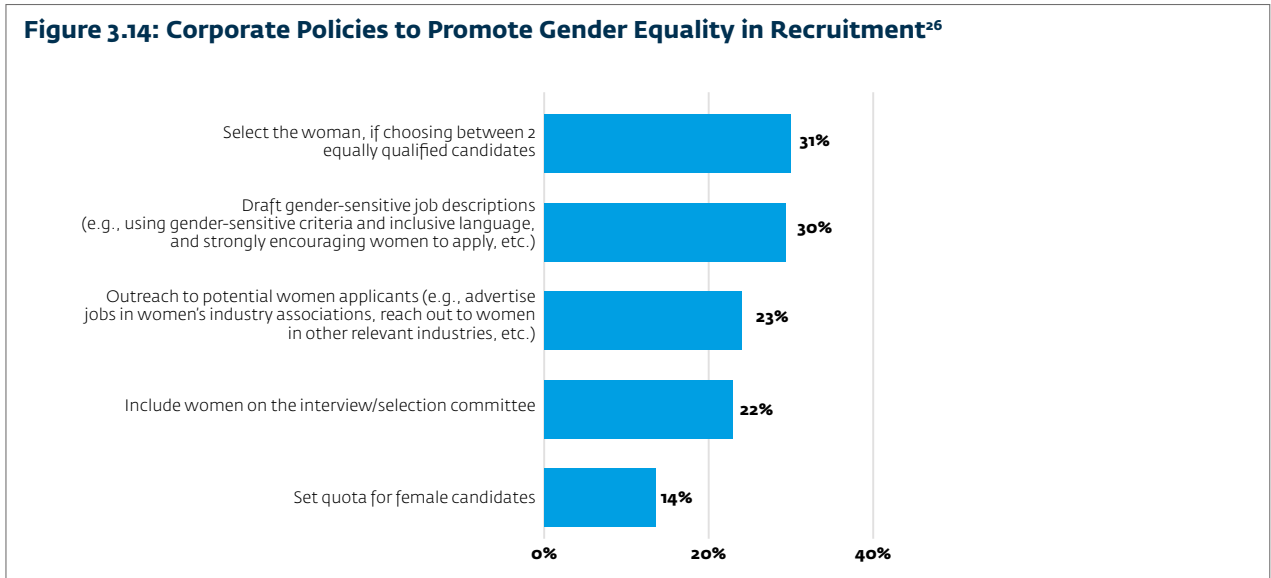


<sup>25</sup> Questions: (1) "Which of the following benefits/programs are available to FULL-TIME employees of your company? Select all that apply." (2) "Are there any processes or training to support women returning from maternity leave?" (3) "Are there any special arrangements or adjustments in the office for pregnant women and/or nursing mothers? For example, breastfeeding and lactation rooms." Sample size (n=35).



### Recruitment and Promotion Policies

Of the companies surveyed for this study, 64 percent had at least one policy or procedure to promote equal opportunity for women and men during the recruitment process (Figure 3.14). Despite having these measures in place, about one in five of the female employees surveyed for this study stated that their employer’s recruitment processes are biased in favor of men, and their employer lacks gender diversity targets.



### Lack of Access to Field Work

One key barrier to women’s career advancement that was strongly emphasized in the interviews, as well as in the focus groups, was the lack of exposure to field work, which requires significant travel and time away from home. It is assumed that women prefer office work or will engage in field work only for short site visits. These assumptions about women are even more pronounced regarding working mothers.

**“Unconsciously, managers just make decisions for women without asking. Women do not really have the choice to do field work.”**

*(Female technical worker, geothermal industry, East Africa)*

Women managers and employees were adamant that lack of access to field work limits their career progression because field work gives employees a strong understanding of the RE value chain, and technical matters, and without this experience, women will ultimately hit a comparatively low “ceiling” with regard to their career progression.

In the focus groups, many issues concerning gender stereotypes and “benevolent sexism” were raised. Both female and male managers and employees expressed the opinion that women “naturally” prefer office work for several reasons: “women are better suited to administrative work, women lack the physical fitness for energy sector jobs, women prefer jobs that are comfortable, and women want to work in a location that is close to their family.” This led some companies to adapt their recruitment strategies to actively recruit women for positions that do not require field work. While this was implemented to increase gender diversity, it inadvertently perpetuates occupational segregation.

Female employees working in large-scale RE infrastructure projects identified the following reasons for women’s low level of participation in field work:

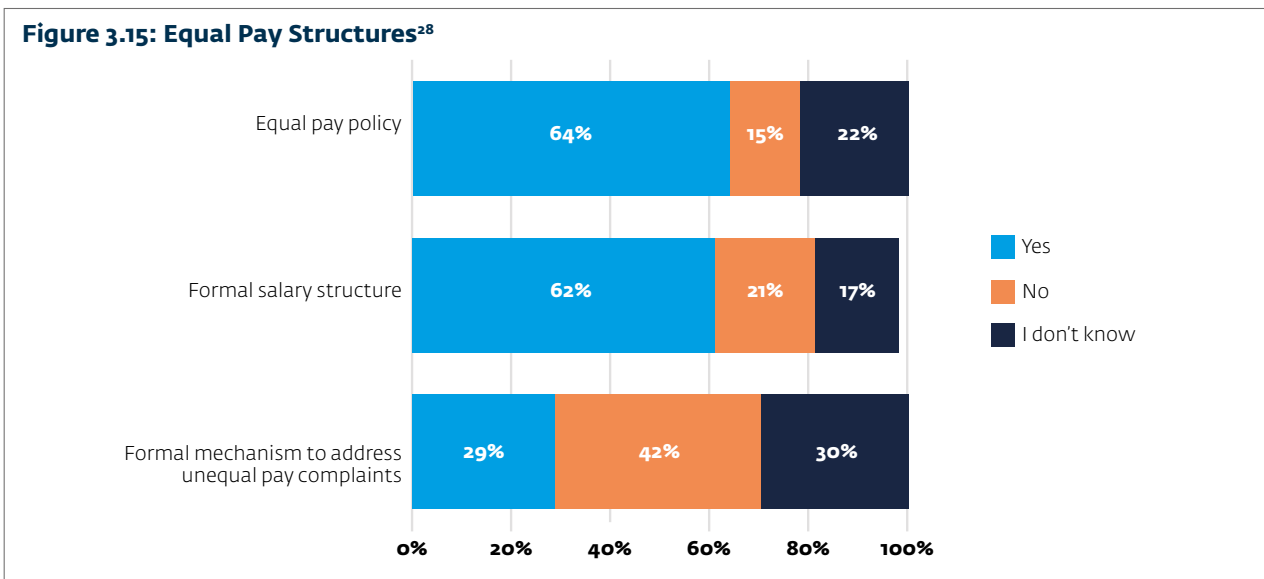
<sup>26</sup> Question: “Which of the following policies or procedures to promote gender equality in the recruitment process has your company adopted? Select all that apply.” Sample size (n=36).

