

Kathmandu | 11-13 December 2024

Parallel session: Tapping clean energy for development Date: 12 December 2024 Time: 11:15-13:00

South Asia's energy landscape is characterized by a heavy reliance on fossil fuels, which account for a substantial portion of the region's energy mix. This dependency has led to high greenhouse gas emissions, air pollution, and vulnerability to global energy price fluctuations. Notably, South Asia imports approximately two-thirds of its energy needs, making it susceptible to external shocks, such as geopolitical tensions and global market volatility. Moreover, with 42.3 percent of its population still living under \$3.65 (PPP) a day (September 2023), South Asia is in dire need of rapid economic development, which is going to be substantially energy intensive.

At the same time, the region is endowed with vast renewable energy resources, including solar, wind, and hydropower. Countries like Bhutan and Nepal have made significant progress in harnessing hydropower, while India is rapidly expanding its solar and wind energy capacity. The transition to clean energy presents an opportunity not only to reduce emissions but also to enhance energy security, create jobs, and stimulate economic development.

Countries in South Asia have made net-zero pledges; hence, they have to tailor their energy mix towards cleaner fuels to attain their economic ambitions. However, they face significant financing gap for renewable energy projects, estimated at US\$5 trillion annually to reach net-zero emissions. Many South Asian countries face challenges in integrating renewable energy into existing grids due to outdated infrastructure and insufficient transmission capabilities. They also require a coherent and supportive regulatory framework to aid the energy transition.

This session will explore the critical role that clean energy plays in driving economic growth and sustainable development in the region. South Asia, home to some of the fastest-growing economies globally, faces significant challenges related to energy demand, environmental sustainability, and economic resilience. The issues and questions the session aims to address include:

- What actions are needed to effectively harness the key renewable energy resources available in South Asia for economic development?
- How can South Asian countries create a supportive regulatory environment that encourages private sector investment in renewable energy?
- What role can regional cooperation play in enhancing clean energy adoption and economic development across South Asia?
- What are the potential economic impacts of transitioning to clean energy, and how can these benefits be maximized and costs minimized?
- What role can international cooperation and collaboration play in accelerating the adoption of clean energy technologies in South Asia?