

CLOSING GAPS IN WOMEN'S EMPLOYMENT IN THE ENERGY SECTOR

FINDINGS FROM AFRICA AND SOUTH ASIA EEG APPLIED RESEARCH PROGRAMME GRANT

Pamela Baldinger

WOMEN'S EMPLOYMENT EXPERT/CONSULTANT WORLD BANK

PBALDINGER@WORLDBANK.ORG







WHY FOCUS ON GENDER GAPS?



Enhance Development Outcomes

Moral Imperative

Risk Management

2



WORLD BANK FOCUS ON GENDER AND ENERGY: 6 REGIONS, 94 COUNTRIES

GLOBAL PROGRAMS

Data and Policy

Women in STEM

Clean Cooking and Heating

Gender and Geothermal

Energy Efficiency, Gender and Behavior Change

Off-Grid Toolkit

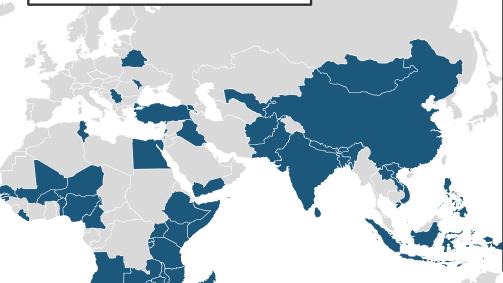
LAC: 8 Tackling labor force participation rates in geothermal and fostering talent in SIDS.

MENA: 6 Countries Research on the impacts of lack of energy access on women's livelihoods and jobs in off-grid.

> AFR: 30 Countries Women's employment program and addressing issue of productive uses of energy and off-grid value chains.

ECA: 8 Countries

Scale work on investigating impacts of subsidy reform and energy efficiency interventions on women and men. Impact evaluation starting Tajikistan.



SAR: 8 Countries WePOWER launched and tackling the business case for utilities.

EAP: 12 Countries Plus PPA (22 **Countries**) Women's employment in solar and geothermal at the utility and level project site in Pacific and Indonesia. Focused interventions leadership on e.g. EDGE Vietnam certification.



WHAT DO WE KNOW ABOUT GENDER GAPS IN THE ENERGY SECTOR?

- 1) Research on gender in the power sector is a new area, with many data gaps. Most estimates put the average percentage of women in the power sector at 22-25% of total employees (World Economic Forum), with significant differences between regions and companies.
- 2) Research by IRENA and others shows **higher percentages of women in renewables** (32%) than the rest of the sector (IRENA 2019).
- 3) Research on the impact of gender quotas is mixed, but the countries with the highest percentage of women employees have quotas (Iceland, Norway).
- 4) Research by USAID and others shows high degrees of **gender segregation** within electric utilities—women commonly work in finance, human relations, legal and accounting departments (USAID 2015 and World Bank 2019).
- 5) Research shows a *correlation* between business performance and gender diversity in the workplace, including in the energy sector:
 - Companies with more women chairs on the board returned a 36% higher return on equity than those with none (MCSI 2015)
 - Study of 200 largest utilities revealed energy companies with greater gender diversity on the board and in management yielded a higher return on equity (E&Y 2016).