- Managers assume that women do not want a job classified as “difficult” or “dangerous,” and they prefer “safe female,” office-based work in administration and corporate support services.
- Field work is extremely difficult to manage if a woman has family responsibilities.
- RE projects are often located in remote, isolated areas, with no provisions for workers’ families.
- Women have been intimidated, harassed, and robbed by male colleagues. A female worker in a large-scale RE infrastructure project stated that when women work in the field, their per diem or financial benefits are systematically stolen by their male colleagues and, consequently, women do not receive the benefits paid to workers in the field. She added that this is a common occurrence, even though company management is aware of the problem.
- Field activities are considered culturally unsuitable for women. For example, climbing on to rooftops, wearing pants, driving motorcycles, and being alone with a group of men are all activities that are frowned on, and these views are especially prevalent in remote rural areas.
- Women cannot access personal protective clothing and equipment nearly as easily as men. It is nearly impossible in SSA to find protective clothing and equipment tailored for women’s bodies, which means it must be imported at great cost.
- Camp infrastructure is not adapted for women—for example, camps do not have women’s bathrooms.

**15%**  
of the companies conduct  
gender pay gap analyses

### Gender pay gap<sup>27</sup>

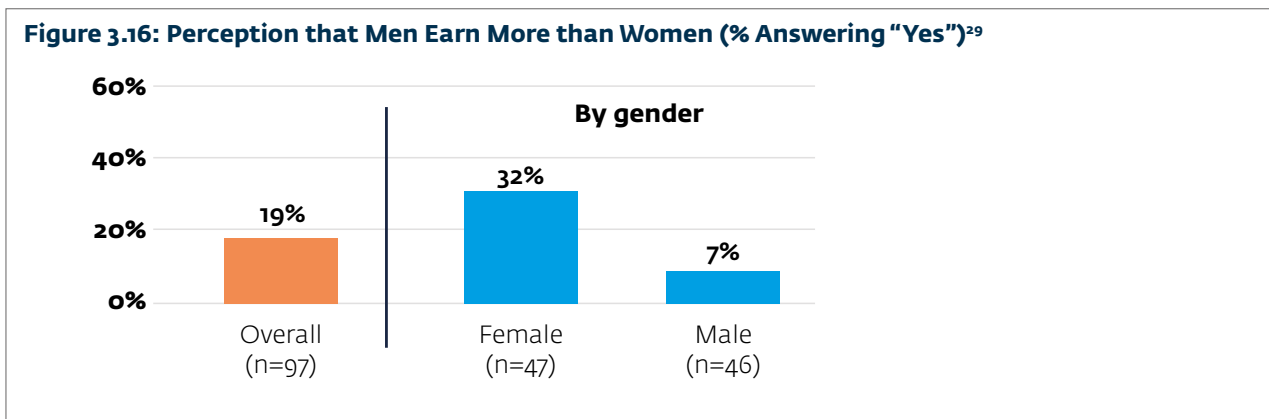
Only 15 percent of the companies surveyed in this study reported performing gender pay gap analyses. Regarding equal pay mechanisms, 64 percent of the companies reported having a corporate equal pay policy, 62 percent had a formal salary structure, and 29 percent had a formal mechanism to address complaints about unequal pay (Figure 3.15).



<sup>27</sup> The difference between average pay for men and women, both before and after. The researchers accounted for differences in worker education, experience, job roles, employee performance, and other factors besides gender that affect pay.

<sup>28</sup> Questions: (1) “Does your company have an equal pay policy? (A policy that requires that employers pay men and women equal pay for equal work.)” (2) “Does your company have a formal salary structure?” (3) “Has your company established a formal mechanism for addressing unequal pay complaints?” Sample size (n=36).

Concerning pay, this study revealed a significant difference in women's and men's perceptions. While 32 percent of female employees believe that men earn more than women for doing the same job, 7 percent of male respondents believe this (Figure 3.16). A gender pay gap is more than a social or legal issue; it is an issue that can affect the credibility of the employer, and especially with female applicants and employees.



### Sexual Harassment and Violence in the Workplace

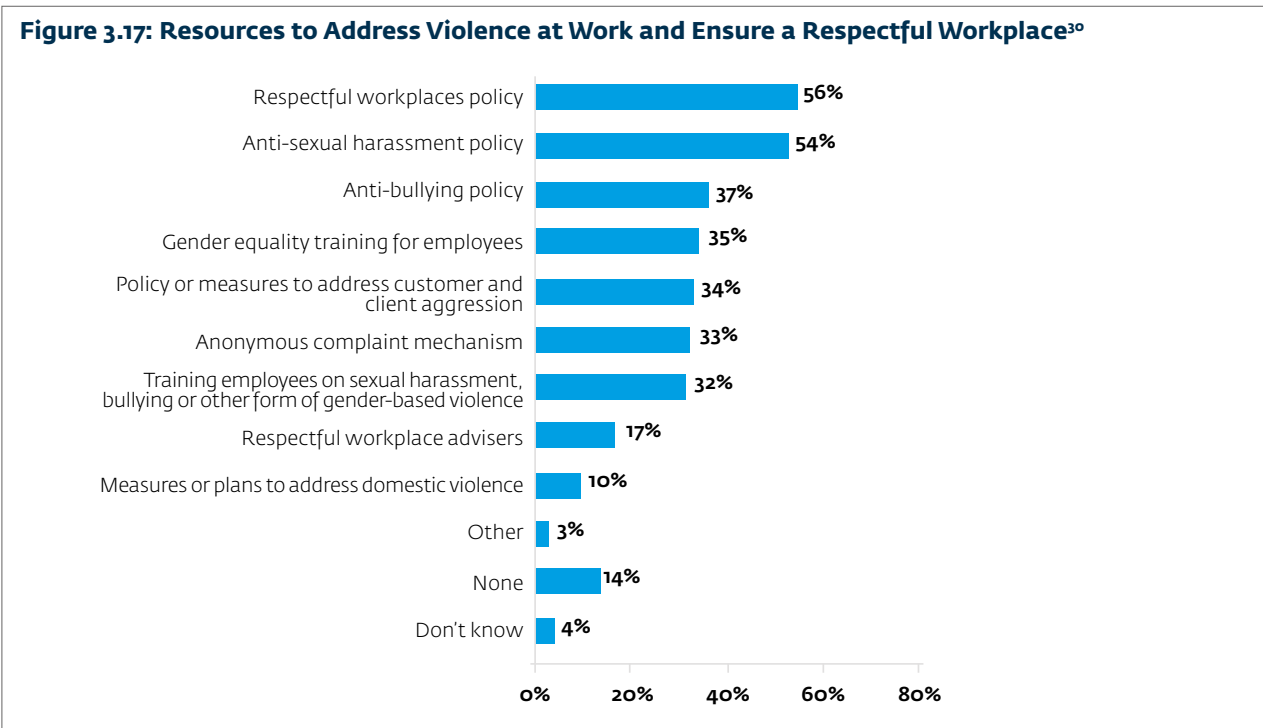
Employees (both female and male) were more likely than employers to identify sexual harassment, bullying, and violence as a problem in women's retention and promotion. Of the employee survey respondents who acknowledged the existence of additional barriers to women, 21 percent highlighted the "lack of a respectful workplace" as a barrier to women's advancement, versus only 8 percent of the surveyed managers.

