Global Power System Transformation Consortium

Several countries, regions, and states are leading the transitions to electricity systems primarily powered by renewable energy and other low-emission energy sources. Complementary storage, efficiency, and smart grid technologies are helping advance these transitions, along with increased sector coupling.

GLOBAL PST

ONSORTIUM

Jurisdictions around the world are seeking to follow these paths to modern, low-emission energy systems to meet a range of environmental, economic, and reliability governments, businesses, and stakeholders in all regions of the world to accelerate clean energy transitions at the ambitious scope and scale that is required.

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; and accelerating localized technology adoption, standards development, and testing programs.

goals. However, governments, system operators, research and educational institutes, and other actors face significant challenges in acquiring and applying the requisite knowledge to rapidly transform power systems.

There is a clear need for a global consortium to overcome these common barriers across all regions and foment clean energy transitions at unprecedented scope and scale.

To address this need, the Global Power System Transformation (G-PST) Consortium, an expert- and practitioner-driven initiative, engages key power system operators, research and educational institutes,

Visionary Goal

Dramatically accelerate transitions to low-emission, low cost, secure, and reliable power systems contributing to >50% emission reductions over 10 years, with \$2 billion of donor support for technical, market, and workforce development solutions that unlock \$10 trillion+ of private sector investment.

The Consortium Advances Action in 5 Areas that Reinforce Existing Initiatives

3. Foundational

Workforce

Development

1. System Operator Research & Peer Learning

Perform cutting-edge applied research to create novel system operator solutions and globally disseminate and infuse new insights through peer learning 2. System Operator Technical Assistance

Provide implementation support to scale established best practice engineering and operational solutions Build the inclusive and diverse workforce of tomorrow through enhanced university curriculum and technical upskilling for utility and system operator staff 4. Localized Technology Adoption Support



Adapt modern power system technologies to individual country contexts through testing programs and standards development activities 5. Open Data and Tools



Support rigorous planning, operational analysis and enhanced real-time system monitoring through open data and tools



For more information visit <u>www.globalpst.org</u> or contact us by email at <u>globalpst@nrel.gov</u>.



Regional training, peer exchange, and communities of practice for system operator personnel from all countries with lighter expert advisory support available to all

