

Interns from the Women in Power System Transformation (WPST) program and fellows from Indonesia's Perusahaan Listrik Negara (PLN) on a tour of NREL's Flatirons Campus. Photo by Joe DelNero, NREL 81913

NREL's International Programs: Highlights

The Net Zero World Initiative



Net Zero World, launched at COP26, is a flagship U.S. effort to expedite the shift to clean, secure energy systems globally. Working in Argentina, Chile, Egypt, Indonesia, Nigeria, Singapore, Thailand, and Ukraine, the initiative's activities range from formulating national net-zero policies and road maps to advancing the implementation of 23 decarbonization actions aimed at net-zero energy transitions in sectors such as power, transportation, and buildings, with plans to mobilize at least \$10 billion in investments. Program highlights include the launch of the Sister City program with Tocopilla, Chile, to phase out coal plants; a \$1.3 billion plan to cut diesel emissions in Indonesia; training for Nigerian distribution companies; and technical assistance for Argentina's Energy Transition Plan, which contributed to a \$350 million Inter-American Development Bank loan.

The Net Zero World Initiative supports partner countries in meeting their clean energy targets and achieving just transitions to net-zero emission energy systems. This unique initiative leverages expertise across 9 U.S. government agencies and 10 U.S. Department of Energy national laboratories in partnership with other governments, philanthropies, and international institutions to accelerate net-zero energy transitions. To date, Argentina, Chile, Egypt, Indonesia, Nigeria, Singapore, Thailand, and Ukraine have joined the Net Zero World Initiative as country partners and receive demand-driven assistance to inform country-driven net-zero pathways and technical and investment plans. Customized support is being provided to countries in the areas of energy sector-wide modeling, renewable energy planning, building energy efficiency, sustainable transport, industrial decarbonization, and finance and investment, among others.

The Net Zero World's Climate Smart Women Energy Leader's Program Promotes Global Energy Transition



Photo by Werner Slocum, NREL 79718

Launched at COP27 by U.S. Secretary of Energy Jennifer M. Granholm, the Net Zero World Initiative's Climate Smart Women Energy Leader's program (CS-WEL) empowers women in partner countries by expanding their skills and resources to tackle climate change and promote clean energy transitions globally. The first phase of this program brought together eight female energy leaders from Argentina, Chile, Egypt, Indonesia, Nigeria, Thailand, and Ukraine for nearly two weeks of intensive training and peer learning at Lawrence Berkeley National Laboratory and NREL. Topics included clean energy analysis tools and data, advanced technology performance testing and validation, innovation and entrepreneurship, policy and deployment best practices, finance mobilization, and leadership. Ongoing coaching and mentoring are being provided as they move these projects forward, and another cohort will be trained in 2024.

To learn more about the CS-WEL program and the Net Zero World Initiative, please visit nrel.gov/international/net-zero-world.html.





































The Global Action Partnership



The Global Climate Action Partnership (GCAP; formerly the Low Emission Development Strategies Global Partnership or LEDS GP) is a member-driven, collaborative network focused on solutions to accelerate the implementation of ambitious, just, and resilient netzero and low-emission transitions. By emphasizing country-driven programming, GCAP's worldwide network accelerates ambitious climate goals and advances implementation in Africa, Asia, and Latin America and the Caribbean by:

- Conducting peer-learning through practitioner-driven communities of practice
- Supporting early movers to serve as inspiring models for others
- Providing quick response advisory support to countries in the GCAP regional platforms
- Enabling access to technical resources and best practice information.

Join GCAP's network and access a wealth of information and resources at globalclimateactionpartnership.org.

The Global Power System Transformation Consortium



The Global Power System Transformation (G-PST) Consortium is an expert- and practitioner-driven initiative that engages key power system operators, research and educational institutes, governments, businesses, and stakeholders in all regions of the world to accelerate clean energy transitions at an unprecedented scope and scale. The G-PST Consortium provides coordinated, holistic 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
- Accelerating localized technology adoption, standards development, and testing programs.

Learn more about G-PST and ways to get involved at globalpst.org.

The USAID-NREL Partnership



The National Renewable Energy Laboratory (NREL) partners with the U.S. Agency for International Development (USAID) to deliver clean, reliable, and affordable power in the developing world. Through the USAID-NREL Partnership, USAID Missions and their host country counterparts can access the best-in-class research, resources, and expertise housed within the U.S. Department of Energy national laboratory network to tackle critical energy sector challenges experienced in the developing world.

Learn more about the USAID-NREL Partnership at nrel.gov/usaid-partnership.

Women in Power System Transformation

As a joint initiative of the USAID-NREL Partnership and G-PST Consortium, the Women in Power System Transformation initiative offers cutting-edge technical training, research opportunities, and professional development tailored to the operation of high variable renewable energy systems for women and other underrepresented groups working in utilities and power system operators. By addressing educational and professional barriers for women's entry and advancement in the power system workforce, this initiative aims to ensure that women can lead and fully partake in the economic and social benefits of the clean energy transition worldwide.

Learn more about this initiative at globalpst.org/what-we-do/workforce-development/women-in-power-system-transformation-initiative.

Reimagining Equitable and Sustainable Mobility: A Framework for the Transportation Sector



Decades of roadway prioritization in global transportation infrastructure investment has overemphasized designing one-size-fits-all public transit systems, resulting in widespread inequities in access, affordability, and reliability of transport options. An October 2023 technical report from the USAID-NREL Partnership highlights a just and sustainable mobility transition framework for transport practitioners and

policymakers, with a focus on gender-mainstreaming considerations. This conceptual framework emphasizes gender inclusion and outlines a pathway for a just and sustainable mobility transition that aligns with global decarbonization efforts.

Explore the full report at nrel.gov/docs/fy24osti/87449.pdf.



NREL is a national laboratory of the U.S. Department of Energy,

Office of Energy Efficiency and Renewable Energy, operated by