Special Session Proposal

A Changing World: Balancing Economic Growth with Sustainable Energy Transitions

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Abstract

The world is facing two global challenges of paramount importance: limiting global warming to 1.5°C and fostering inclusive and equitable socio-economic development. These challenges should not be seen as conflicting objectives but as interconnected goals to be addressed simultaneously through integrated solutions. In this context, the energy transition emerges as a transformative process requiring systemic changes across technological, social, and political dimensions (Geels, 2011). The energy transition is a holistic concept aimed at improving energy efficiency, affordability, and system reliability, reducing dependence on fossil fuels, and achieving energy independence (Cantarero, 2020). Its implementation can contribute to achieving climate goals while simultaneously promoting sustainable and just development for all. However, the transformations needed to realize these objectives must be carefully managed to avoid exacerbating existing social and economic inequalities (Heffron & McCauley, 2018). This session explores the transformative role of energy transitions in building resilient systems capable of addressing contemporary challenges, including climate change, economic uncertainty, and social inequalities. The discussion will focus on the contribution of energy transitions to shaping more equitable economic systems, promoting social cohesion, and ensuring environmental sustainability. This special session seeks to develop knowledge and solutions that contribute to realizing sustainable, inclusive, and resilient energy systems. The proposed contributions are hoped to offer innovative insights, advanced methodologies, and practical applications capable of addressing today's urgent challenges.

References

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