USAID WEE COP June 2023
LEARNING EVENT
PREPARING A GENDER-INCLUSIVE POWER SECTOR WORKFORCE FOR THE FUTURE
AGENDA

Welcome and Overview
– Morgan Mickle, Senior Program Officer, USAID WEE CoP, Banyan Global

Presentation

Moderated Panel Discussion & Questions
– Balarko Chaudhuri, Reader in Power Systems, Imperial College of London
– Marcela González, Human Resources Director, XM

Wrap-Up and Announcements
– Morgan Mickle, Senior Program Officer, USAID WEE CoP, Banyan Global
USAID WOMEN’S ECONOMIC EMPOWERMENT COMMUNITY OF PRACTICE

Currently 1,500+ members

- Gather and share evidence
- Facilitate learning among members
- Foster engagement opportunities
LEARNING OBJECTIVES

1. Build awareness of the importance of preparing a power sector workforce that includes women.

2. Share approaches to designing cutting-edge university-level technical coursework that meets future workforce needs and promotes gender equality and women’s economic empowerment.

3. Understand challenges and highlight successful strategies for preparing the power sector workforce of the future through university-system operator partnerships.
WOMEN IN POWER SYSTEM TRANSFORMATION: INCLUSIVE WORKFORCE DEVELOPMENT TO ACCELERATE DECARBONIZATION
Hallie Lucas
Researcher, Women in PST Program Lead
National Renewable Energy Laboratory
National Renewable Energy Laboratory (NREL) Science Drives Innovation

Renewable Power
- Solar
- Wind
- Water
- Geothermal

Sustainable Transportation
- Bioenergy
- Hydrogen and Fuel Cells
- Transportation and Mobility

Energy Efficiency
- Buildings
- Industrial Efficiency and Decarbonization
- Advanced Materials and Manufacturing
- State, Local, and Tribal Governments

Energy Systems Integration
- Energy Security and Resilience
- Grid Modernization
- Integrated Energy Solutions

Photo by Werner Slocum, NREL 66364
Decarbonizing the Global Energy Sector - Challenges and Opportunities

- Deep, rapid, and sustained reductions in greenhouse gas emissions are needed to mitigate the impacts of climate change
- Reaching net zero carbon emissions will require transformational change

How do we get there?

- Electrify energy consumption across sectors
- Reduce the carbon intensity of the electricity generation
- Develop new technologies for industry and heavy-duty transport

Limiting warming to 1.5°C and 2°C requires rapid, deep reductions in greenhouse gas emissions.
System Operators Are Key to Energy Transformation

How will the grid change in a decarbonized energy system?

What does power sector transformation mean for women?

- < 25% of utility and energy sector jobs globally are held by women, far fewer in technical and leadership positions
- Job changes for existing practitioners
- New occupations and economic opportunities
Women in Power System Transformation

Develop technical knowledge and skills

Professional development opportunities and agency-based empowerment

Build a support network to expand women’s access to professional opportunities

Address engrained institutional barriers to women in power sector technical and leadership roles.

G-PST’s Activities Are Organized into Five Integrated Action Pillars
Graduate and Professional Technical Training

- Expanding women’s access to high quality technical training materials that are designed to support deep decarbonization of power systems

- Forward-looking workforce readiness to ensure women have equal opportunity to access the economic opportunities associated with clean energy transitions
  - Reducing occupational segregation
  - Advancing career leadership
  - Securing new occupations generated by the clean energy transition

- Engaging universities as the launching pad and key enablers of early career support

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### Women in PST Graduate-Level Technical Courses

- Declining System Inertia and Dynamic Reserve Requirements
- Power System Stability with 100% Inverter-Based Resources (IBR)
- Impacts of Electric Vehicles on Power Systems
- Network Planning and Pricing to Support Net-Zero Transition
- Modular Multilevel Converters (MMC) High-Voltage Direct Current (HVDC)
Reshaping the Narrative of Power System Careers
Broader Challenges to Women’s Economic Empowerment in this Sector

- Lack of disaggregated data to understand occupational segregation and targeted training needs
- Structural and systemic barriers
- Cultural shift and male engagement
- Access to university and advanced technical education
- Early interest in STEM programs and power sector careers
- University workforce pipelines and system operator recruitment
PANEL DISCUSSION
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MODERATOR

Hallie Lucas
Researcher, Women in PST Program Lead
National Renewable Energy Laboratory

PANELISTS

Balarko Chaudhuri
Reader in Power Systems
Imperial College of London

Marcela González
Human Resources Director
XM
WRAP UP AND ANNOUNCEMENTS

Participant Poll

Call for Member Spotlights
Want to feature your activity in a future USAID WEE CoP monthly communication?
Email Banyan Global at fundcop@banyanglobalgita.com

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https://www.linkedin.com/groups/12501152/

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