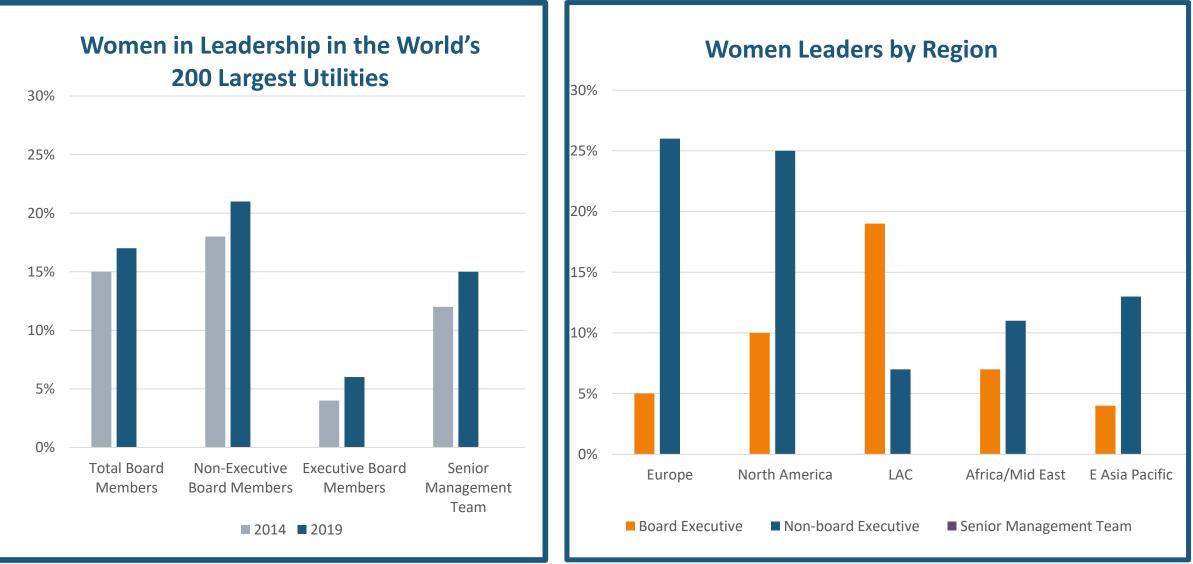
Women's Share of Workforce, by Infrastructure Industry

Industry group	CEO	Board members	Senior roles	Mid-level roles	Junior roles	Lines roles	Staff roles	
Industries Overall	9%	28%	15%	24%	33%	30%	35%	
Basic and Infrastructure	2%	35%	9%	13%	22%	14%	20%	
Energy	0%	32%	11%	19%	24%	19%	22%	
Information and Communication technology	5%	19%	11%	21%	32%	23%	33%	
Mobility	9%	17%	13%	21%	28%	25%	34%	

World Economic Forum (2016). The Future of Jobs Survey 2016. Dataset is the result of a 2015 survey with the CHRO of 371 companies representing over 13 million employees in 15 middle- and high-income economies.



WOMEN OCCUPY FEW LEADERSHIP POSITIONS





Ernst & Young March 2019

WHY ARE THERE SO FEW WOMEN WORKING IN THE ENERGY SECTOR?

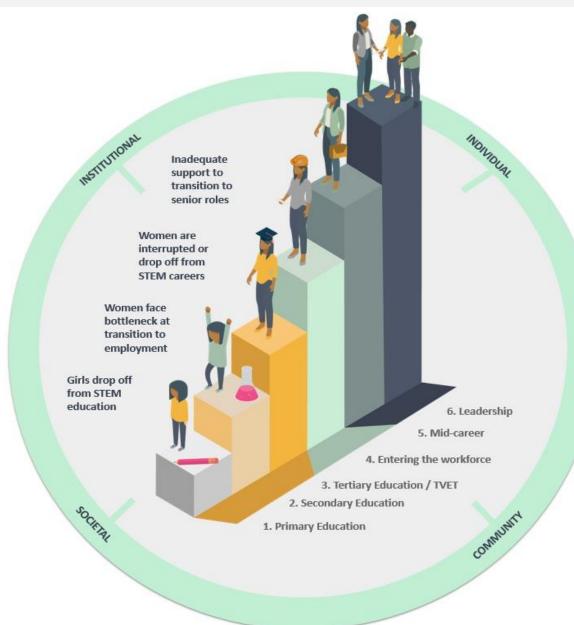
Barriers to Women's Employment

<u>Societal</u>

- Laws may prohibit certain types of employment
- Biased social norms and expectations
- Child care/home responsibilities → less time and/or mobility
- Fewer women in STEM pipeline
- Few/no role models

Institutional

- Lack of adequate facilities/equipment for women
- Sexual harassment
- Gender bias in recruitment and promotion processes
- Lack of internship/training opportunities
- Lack of leadership commitment
- Resistance to change



EEG RESEARCH GRANT

Objective: Identify successful strategies for narrowing employment gaps between men and women

