

# WOMEN IN THE SOLAR INDUSTRY: SKILLS REQUIRED TO THRIVE IN THE SECTOR

Zambia Women in Engineering (ZWES)
Conference

Presented by: Eng. Dr. Chilala Kakoma Bowa

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**Venue: Avani Hotel Livingstone** 





## The Growing Role of Women in Clean Energy

- In Africa, women make up a larger percentage of roles in renewable energy compared to traditional energy sectors.
- Women are increasingly entering the clean energy sector, particularly in renewable energy.
- However, women remain underrepresented in leadership and technical roles.
- Key Question: What skills are needed for women to thrive and advance in the solar

industry?

## The Solar Industry: A Growing Field for Women

Female Representation in Energy



**39% OF THE** 





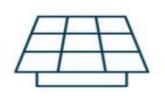
**16% IN THE 32% IN THE** ENERGY SECTOR RENEWABLES SECTOR



**22% IN THE** OIL AND GAS INDUSTRY



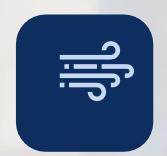
21% IN THE WIND INDUSTRY



**40% IN THE** SOLAR INDUSTRY



Sources: Workplace Gender Equality Agency (WGEA), International Energy Agency (IEA), and International Renewable Energy Agency (IRENA).



The clean energy sector is projected to create 19 million new jobs globally by 2050 (IRENA).



Women currently hold only 32% of fulltime jobs in clean energy globally.



In Africa, off-grid solar alone could create 1.3 million jobs by 2022 (GOGLA).

# Key Skills for Success in the Solar Industry

Project manageme nt and financial literacy

Sales and customer service skills

Entreprene uri al mindset for innovation Busines s Acume

n

Soft Skills

Technic al Skills

Leadership and communicati on

Teamwork and problem-solving

Adaptability and emotional intelligence

Data
analysis and
IT skills for
system
monitoring

Solar system installation, maintenance, and troubleshootin

g

Understandi ng of renewable energy technologies

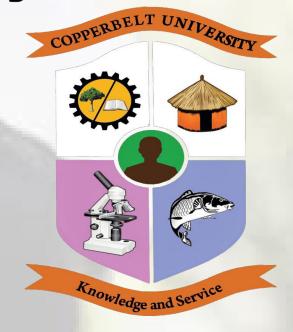
## **Building the Skills to Thrive in the Solar Industry**



## **Technical Skills**

- Enroll in STEM programs, engineering courses, or renewable energy certifications.
- Participate in solar installation and maintenance workshops.
- Seek apprenticeships or internships with solar companies.











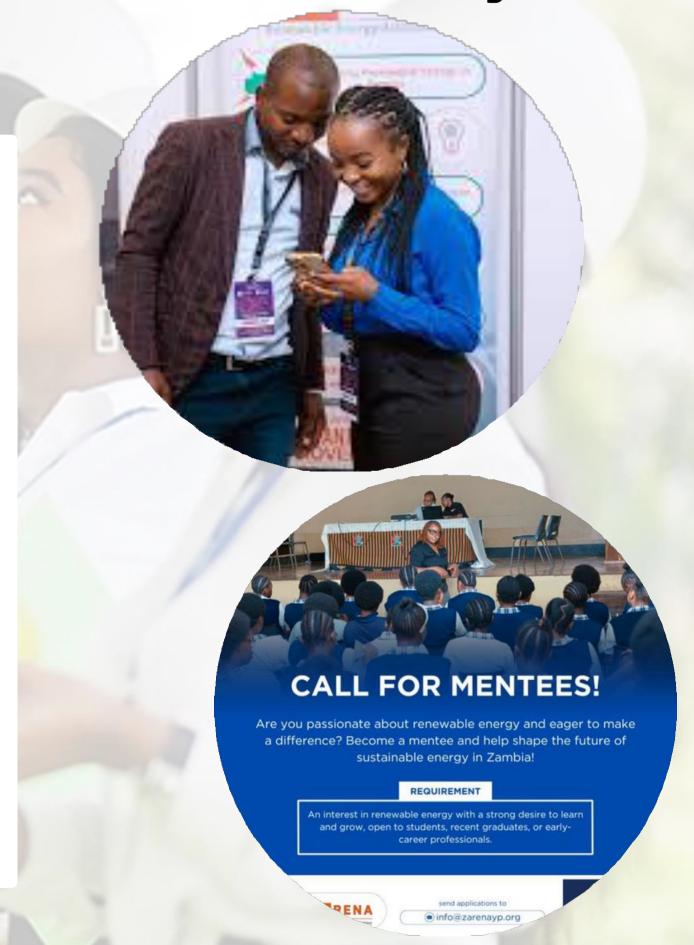


## **Building the Skills to Thrive in the Solar Industry**



#### **Soft Skills**

- Join leadership development programs like the Future Female Leaders in Energy Program.
- Attend workshops on communication, teamwork, and problem-solving.
- Find mentors in the industry to guide your professional growth.



## **Building the Skills to Thrive in the Solar Industry**



#### **Business Acumen**

- Take online courses in project management, finance, and entrepreneurship.
- Attend industry conferences and networking events to learn from experts.
- Join programs like Women in Renewable Energy in Africa (W-REA)

REA)

for business development
support



## Challenges Women Face in the Solar Industry



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 Women are less likely to pursue STEM education or technical training.

#### **Workplace Challenges**

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- Lack of mentorship and career development opportunities.
- Inflexible work schedules and limited childcare support.
- Harassment and exclusion from informal networks.

#### **Self-Perception**

 Social norms and biases can discourage women from pursuing technical roles.

# How to Overcome Challenges and Thrive



#### **Education and Training**

- Pursue STEM education and technical training programs.
- Participate in leadership and soft skills development programs.

# **Mentorship and Networking**

- Seek out mentors and role models in the industry.
- Join professional networks and communities for women in clean energy.

### Advocacy and Policy Change

- Advocate for genderinclusive workplace policies.
- Push for equal pay and transparent promotion policies.



# Creating an Inclusive Solar Industry



## **For Companies**

- Implement structured training and mentorship programs.
- Offer flexible work arrangements and familyfriendly policies.
- Conduct regular pay equity audits to ensure fair compensation.



## For Policymakers

- Invest in STEM education and technical training for women.
- Support initiatives that promote gender diversity in clean energy.
- Create funding opportunities for women-led startups in the solar sector.





# **Empowering Women in Solar Energy**

#### **For Women**

- Pursue technical and leadership training.
- Advocate for your career growth and seek mentorship.
- Join networks and communities for

## **For Organizations**

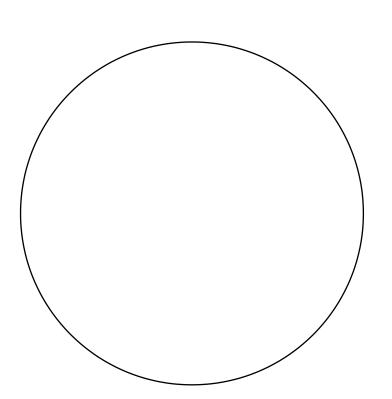
- Commit to gender equity in hiring and promotions.
- Invest in the development of female talent in the solar industry.

Together, we can build a more inclusive and sustainable future in clean energy!











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