Female focus group participants stressed that they commonly experience intimidation and harassment during field work. One female employee emphasized that women are more likely to experience sexual harassment if they have a male boss, because male managers promote the employees they favor. She added that women have to do "certain things that are not morally upright" in order to get a promotion.

Most companies (82 percent) reported making available at least one type of resource to address violence at work and ensure a respectful workplace (Figure 3.17). Of these, 54 percent had anti-sexual harassment policies in place, and 37 percent had anti-bullying policies. About one third of companies had an anonymous complaint mechanism and provided sexual harassment training for employees. However, 14 percent of companies had no resources to address harassment and bullying.

As common as sexual harassment and gender-based violence appear to be in the workplace, employer survey respondents and interviewees generally did not consider it an additional barrier to women's advancement. There was one exception: a female manager stated that "intimidation from male colleagues" was the main challenge in retaining women employees in her company.

<sup>29</sup> Question: "In your company, do you perceive that men seem to earn more than women for doing the same job?"



### Lack of Access to Mentoring and Training Opportunities

The lack of mentoring opportunities was highlighted as one of the key barriers to women’s career progression in the RE sector. Of the total survey respondents, 48 percent thought that mentoring programs would facilitate the retention and career advancement of women, but only 18 percent of the companies surveyed offer mentoring programs.

Regarding training, female respondents were almost half as likely as male respondents (29 percent of women, versus 57 percent of men) to indicate that lack of training opportunities was a barrier to women’s career advancement in the RE sector (Figure 3.18). One manager indicated that notwithstanding equal access to training, men made up about 90 percent of the trainees.

Participants in the interviews and focus groups stressed that even when training was open to all, with no discrimination, women often could not participate due to competing demands on their time. Women employees reported lacking time outside working hours to take online training, pursue additional education, and engage in personal development activities, and that they could not take advantage of these opportunities as easily as their male colleagues.

**“We provide on-the-job training and ensure equal access to women and men. But doing training after business hours is difficult for women. We do not ask women to complete assignments after work hours because she has family-related responsibilities, but we do ask men.”**

*(Male project director, East Africa)*

**Figure 3.18: Lack of Training Opportunities is a Barrier to Women’s Career Advancement**



<sup>30</sup> Question: “Which resources has your company made available to address violence and ensure a respectful workplace? Select all that apply.” Sample size (n=36).

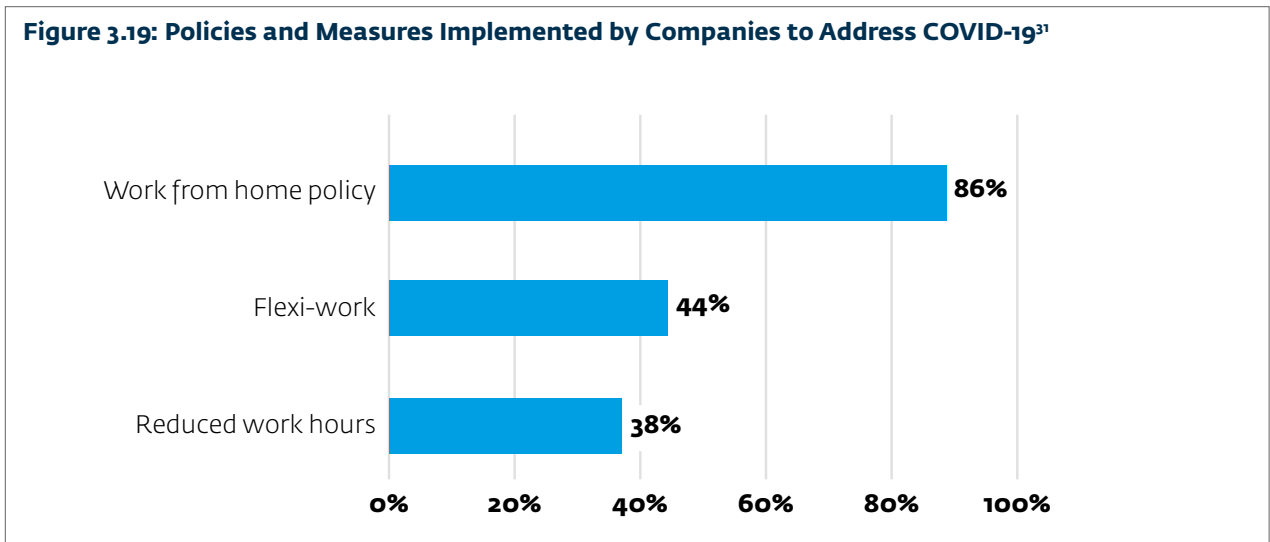
### 3.3 The Impact of COVID-19 on Women's Employment

While COVID-19 is having a detrimental impact on African economies, it is having overwhelmingly negative effects on RE companies in SSA. Most companies (73 percent) reported a negative impact on revenues, and 37 percent reported a negative impact on hiring and retention.

The companies have implemented a range of policies and measures in response to COVID-19 (Figure 3.19). The three most common measures have been a work-from-home policy (86 percent of the companies), flexi-work (44 percent), and reduced work hours (38 percent). Hiring and layoffs were 10 percent each.

**86%**  
of companies implemented  
work-from-home policies in  
response to COVID 19

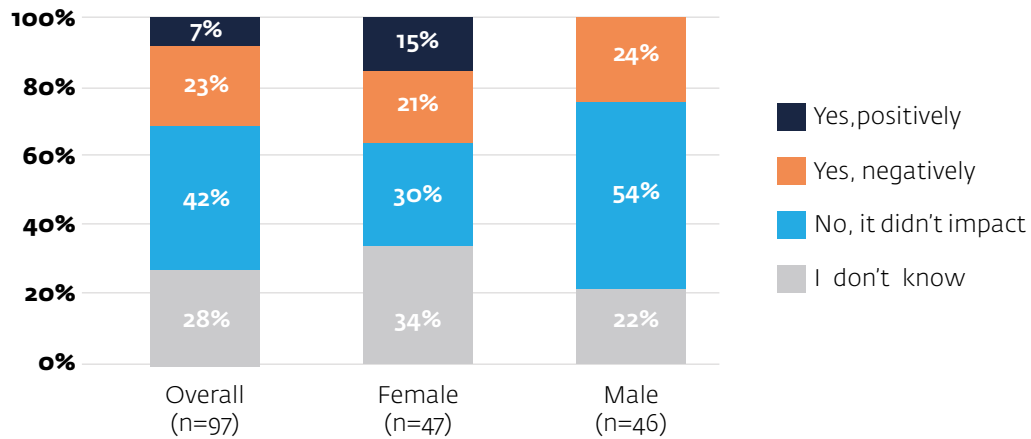
**Figure 3.19: Policies and Measures Implemented by Companies to Address COVID-19<sup>31</sup>**



When asked if COVID-19 impacted women's participation in the RE workforce, respondents had a wide range of answers, depending on their gender. Of the female respondents, 15 percent stated that COVID-19 had positively impacted female participation in the workforce, versus none for males (Figure 3.20). The gender discrepancy in these answers reveals a common pattern that was also noted in an IRENA survey, which showed that men in the RE sector are often unaware of the specific challenges that women face in the industry (IRENA 2019).