Focus: Power Sector Institutions

Two Regions, Two Implementation Approaches

South Asia: Regional network targeting women professionals in eight countries, focus on engineers and STEM

Africa: Country-specific focus, research tied to identifying gaps and assessing measures taken to address them





EEG GRANT: METHODOLOGY

Eliminating Data Gaps									
Qualitative Data Colle	ection								
	Quantitative Data Collection Stakeholder Mappin								
 Key informant interviews Focus groups 	 Sex-disaggregated data Baseline survey on employment and gender policies 	 Energy companies Government Academia Donors Non-profits 							

- Identify gender gaps
- Inform interventions
- Monitor results
- Develop best practices/success stories
- Share knowledge

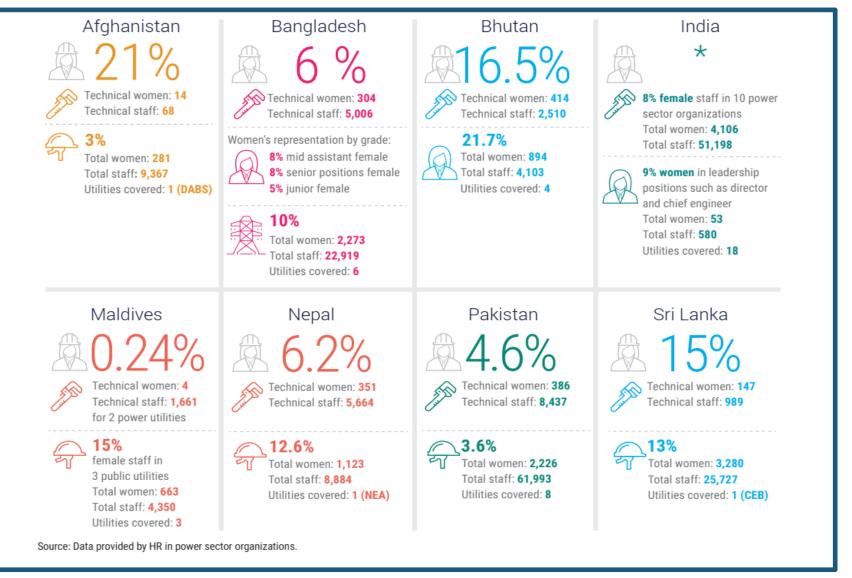


WHAT WE HAVE LEARNED IN SOUTH ASIA: EMPLOYMENT

8 Baseline Assessments on Women's **Representation in South Asia Region Power** Sector: Data collected from over 100 energy and academic institutions. Over 500 women and men contributed through focus-group discussions and key informant interviews.

