POWER AND ENERGY FUTURE

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Editorial

Power and Energy Future: A New Journal for a New Era

Welcome to the inaugural issue of *Power and Energy Future (PEF)*, an international, peer-reviewed, open-access journal dedicated to advancing interdisciplinary research in energy systems engineering and sustainable energy science. Established under the auspices of Northeast Electric Power University, China, and jointly published with Tsinghua University Press via the SciOpen platform, PEF provides a forum for disseminating high-quality research that connects fundamental science, technological innovation, industrial development, and practical applications across the global power and energy sector.

The global energy landscape is undergoing rapid and profound transformation, driven by decarbonization goals, technological innovation, and the imperative of sustainable development. Energy systems are becoming increasingly interconnected with environmental, digital, economic, and policy domains. In this context, *PEF* seeks to reflect the complexity of contemporary energy challenges by encouraging contributions that integrate diverse methodologies and perspectives. The journal places particular emphasis on research that advances both technological innovation and system-level understanding, thereby supporting the evolution of future energy systems.

Power and Energy Future publishes original research articles, review papers, perspectives, and case studies addressing major developments in energy systems. Areas of interest include, but are not limited to, energy system transition and resilience, integrated solutions for sustainable cities, digitalization and artificial intelligence in energy, emerging low-carbon technologies, energy governance and equity, and cross-sector energy integration ("Electricity + X"). Contributions that demonstrate both scientific rigor and practical relevance are especially encouraged, with a focus on solutions that are scalable and applicable in real-world contexts. The journal aligns with global efforts such as the Paris Agreement and China's "Dual Carbon" strategy, and supports ongoing initiatives toward low-carbon, sustainable energy development and the broader global energy transition.

This inaugural issue reflects the journal's interdisciplinary vision. The papers included explore topics such as advanced load forecasting, data-driven demand prediction, building-level energy flexibility, applications of artificial intelligence, optimization of distributed energy systems, climate-related transition pathways, and emerging technologies for energy utilization. Together, they illustrate the diversity, vitality, and evolving nature of research in this field.

The successful launch of this journal has depended on the dedication and contributions of the editorial board, authors, reviewers, and publishing team, to whom we express our sincere appreciation. As the journal grows, *PEF* remains committed to upholding high academic standards and fostering constructive exchange within the research community.

We warmly invite researchers and practitioners worldwide to contribute to *Power and Energy Future*. Through continued collaboration and knowledge sharing, the journal aims to support the advancement of sustainable, resilient, and forward-looking power and energy systems.

We look forward to working with all of you to make *PEF* an influential journal in this dynamic and vital field.

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