31 Question: "Which of the following policies/measures did your company implement to address COVID-19 impacts? Select all that apply." Sample size (n=36).

**Figure 3.20: Impact of COVID-19 on Women's Participation in the RE Workforce<sup>32</sup>**



RE managers' views on the impact of COVID-19 on women in the RE workforce were somewhat mixed. Most managers responded that the pandemic had a negative impact on both genders, mainly due to pay cuts and job losses.

Conversely, COVID-19 has accelerated the introduction of much-needed corporate flexibility. Measures such as working-from-home, flex-work, and reduced work hours, have helped women to juggle their professional life and family responsibilities better. However, a United Nations' study conducted early in the pandemic suggested that the increase in flexible and remote work would not be sufficient to improve the entrenched division of labor within households that puts most of the burden on women (UN Women 2021).

**"COVID has proven that judging employees' performance based on their output and not on whether they have been in front of a computer all day long is important. COVID-19 has tested, and proven, that it works to give women flexibility in their work."**

*(Female CEO, solar industry, Southern Africa)*

One potential "red flag" risk with flexible work practices is the creation of a two-tier system in pay and career advancement. Those choosing remote work (still predominantly, although not exclusively, women) have experienced both lower wages and slower career advancement rates (Baruah 2017).

<sup>32</sup> Question: "Has COVID-19 impacted women's participation in the RE workforce?"

# 4. RECOMMENDATIONS

The recommendations proposed in this section respond to the findings from this study. This section addresses the barriers that women face and provides solutions for greater female engagement and career advancement in the RE workforce in Sub-Saharan Africa. It also incorporates international and regional best practices for achieving gender equality at all company levels and features best practices already implemented by SSA RE companies (USAID 2021, Moodley et al. 2016, Orlando et al. 2018, Devillard et al. 2016).

## 4.1 Provide Strong Leadership Endorsement of Gender Equality and Diversity within the Workplace

### 4.1.1 Gender Balance in Leadership and the Workforce

Actions	Description
Provide a strong leadership endorsement of gender equality and diversity within the workplace	<ul style="list-style-type: none"> <li>› The board, CEO, and senior management can effectively set the tone, and champion gender equality by <b>communicating a compelling business case, creating a company culture that embraces gender equality, and backing this with measurable targets of between 40 to 60 percent of either gender at all levels of the company</b>—the board, leadership, management, and workforce; across all departments; and especially in technical, higher-paying positions (Box 1).</li> <li>› Back company diversity targets with <b>key performance indicators (KPIs), a budget and dedicated resources</b>. Cascade KPIs down from the top to ensure that everyone works toward the same goals.</li> <li>› Establish a <b>diversity and social inclusion (D&amp;I)</b> council that promotes and monitors implementation of the <b>gender diversity strategy and gender action plan (GAP)</b>.</li> <li>› Support leadership and staff engagement in achieving gender equality with training, awareness-raising, and internal communication.</li> </ul>
Support leadership and staff engagement	<ul style="list-style-type: none"> <li>› <b>Engage senior leadership in gender equality initiatives</b>. Assign gender targets to senior leaders and include it in their performance evaluations.</li> <li>› Secure <b>men as allies</b> through the identification of male change agents and motivate them to act as ambassadors for gender equality.</li> </ul>

Implement monitoring and evaluation	<ul style="list-style-type: none"> <li>› Continuously monitor progress against targets and <b>report progress, backed by data, to the board regularly.</b></li> <li>› Collect and analyze <b>sex-disaggregated data</b> at the company level. Develop a baseline, and ensure regular monitoring and evaluation based on sex-disaggregated data on employee satisfaction, training hours, positions in the company, use of parental leave, and the pay gap etc.</li> <li>› Track the use of dedicated <b>financial resources</b> to increase gender equality and diversity.</li> <li>› <b>Join voluntary initiatives</b> such as the United Nations Women's Empowerment Principles (WEPs) which can help benchmark and access new trends and best practices.</li> <li>› Undertake company gender diagnostics such as the Economic Dividends for Gender Equality Methodology (EDGE) or the Gender Equality European and International Standard (GEEIS) Label by Arborus.</li> <li>› <b>Publish</b> gender equality targets, indicators, and results in the company's annual report, sustainability reports, and on the company's website.</li> </ul>
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**Box 1: A Regional Best Practice Focused on Results: Setting Targets to Drive Action**

At Schneider Electric, an international company with energy projects across SSA, gender is embedded in the company's 2021–2025 sustainability strategy. As part of its Schneider Sustainability Index (SSI), the company has included the 50/40/30 gender diversity as a key performance indicator. This means that women should comprise 50 percent of all new hires, 40 percent of frontline managers, and 30 percent of senior leadership roles by 2025. The company also has a KPI to increase women's participation in sales positions in the SSA region, so that occupational segregation does not limit women's career development.

**4.2 Strengthen Workplace Policies and Practices to Enhance the Recruitment, Retention, and Promotion of Women**

**4.2.1 Prepare Women to Enter Leadership Positions**

Actions	Description
Provide leadership skills training to women to prepare them for new roles and responsibilities	<ul style="list-style-type: none"> <li>› <b>Recruit women board members, executives, and management from other sectors, if needed.</b></li> <li>› Design and conduct targeted training and workshops for female employees, focusing on <b>leadership and other soft skills.</b><sup>33</sup></li> <li>› Create <b>leadership development plans</b> that enable women's advancement to all leadership levels.</li> <li>› Use different types of training methods such as <b>job sharing</b><sup>34</sup> and <b>job-shadowing</b>.<sup>35</sup></li> </ul>

<sup>33</sup> *Soft skills are non-technical skills that relate to how an employee works, and these strongly influence an employee's career trajectory (Doyal 2020). In its report, The Future of Jobs Report 2020, the World Economic Forum identified the top 10 skills needed for the future and most are soft skills, which include problem solving, self-management, and working with people (WEF 2020).*

<sup>34</sup> *Job sharing is a flexible work arrangement in which two employees work part-time, with hours that add up to the work hours of a single full-time job (Conlan 2021)*

<sup>35</sup> *Job shadowing involves spending time following and observing a professional as she or he works. This can last from a few hours to several weeks (Doyle 2020).*



### 4.2.2 Recruitment Process

Actions	Description
Conduct talent outreach	<ul style="list-style-type: none"> <li>› <b>Give presentations to university students enrolled in STEM programs</b> about career opportunities in the company, and the RE value chain. Promote STEM careers in primary and secondary schools.</li> <li>› <b>Offer scholarships</b> to women to pursue degrees in STEM fields.</li> <li>› Offer <b>internship opportunities and mentoring programs</b> to women enrolled in STEM programs.</li> </ul>
Implement a gender-responsive recruitment process	<ul style="list-style-type: none"> <li>› Conduct <b>unconscious bias training sessions</b> for all employees involved in the recruitment process.</li> <li>› Review <b>job descriptions</b> to make them competency-based and to reduce potential bias (for example, allocate more weight to education; require certain skills, rather than years of experience; limit the number of mandatory qualifications).</li> <li>› <b>Advertise jobs through women's networks</b> and through a variety of media.</li> </ul>

#### Box 2: Regional Best Practice—Bridging the Entry Gap Through Targeted Outreach

Africa GreenCo is a women-led start-up operating in Zambia that acts as a creditworthy renewable energy buyer and trader. Like the experience of other SSA RE companies, Africa GreenCo's ambitions to hire more female employees is often hampered by the lack of qualified women applicants. Thus, the company decided to collaborate with universities to identify female engineering students to enroll them in Africa GreenCo's internship program. This approach, launched in May 2021, will enable it to benefit from a wider pool of junior female experts. Since its founding, to retain female employees, Africa GreenCo has had a gender equality policy and a set of measures (for example, flex-work and a lactation room).