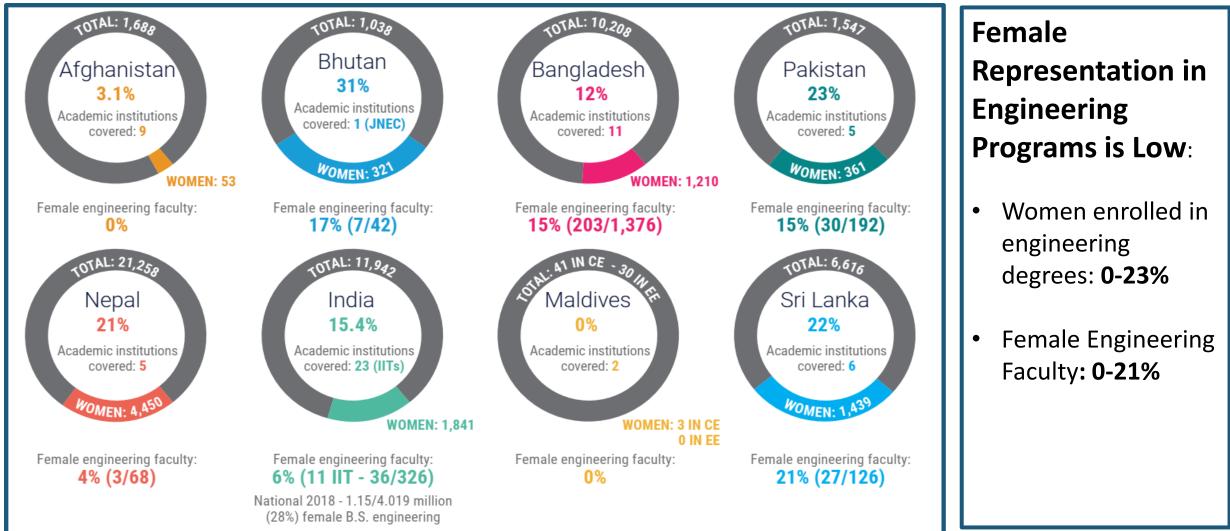
• Women as % of overall staff: 3-22%

 <1-16% women in technical positions





WHAT WE HAVE LEARNED IN SOUTH ASIA: ACADEMIA/STEM



Note: Includes electrical engineering, mechanical engineering, power systems engineering and civil engineering programs. Faculty count includes visiting lecturers, teaching assistants and technical support staff.



OUR SOLUTION: WEPOWER

What is WePOWER?

- A Regional Professional Network designed to address barriers to women's employment identified in the qualitative research:
- Lack of female role models and mentors for students and professional women in STEM
- Limited networking opportunities for women in STEM
- Limited exposure to new ideas and desire for professional development
- HR policies and physical facilities that are not always gender friendly

WePOWER will:

- Support higher participation of women in the energy sector and utilities
- Foster higher retention and professional development of women in the energy sector
- Promote normative change regarding women and girls in STEM

WePOWER Partners implement gender activities under 5 pillars



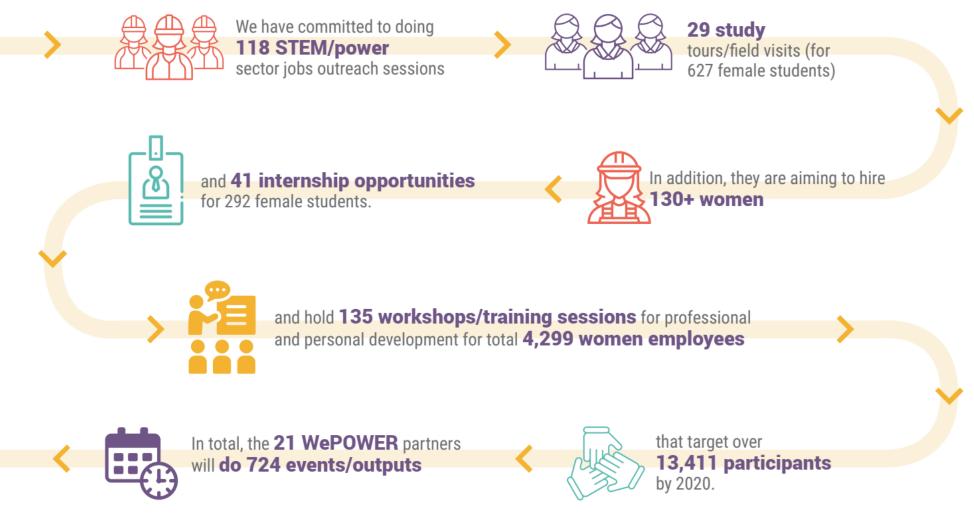


SAR Women Engineers





WEPOWER ACTIVITIES AND TARGETS UNTIL 2020



**WePOWER has 21 Partners – of which 10 are major public and private power utilities in the SAR region



WHAT ARE WE DOING IN AFRICA?

