



USAID
FROM THE AMERICAN PEOPLE

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

- **Hallie Lucas**, Researcher, Women in Power System Transformation (PST) Program Lead, National Renewable Energy Laboratory

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



PRESENTER



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

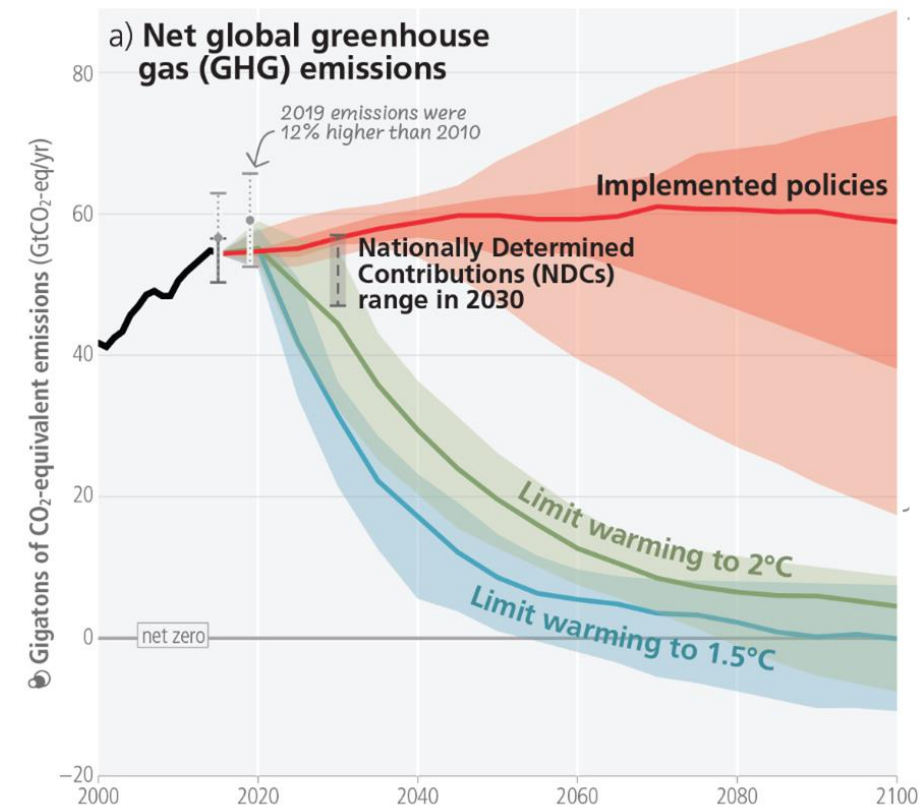
Decarbonizing the Global Energy Sector - Challenges and Opportunities

- 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?