### 4.2.3 Retention Strategies

Actions	Description
<p>Implement approaches that encourage women to stay in the workforce</p>	<ul style="list-style-type: none"> <li>› <b>Provide opportunities to gain more experience.</b> This could include developmental assignments, job shadowing, stretch assignments, and working in teams, so women can learn on the job with peer support, mentoring, and coaching.</li> <li>› Publish internal opportunities to promote transparency and encourage women to apply.</li> <li>› Ensure that <b>field and office-based work are equally accessible</b> to women and men and are safe for women. Increase women’s engagement in field work by adopting health and safety policies that consider the needs of women and men. Provide women with equal access to personal protective equipment; and access to a separate toilet, changing room, and shower.</li> <li>› Implement a <b>fair and unbiased performance management system</b> (set targets for each employee, hold an evaluation meeting with line managers at the end of the performance period, and exclude time for parental leave from evaluations).</li> </ul>
<p>Implement policies and procedures to prevent and address workplace bullying and sexual harassment and to support employees affected by domestic violence</p>	<ul style="list-style-type: none"> <li>› All leaders in the organization communicate authentically with employees about creating a respectful workplace, <b>role model respectful behavior</b> and support employees to report disrespectful behavior.</li> <li>› <b>Policies and procedures</b> are in place that support respectful workplaces by clearly articulating that disrespectful behavior will not be tolerated, giving examples of disrespectful behavior and its consequences, and identifying where to report disrespectful behavior and what support will be provided for affected employees.</li> <li>› <b>Create a safe workplace</b> for women and men, in both offices and field locations, that is free of bullying and sexual harassment, and where employees are encouraged to disclose domestic violence and seek support.</li> <li>› Implement <b>anti-workplace bullying and sexual harassment policies</b>, coupled with mandatory <b>training for all employees and managers on workplace bullying and sexual harassment</b>, which is taught by a qualified and skilled practitioner. Implement communications campaigns to raise awareness about workplace bullying and sexual harassment.</li> <li>› <b>Enforce policies</b> and strengthen the <b>internal justice mechanism</b> to build credibility and trust. <b>Hold managers</b> accountable for ensuring a safe workplace.</li> <li>› Provide multiple reporting channels - informal, formal and/or online, and at least one anonymous way to report. Ensure that whistleblowers and witnesses have protection from retaliation and provide appropriate and timely remedies for victims.</li> <li>› Act promptly to investigate and resolve all issues raised in a <b>safe and confidential manner by a trained team.</b></li> <li>› Ensure that any <b>disciplinary action taken is based on the outcome of the investigation</b> and proportionate to the impacts of the harassment</li> <li>› <b>Promote awareness</b> so that employees know what action they can take if they experience, witness, or hear about disrespectful behavior.</li> <li>› Incidences and responses of disrespectful behavior are monitored and evaluated, and guidelines are reviewed as necessary.</li> </ul>

Promote equal training and mentoring opportunities	<ul style="list-style-type: none"> <li>› Develop a <b>training plan for each employee</b> with clear goals and timelines. Make sure that women trainees can diversify and upgrade their skillset, and especially their technical skills, with formal university training, short courses, and certifications.</li> <li>› <b>Ensure that in-house training materials are bias-free</b> and support the company's gender equality values.</li> <li>› <b>Accommodate gender-specific restrictions</b> (such as family responsibilities) in training logistics and timing. For example, hold the training sessions during office hours, offer online participation, and on-demand, pre-recorded videos.</li> <li>› <b>Design high-quality mentoring and sponsorship programs</b> tailored to women at different career levels.</li> </ul>
Ensure equal pay	<ul style="list-style-type: none"> <li>› Adopt a formal and transparent <b>salary structure</b> and a salary equity policy.</li> <li>› Conduct periodic <b>gender pay gap analyses</b>, communicate the results and mitigation measures, and report publicly.</li> </ul>
Understand employees' reasons for leaving the company	<ul style="list-style-type: none"> <li>› Consider conducting <b>exit interviews</b> to understand reasons for departure and to address issues.</li> </ul>
Foster a workplace culture that balances work and family life	<ul style="list-style-type: none"> <li>› Develop and implement <b>robust parental leave policies for both parents</b> that pays at least two thirds of the regular salary for 14 weeks for the primary caregiver, and two weeks for the secondary caregiver. Provide policies that protect women from termination during pregnancy or absence while on leave. Guarantee the right to return to the same or equivalent position, paid at the same rate, at the end of maternity leave. These standards correspond to No. 183 of the ILO's Maternity Protection Convention (2000), and the European Commission's recommendation for paternity leave.</li> <li>› <b>Support returnee parents</b> with measures such breastfeeding breaks and lactation rooms with refrigeration, power outlets, and a sink.</li> <li>› <b>Invest in company-sponsored childcare programs</b> (ILO 2019, IFC 2020).</li> <li>› <b>Offer flexible work policies covering both hours and location</b>, especially in the wake of the COVID-19 pandemic and ensure that tele-commuting workers are not discriminated against, are compensated at the same level of pay, and have the same access to career progression opportunities.</li> <li>› Extend <b>health benefits to family members</b>.</li> </ul>

**Box 3: Regional Best Practice—Embedding Gender-sensitive Recruitment and Retention Policies and Practices**

Baobab +, a social enterprise that distributes solar home systems in off-grid areas of Senegal, Mali, Madagascar, and Côte d'Ivoire, actively wants to increase female representation among their field officers. It has developed a gender-responsive recruitment strategy that includes training to avoid unconscious gender bias. Baobab + also features pictures of women workers and uses gender-neutral language in its recruitment materials, and it publishes job announcements in locations frequented by women. Regarding retention, the company provides female field officers with financial support to cover their mobility costs (since, unlike their male colleagues, due to cultural factors, women do not drive motorcycles). With these measures, Baobab + expects to increase the proportion of female field officers from 3 percent in 2020 to 10 percent in 2021.

