

Women in Power System Transformation

A Joint Initiative from the USAID-NREL Partnership and the G-PST Consortium to Expand Leadership Opportunities for Women in Power System Operations

Although women make up half of the worldwide workforce potential, they are often underrepresented in the power sector—especially in technical and leadership roles, such as utility management, power system operations, and engineering. This disparity persists even though women offer diverse perspectives, skill sets, and experiences proven to enhance innovation, problem solving, and organizational performance. As countries ambitiously transform their power systems by bringing significantly larger shares of renewables and complementary technologies onto their grids, there is a risk that women will be left out of the clean energy transformation.

If so, women will benefit less—both socially and economically—from opportunities offered by the scale-up of renewable energy deployment as the world transitions to cleaner power systems. As more governments and private companies pursue initiatives to increase gender-informed recruitment and retention in the energy sector, it is an opportune time to focus on expanding technical training and experiential learning in power systems aimed at reaching women.

To support these efforts, [the United States Agency for International Development \(USAID\) – National Renewable Energy Laboratory \(NREL\) Partnership](#), Imperial College London, and [the broader Global Power System Transformation \(G-PST\) Consortium](#) community joined together

to launch the **Women in Power System Transformation** initiative. This initiative aims to increase gender equality in the global transition to clean energy by providing in-depth technical capacity building for women in emerging economies, so they are prepared to excel in science and engineering professional roles in the rapidly evolving power sector.

The opportunities offered by this initiative for female rising stars and seasoned professionals in the energy sector contribute to achieving USAID's women's economic empowerment and gender equality goals, as well as its energy and economic growth outcomes. As an activity within the G-PST Consortium, the initiative has access to critical connections with industry and academic institutions that are leading the clean energy transition for the power sector.

Key Activities

The Women in Power System Transformation initiative will integrate gender equality and women's empowerment into foundational elements of the G-PST Consortium through the following activities:



- 1. Developing a university-level course package, engineering training, and internships focused on increasing gender equality within utilities and system operators.**

What is the G-PST Consortium?

A force multiplier in the global effort to achieve cost-efficient, clean, and reliable power systems by:

- Partnering with power system operators worldwide to support local priorities for clean energy integration and grid modernization
- Providing technical leadership from premier research institutions—contributing expertise and informing the consortium's strategic approach
- Leading and disseminating cutting-edge applied research to solve power system operation challenges.

Visit the [G-PST Consortium website](#) to learn more.

With leadership from Imperial College London, this work focuses on the creation of an in-depth technical course package for use in university engineering programs. The courses are designed to explore [stories of women's journeys to leadership](#) in power system operations, gender equality and empowerment, and cutting-edge power system technical topics aligned with the G-PST Consortium's [teaching agenda](#). Course content will be available for online and in-person use at no cost to universities and professors around the world. These materials will be developed in

conjunction with outreach strategies directed at women to build interest in the field of power system transformation.

The internship program will focus on people from underrepresented groups who are studying in a science, technology, engineering, or mathematics fields and are interested in pursuing technical career paths at utilities and power system operators. The first internship cohort will be hosted at NREL, where students will be mentored by staff scientists, and future cohorts will be hosted across other G-PST Consortium institutions. After completing their internship, participants will have access to continued mentorship and connection through networking activities.



2. Upskilling and providing networking opportunities for women within utilities and system operators to advance their leadership roles.

This initiative will create fellowships targeted at women and professionals from underrepresented groups working in power system operators or utilities. Participants will spend one to three months at a leading G-PST Consortium system operator partner focusing on the application of cutting-edge operational and engineering solutions to bring high levels of variable renewable energy onto grids.



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3. Partnering with well-established programs that address the broader challenges women face in the workplace related to empowerment, negotiation, and leadership.

It is clear there are many systemic barriers to women's advancement in technical careers that are not technical in nature. There are several existing programs that address these barriers and build foundational professional skills, including the USAID's [Engendering Industries](#) program and Johns Hopkins University's [Self-Empowerment and Equity for Change Initiative \(SEE Change\)](#). By linking the Women in Power System Transformation initiative with existing programs, participants can amplify their networks and access additional development resources.

Through these and other activities, the Women in Power System Transformation initiative captures and supports a critical opportunity to increase the participation of women in engineering programs and careers and to develop a more equitable, diverse, and innovative power system operations field.

Learn more about this initiative and ways to get involved at [Globalpst.org](https://www.globalpst.org).

Sarah Lawson

U.S. Agency for International Development
Email: slawson@usaid.gov

Corinne Hart

U.S. Agency for International Development
Email: cohart@usaid.gov

Alexandra Aznar

National Renewable Energy Laboratory
Email: alexandra.aznar@nrel.gov

Sadie Cox

National Renewable Energy Laboratory
Email: sadie.cox@nrel.gov

This work was authored, in part, by the National Renewable Energy Laboratory (NREL), operated by Alliance for Sustainable Energy, LLC, for the U.S. Department of Energy (DOE) under Contract No. DE-AC36-08GO28308. Funding provided by the United States Agency for International Development (USAID) under Contract No. IAG-17-2050. The views expressed in this report do not necessarily represent the views of the DOE or the U.S. Government, or any agency thereof, including USAID.

The USAID-NREL Partnership addresses critical challenges to scaling up advanced energy systems through global tools and technical assistance, including the Renewable Energy Data Explorer, Greening the Grid, the International Jobs and Economic Development Impacts tool, and the Resilient Energy Platform. More information can be found at: www.nrel.gov/usaid-partnership.

The G-PST Consortium provides coordinated, holistic, end-to-end support and knowledge infusion for system operators pursuing clean energy transitions, including performing cutting-edge research, providing implementation support for world-class engineering and operational solutions, supporting workforce development, building and disseminating open-access data and tools, and accelerating localized technology adoption, standards development, and testing programs. Learn more about the G-PST Consortium on our website: www.globalpst.org. Email the G-PST Consortium at globalpst@nrel.gov.



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