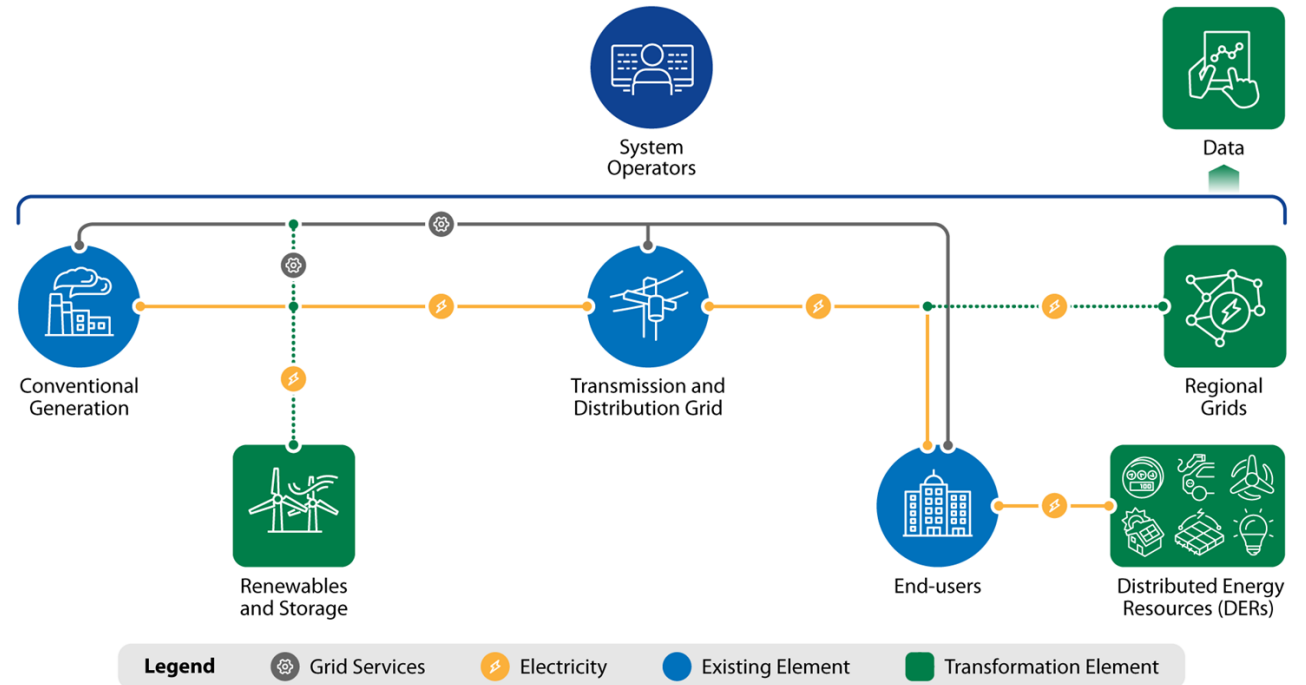
- Electrify energy consumption across sectors
- Reduce the carbon intensity of the electricity generation
- Develop new technologies for industry and heavy-duty transport

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



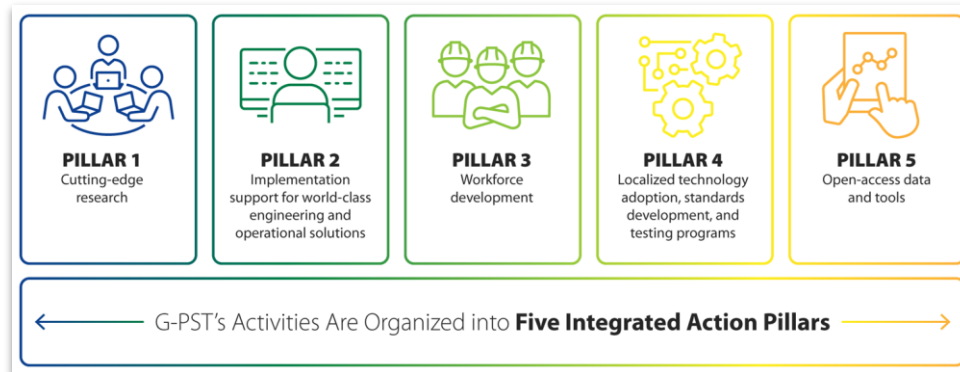
Professional development opportunities and agency-based empowerment



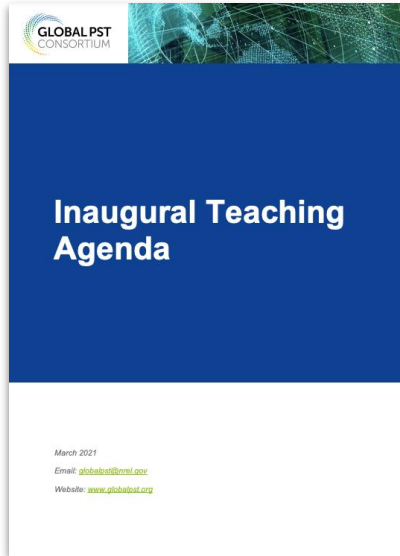
Build a support network to expand women's access to professional opportunities



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



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

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



PANEL DISCUSSION

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



Join the USAID WEE CoP LinkedIn Group

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



Join the USAID WEE CoP

Email us at fundcop@banyanglobalgita.com

Email the USAID WEE CoP with questions at:
fundcop@banyanglobalgita.com



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