**4.2.4 Promotion**

Actions	Description
Establish a formal and transparent promotion process to counteract gender bias in promotion	<ul style="list-style-type: none"> <li>› Implement a <b>fair and unbiased performance management system</b> (set targets for each employee; conduct an evaluation meeting with the manager at the end of the performance period; conduct an evaluation prior to the start of maternity leave; set new targets upon the employee's return from maternity leave; and prorate evaluation periods to only include the time the employee worked so the employee is not penalized for taking leave).</li> <li>› <b>Use best practices for promotion</b> such as competency mapping and gender-balanced promotion panels.</li> </ul>
Promote career development plans for all employees	<ul style="list-style-type: none"> <li>› Promote <b>career development plans</b> for all employees and review annually.</li> <li>› Provide <b>career reintegration plans</b> for returnee mothers.</li> </ul>

**Box 4: Regional Best Practice—Collecting Gender-disaggregated Data to Effectively Invest in Addressing Gaps**

Lekela is an independent renewable power generation company that delivers utility-scale projects which supply much-needed clean energy to communities across Africa. Lekela is Headquartered in the Netherlands, with a team also in the UK and a current portfolio of projects across Egypt, Senegal, South Africa and Ghana. After undertaking a gender assessment in 2020, in which the company collected detailed sex-disaggregated data, Lekela identified few gaps in some areas such as recruitment, gender policy, communication of promotions process that required improvement in order to achieve their goal towards a better gender diversity. The company has rolled out micro-behaviours and unconscious bias training for all employees, integrating gender considerations in recruitment processes, and has established a diversity and inclusion working group to report on progress internally. Conscious of the company's gender gap at the board level, Lekela provides continuous support for women so that they take up roles at the senior level and is increasing gender diversity appointing diverse Board members. To help with this endeavour, all employees have a career development plan.

#### 4.2.5 Improve the Legal Framework

Actions	Description
Encourage and support regulatory reform	<ul style="list-style-type: none"> <li>› Advocate for legal frameworks that promote equal access to opportunity, prevent discrimination, and enhance workplace benefits, such as parental leave for both parents.</li> <li>› Support public and private investments in STEM educational programs for girls and women.</li> </ul>

## 5. CONCLUSION

A sustainable future for all people, including the 1.2 billion people in Africa, depends on our collective ability to tackle climate change, promote a rapid economic recovery from the COVID-19 pandemic, and achieve the Sustainable Development Goals. Continued and rapid deployment of renewable energy systems will play a pivotal role in these efforts. As RE energy companies scale up in Sub-Saharan Africa, more women will be needed at all levels of the sector. There is a strong business case, which demonstrates that gender-diverse companies consistently outperform their peers. RE companies have much to gain by diversifying their workforce because having more women in leadership positions positively correlates with a company's successful financial performance, resilience, and ability to innovate. The good news is that although the SSA renewable energy companies are male-dominated, about 30 percent of RE company board members and CEOs are women, which outpaces G-20, as well as African averages. However, despite this positive trend, the RE workforce has substantial gender gaps, with strong occupational segregation that recruits women predominantly for corporate support functions, rather than in core business functions, which will impact future cohorts of RE leaders.

Women continue to face barriers to entry and advancement in the RE sector. Male managers are often unaware of these challenges and stated in this study that women's self-perception was the main inhibitor to their career progression, rather than systemic barriers and gender stereotypes. The gender gap in company leadership stems from biases that limit women's ability to rise to leadership roles, as well as women's reluctance to pursue leadership roles. In addition, many SSA RE companies do not fully understand gender issues, and do not take them seriously enough.

The three main barriers discouraging women from entering the RE sector are societal and cultural norms, a corporate culture that fails to embrace gender equity and lacks gender diversity targets and hiring practices that favor men over women. Female respondents cited three main obstacles to their career advancement in the RE sector: gender discrimination, lack of training and mentoring opportunities, and the burden of balancing work and family with inadequate corporate support.

Looking at the gender equality policies and procedures in RE companies, this study found that women's perceived obstacles are legitimate. Few of the RE companies had policies or procedures that promote equal opportunities during the recruitment process, only 15 percent of them conducted gender pay gap analyses, and only one in three companies had an anonymous complaint mechanism for reporting sexual harassment. Additionally, parents need more support. A substantial number of RE companies (32 percent) do not provide paid maternity leave, nor paternity leave (59 percent), and companies provide little support to parents returning from parental leave.

The response to these issues starts from the top—the board of directors and company leaders can provide a strong endorsement for gender diversity at all levels of the company and emphasize the strong business case for gender diversity. Also, much can be done to strengthen the corporate culture to improve women's opportunities for leadership. Workplace policies and practices can be strengthened to enhance the recruitment, retention, and promotion of women, which will, in turn, spur innovation, creativity, and profitability. But time is short, and a rapid response is imperative.

# APENDIX I

## RESEARCH METHODOLOGY

### Surveys of Companies and Employees

Companies that were invited to participate in this study were identified through various channels, including IFC's partner companies, Econoler's network of local consultants, industry associations, and women's business networks. E-mail, social media, and targeted phone calls were used to recruit participants.

The surveys were designed primarily to understand the patterns of women's employment in privately held RE companies in SSA, as well as to identify the challenges and opportunities that women encounter in the sector. The surveys targeted companies and employees, and the objectives and content differed with each of the following sub-groups:

- **Human resources (HR) managers:** Sex-disaggregated data were collected on the company's workforce across departments and positions, on staff turnover, and on working conditions and benefits.
- **Managers** (non-HR): Information was gathered on existing policies and procedures, and the impact of COVID-19. Managers also answered a set of questions about employees.
- **Employees:** Perceptions on the gender gap in the RE workforce were collected to identify the main gender-related professional barriers to women's entry and advancement in the sector, and measures to overcome these barriers.

A total of 132 survey responses were received (35 HR directors, 36 managers, and 61 employees), resulting in 71 respondents providing corporate-level data, and 97 respondents answering in their individual capacity. Most of the respondents were women (48 percent), 47 percent were men, and 4 percent preferred not to disclose their gender. The survey was made available in French and English, and responses were obtained from people in 10 SSA countries. The surveys included a mix of closed (multiple choice), and open-ended questions.

### Key Informant Interviews and Focus Group Discussions

A total of 16 key informant interviews (KIIs) were undertaken with managers (11 women, 4 men, and 1 whose gender was not given) of RE companies located or active in a sample from 10 SSA countries. Focus group discussions (FGDs) were conducted with staff from four RE companies, involving a total of 20 staff members (11 women and 9 men). The KIIs, which lasted around one hour, and the FGDs, which lasted around 2 hours, aimed to complement the survey data by exploring barriers to women's entry and career advancement, opportunities for inclusive job creation, and existing best practices. These data collection activities were conducted, in-person or virtually, by a team of national consultants.

### Data Limitations

This survey had limitations stemming from its design and sampling method, which are discussed below.

**Sampling size.** The sampling accurately represents the characteristics of the SSA private RE sector in terms of company size, types of RE technologies used, and the services provided. With 132 respondents, the survey had a limited sampling size, especially when broken down into sub-groups (35 HR managers, 29 directors, and 68 employees); however, the survey results are valuable for detecting patterns within the SSA private RE workforce. Appropriate statistical methods for small samples were used to analyze the data, and the report indicates whenever the data were based on a sample of fewer than 30 respondents. The researchers used a self-selection, non-probability survey sampling method and, thus, reporting a margin of error would be inappropriate.