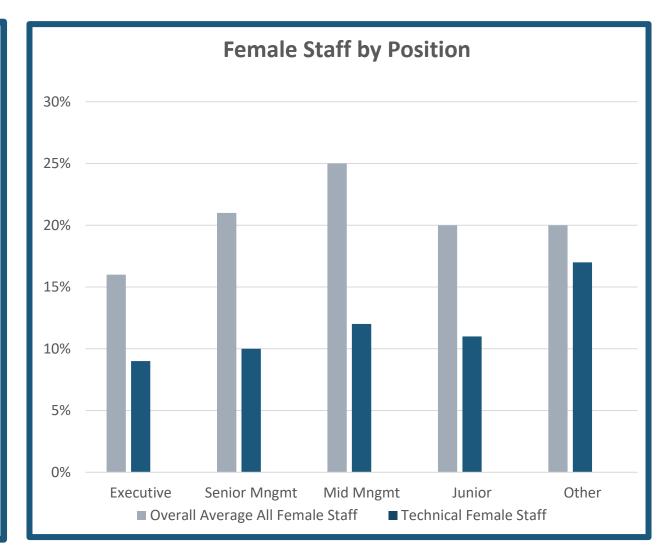
- Conducted review of energy projects across Africa portfolio
- Selected three pilot countries for research focus: Ethiopia, Kenya and Zambia
- Respond to gender gaps and opportunities identified by Africa Energy Program
 - Research to narrow data gaps and inform implementation
 - Integrate women's employment initiatives into World Bank lending programs
 - ➤Knowledge sharing and dissemination





WHAT WE HAVE LEARNED IN AFRICA: EMPLOYMENT

- Baseline survey tool piloted with three energy companies in Kenya and Ethiopia
- On average, women make up 21% of the workforce in the companies surveyed higher than in South Asia, but slightly below the global average of 22-25%
- Women made up 14% of technical employees (range of 7-20%)
- The data confirms the existence of occupational segregation by position, with most women working in non-technical positions.





WHAT WE HAVE LEARNED SO FAR IN AFRICA: COMPANY POLICIES

- All energy companies had non-discrimination policies
- All energy companies had anti-harassment policies with grievance mechanisms in place
- Flexible work options generally are not available
- Childcare options are limited
- All energy companies had gender committees with focal points, but not all staff were aware of them
- Mentoring programs are limited or non-existent (for men and women)



ETHIOPIA ELECTRIC UTILITY: BOLSTERING RECRUITMENT AND RETENTION

In \$375 million World Bank funded Ethiopia Electrification Program \$4.5 million is set aside for gender, including:

- Construction or renovation of childcare facilities in headquarters and 11 regional offices
- GBV prevention and response
- Career development and leadership training for women in STEM:
 - MoU signed with universities/Ministry of Science for internship and scholarship program
 - Internships for 40 female students in STEM/year
 - Full scholarships for 44 current female staff (Masters)/year
 - Short-term professional development training for 55 women/year (50% STEM areas)
 - Mentorship program for 52 emerging female leaders/year





KENYA POWER AND LIGHTING CO LTD: ENSURING SUPPLY OF TECHNICALLY SKILLED WOMEN

- WB Project in Approval Phase Kenya Electricity System Improvement Project
- Addresses two gaps identified in gender assessment:
 - lack of women in STEM pipeline
 - tuition is barrier to female enrollment for relevant degrees/training
- Project to include a scholarship program for 60 women at the Institute of Energy Studies and Research
 - Craft Certificate in Electrical Engineering (2 years)
 - Diploma in Electrical Engineering, Mechanical Engineering, and ICT (3 years)
- Scholarship recipients will receive support during training including internships, mentors and coaching.





IN THE WOMEN'S OWN WORDS: KENYA TVET STUDENT FOCUS GROUP

Q: Why are you studying to become an electrical technician?

"I have passion for this career, and my skills will be marketable, especially as a woman." Q: What did your friends say when you told them you'd chosen to enroll?

> "They said I must be smart, because it would be so hard."



"I want to prove that I can do it. Anything a man can do, a woman can do better."

GLOBAL

ESMAP | Inka Schomer; Barbara Ungari

REGIONAL

AFR | Inka Schomer MENA | Elisabeth Maier, Sarah Keener ECA | Audrey Sacks, Hiwote Tadesse EAP | Helle Buchhave LAC | Elisabeth Maier SAR | Gunjan Gautam, Maria Beatriz Orlando

Women's Employment (AFR) | Pamela Baldinger





Energy Sector Management Assistance Program The World Bank 1818 H Street, NW || Washington DC || USA www.esmap.org || esmap@worldbank.org