**Regional sampling bias.** Participants responding on behalf of their company were unevenly spread across SSA's sub-regions, with 40 percent of the headquarters located in West Africa and only 6 percent in Central Africa. This sub-regional bias partly reflects the regional dynamism of the RE market but could also stem from other factors such as unequal survey outreach efforts, Internet connectivity, and cultural considerations.

**Anonymity.** To ensure a higher response rate and honest feedback, the online survey was anonymous, with respondents providing the name of their company on an optional basis. Therefore, following up with respondents to clarify their answers was impossible.

**Focus on formal waged employment.** Data collection activities were only able to capture formal employment in the RE sector. The research does not provide specific insights into the challenges faced by women in informal RE activities, such as fuel collection, and biomass production and processing. Efforts made by other researchers and intergovernmental organizations to provide estimates of informal employment suggest that millions of women are engaged in RE informally (Baruah 2017, Baruah 2015). Future research aimed at both collecting empirical data on informal employment in RE and identifying the potential for informal sector workers to transition to formal employment is essential.



# REFERENCES

- Addati, Laura, Naomi Cassirer, and Katherine Gilchrist. 2014. *Maternity and Paternity at Work: Law and Practice Across the World*. Geneva: International Labour Organization.
- AfDB. 2018. "Africa's Population Explosion is a Ticking Time Bomb – African Development Bank Governors." *African Development Bank News*. March 7.
- AfDB. 2019. *African Economic Outlook 2019: Macroeconomic Performance and Prospects; Jobs, Growth, and Firm Dynamism; Integration for Africa's Economic Prosperity*. Abidjan: African Development Bank.
- Baruah, Bipasha. 2015. "Creating Opportunities for Women in the Renewable Energy Sector: Findings from India." *Feminist Economics*, 21 (2): 53–76.
- Baruah, Bipasha. 2017. "Renewable Inequity? Women's Employment in Clean Energy in Industrialized, Emerging, and Developing Economies." *Natural Resources Forum*, February 2017. Vol. 41 (1): 18–29.
- Baruah, Bipasha and Sandra Biskupski-Mujanovic. 2021. "Navigating Sticky Floors and Glass Ceilings: Barriers and Opportunities for Women's Employment in Natural Resources Industries in Canada." *Natural Resources Forum*, May 2021. Vol. 45 (2): 183–205.
- Blankenship, Mary and Christina Golubski. 2021. "Figure of the Week: Increasing Access to Electricity in Sub-Saharan Africa." *Africa in Focus*, June 18, 2021. Brookings.
- Chingwete, A., Samantha Richmond, and Carmen Alpin. 2014. "Support for African Women's Equality Rises: Education, Jobs and Political Participation Still Unequal." Policy Paper #8. Cape Town: AfroBarometer.
- Cline, Jared. 2019. "10 Reasons Every Company Should Offer Paid Paternity Leave and Every Father Should Take It." *Catalyst (blog)*, June 12, 2019. <https://www.catalyst.org/2019/06/12/10-reasons-every-company-should-offer-paid-paternity-leave-and-every-father-should-take-it/>.
- Collins, Charlotte. 2019. Can Improving Women's Representation in Environmental Governance Reduce Greenhouse Gas Emissions? Washington, DC: Climate Institute. <http://climate.org/wp-content/uploads/2019/02/WomenGhG2.pdf>
- Conlan, Catherine. 2021. "What is job sharing? Sharing your job can mean greater flexibility for you and your employer." *Monster*. <https://www.monster.com/career-advice/article/what-is-job-sharing>.
- Devillard, Sandrine, Sandra Sancier-Sultan, Alix de Zelicourt, and Cécile Kossoff. 2016. *Women Matter 2016: Reinventing the Workplace to Unlock the Potential of Gender Diversity*. McKinsey & Company.
- Doyle, Alison. 2020. "What are Soft Skills? Definition and Examples of Soft Skills". *The Balance Careers*. September 26, 2020. <https://www.thebalancecareers.com/what-are-soft-skills-2060852>.
- Droit Afrique. 2021. Décret d'application du Code du travail (Mali's Decree Implementing the Labor Code, 1996, Decree # 96-178/P-RM of June 13, 1996). *Droit Afrique*. Website: <http://www.droit-afrique.com/upload/doc/mali/Mali-Decret-1996-178-application-Code-travail.pdf>
- EBRD, IFC, CDC. 2020. "Addressing Gender-Based Violence and Harassment: Emerging Good Practice for the Private Sector." London: European Bank for Reconstruction and Development, International Finance Corporation, and CDC Group.
- EY. 2016. *Women in Power and Utilities Index*. Toronto: EY (Ernst and Young).
- EY. 2019. "Could gender equality be the innovation boost utilities need?" EY Global Article.
- Habtezion, Senay. 2016. "Gender and Climate Change: Overview of Linkages Between Gender and Climate Change." UNDP Policy Brief. New York: United Nations Development Programme and the Global Gender and Climate Alliance. [https://www.UNDP.Linkages Gender and CC Policy Brief 1-WEB \(2\).pdf](https://www.UNDP.Linkages Gender and CC Policy Brief 1-WEB (2).pdf)
- Hewlett, Sylvia Ann, Melinda Marshall, and Laura Serbin. 2013. "Innovation, Diversity and Market Growth." New York: Center for Talent Innovation (now Coqual).
- IEA. 2019a. *Africa Energy Outlook 2019: World Energy Outlook Special Report*. Paris: International Energy Agency.

- IEA. 2019b. *Status Report on Gender Equality in the Energy Sector*. Paris: International Energy Agency.
- IFC. 2018. "Women in Business Leadership Boost ESG Performance: Existing Body of Evidence Makes Compelling Case." Washington, DC: International Finance Corporation.
- IFC. 2020. "Childcare in the COVID-19 Era: A Guide for Employers. Interim Guidance for employers in a rapidly changing global situation." Washington, DC: International Finance Corporation.
- IFC. 2021. "Gender Equality in Nigeria's Private Sector. A Gender Gap Assessment of the 30 Most Capitalized Companies Listed on the Nigerian Exchange." Washington, DC: International Finance Corporation.
- ILO. 2019. *Women in Business and Management: The Business Case for Change*. Geneva: International Labour Organization.
- ILO. 2020. Maternity Protection Convention, 2000, No. 183. International Labour Organization, [https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\\_ILO\\_CODE:C183](https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C183)
- ILO Working Conditions Laws Database. International Labour Organization, Geneva. Available at: <http://www.ilo.org/dyn/travail>.
- IRENA. 2019. *Renewable Energy: A Gender Perspective*. Abu Dhabi: International Renewable Energy Agency.
- IRENA. 2020a. *Renewable Energy and Jobs – Annual Review 2020*. Abu Dhabi: International Renewable Energy Agency.
- IRENA. 2020b. *Wind Energy: A Gender Perspective*. Abu Dhabi: International Renewable Energy Agency.
- Jackson, Lauren. 2021. "The Climate Crisis Is Worse for Women. Here's Why." New York Times, August 24, 2021.
- Kebede, E.M., Seifu, B. 2021. Breastfeeding and Employed Mothers in Ethiopia: Legal Protection, Arrangement, and Support. *International Breastfeeding Journal*. <https://doi.org/10.1186/s13006-021-00392-2>.
- Maduekwe, Monica, Ellen Morris, Jennye Greene, and Victoria M. Healey. 2019. "Gender Equity and Mainstreaming in Renewable Energy Policies - Empowering Women in the Energy Value Chain in the Economic Community of West African States (ECOWAS)." Sustainable Renewable Energy Report. Washington, DC: Office of Scientific and Technical Information, United States Department of Energy.
- Droit Afrique. 2021. Décret d'application du Code du travail (Mali's Decree Implementing the Labor Code, 1996, Decree # 96-178/P-RM of June 13, 1996). *Droit Afrique*. Website: <http://www.droit-afrique.com/upload/doc/mali/Mali-Decret-1996-178-application-Code-travail.pdf>
- Mclaughlin, Heather, Christopher Uggen, and Amy Blackstone. 2017. "The Economic and Career Effects of Sexual Harassment on Working Women." *Gender and Society*, Volume 31 (3): 333–358.
- Moodley, Lohini, Tania Holt, Acha Leke, and Georges Desvaux. 2016. *Women Matter Africa*. McKinsey & Company.
- Moodley, Lohini, Mayowa Kuyoro, Tania Holt, Acha Leke, Anu Madgavkar, Mekala Krishnan, and Folakemi Akintayo. 2019. "The Power of Parity, Advancing Women's Equality in Africa." Washington, DC: McKinsey Global Institute. <https://www.mckinsey.com/featured-insights/gender-equality/the-power-of-parity-advancing-womens-equality-in-africa>
- OECD/IEA. 2017. *Energy Access Outlook 2017: World Energy Outlook Special Report*. Paris: Organisation for Economic Co-operation and Development and International Energy Agency.
- Orlando, Maria Beatriz, Vanessa Lopes Janik, Pranav Vaidya, Nicolina Angelou, Ieva Zumbyte, and Norma Adams. 2018. "Getting to Gender Equality in Energy Infrastructure: Lessons from Electricity Generation, Transmission, and Distribution Projects". Energy Sector Management Assistance Program (ESMAP). Technical Report 012/18. Washington, DC: World Bank.
- Orser, Barbara. 2001. *Chief Executive Commitment: The Key to Enhancing Women's Advancement*. Ottawa: Conference Board of Canada.
- Power for All. 2019. *Powering Job Census 2019: The Energy Access Workforce*. San Francisco: Power for All.
- Republic of Kenya. 2017. "The Health Act." *Kenya Gazette Supplement*. Accessed September 15, 2021. <http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/HealthActNo.21of2017.pdf>.

- Shook, Ellyn and Julie Sweet. 2019. "Equality = Innovation. Getting to Equal 2019: Creating a Culture that Drives Innovation." *Accenture blog*.
- Tejada, Monica and Denise Mortimer. 2018. "End Gender-based Violence in the World of Work." Power Africa. Washington: United States Agency for International Development.
- The Boardroom Africa. 2021. [www.theboardroomafrica.com](http://www.theboardroomafrica.com). March 18, 2021. <https://theboardroomafrica.com/research/>.
- UNESCO. 2015. *UNESCO Science Report: Towards 2030*. Paris: United Nations Educational Scientific and Cultural Organization.
- UNESCO Institute for Statistics. 2019. "Women in Science." Fact Sheet No. 51. Montreal: UNESCO Institute of Statistics.
- UN. 2021. "The 17 Goals: Sustainable Development Goals." United Nations Department of Economic and Social Affairs. Website. <https://sdgs.un.org/goals>.
- UN IPCC. 2021. "Climate Change 2021: The Physical Science Basis." Working Group I contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. New York: United Nations Intergovernmental Panel on Climate Change.
- UN Sustainable Stock Exchanges. 2021. "Gender equality on Corporate Boards: Analysis of 2,200 Issuers on 22 Stock Exchanges in G20 Countries." Policy Brief. New York: United Nations Sustainable Stock Exchanges.
- UN Women. 2021. "Impact of COVID-19 on Gender Equality and Women's Empowerment in East and Southern Africa." Consultant Report. Nairobi: East and Southern Africa Regional Office, UN Women.
- USAID. 2021. *Delivering Gender Equality: A Best Practice Framework for Male-Dominated Industries*. Washington, DC: United States Agency for International Development. <https://www.usaid.gov/sites/default/files/documents/Delivering-Gender-Equality-Best-Practices-Framework.pdf>.
- WEF. 2020. *The Future of Jobs Report 2020*. Geneva: World Economic Forum.
- WEF and Quartz Africa. 2018. "Africa's Fastest-growing Cities are the Most Vulnerable to Climate Change Globally." Weforum. <https://www.weforum.org/agenda/2018/12/africa-s-fastest-growing-cities-are-the-most-vulnerable-to-climate-change-globally>.
- Westendarp, Louis. 2021. "Women do more to tackle climate change than men: Survey." Politico. October 18, 2021. <https://www.politico.eu/article/women-men-climate-change-survey/>
- WHO. n.d. Breastfeeding. Accessed August 25, 2021. Geneva: World Health Organization. [https://www.who.int/health-topics/breastfeeding#tab=tab\\_1](https://www.who.int/health-topics/breastfeeding#tab=tab_1) and [https://www.who.int/elena/titles/exclusive\\_breastfeeding/en/](https://www.who.int/elena/titles/exclusive_breastfeeding/en/)
- World Alliance for Breastfeeding Action. 2019. "Parents at Work: Leave and Breastfeeding Breaks by Country – Africa." Penang: World Alliance for Breastfeeding Action.
- World Bank. 2020. School Enrollment, secondary, female (% gross). <https://data.worldbank.org/indicator/SE.SEC.ENRR.FE>.
- World Bank. 2021a. *Women, Business, and the Law*. 7th Edition. Washington: World Bank.
- World Bank. 2021b. "What you need to know about the World Bank Group's Climate Change Action Plan." Feature Story. <https://www.worldbank.org/en/news/feature/2021/06/22/what-you-need-to-know-about-the-world-bank-group-2nd-climate-change-action-plan>.
- Women's Forum. 2021. "The Women's Forum Barometer on Gender Equity: Focused on Business, Climate Change, Health and Tech in the G20 Countries." Dauville: Women's Forum for the Economy and Society. [https://www.politico.eu/wp-content/uploads/2021/10/18/WFG\\_BAROMETER\\_2021\\_FINAL.pdf](https://www.politico.eu/wp-content/uploads/2021/10/18/WFG_BAROMETER_2021_FINAL.pdf)
- United Nations. 2015. "Paris Agreement." Bonn: United Nations Framework Convention on Climate Change Secretariat. [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf)



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