Chintan Research Foundation

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Symposium on

THE POWER OF PARTNERSHIP

Advancing India-Nepal Energy Cooperation



01 December 2026

9 am-1:30 pm

Hotel Himalaya, Lalitpur, Kathmandu, Nepal

South Asia's power sector landscape is changing in line with energy security goals, decarbonisation commitments and rising electricity demand, particularly in the context of increasing economy wide electrification focus. In this era, India and Nepal share a strong and growing partnership in the power sector. Under the Agreement for Long-Term Power Trade signed in 2024, the two countries have set a target of exporting up to 10,000 MW of electricity from Nepal to India over the next decade. By 2031–32, the India–Nepal cross-border power transfer capacity portfolio is expected to total around 15 GW, comprising 1.6 GW of existing capacity, 8.1 GW under construction, and 5.4 GW at various stages of development[1].

Nepal has built a successful hydropower sector and has become an electricity exporter during the monsoon season. At the same time, studies highlight climate and hydrological variability as a significant challenge for Nepal's growing hydropower sector. Power evacuation infrastructure, such as transmission lines and associated infrastructure, must traverse hilly and mountainous terrain, where exposure to climate-induced hazards increases, deepening the vulnerabilities. Therefore, the next step is to add other forms of renewable energy sources to this foundational base with the underlying rationale that a more diverse generation mix will help the Himalayan country maintain a stable electricity supply across all seasons, continue to export surplus meaningfully and adapt to changing climate patterns.

Solar and other renewable energy sources, if tapped properly, offer a major complementary opportunity for this. A GIS-based land use and topography assessment estimates that Nepal could generate up

[1]Central Transmission Utility of India Limited, ISTS ROLLING PLAN- INTERIM REPORT (2031-32). (2026)

to 552 TWh (terawatt-hour) per year from ground-mounted, rooftop and agrivoltaic systems. The levelised cost of solar electricity is estimated at USD 56–72 per MWh[2]. Agrivoltaics also have an added significant potential for producing clean electricity in rural areas without affecting agricultural production, when operationalised responsibly.

Furthermore, solar and hydropower complement each other well. Solar output is higher during the dry season, while hydropower generation peaks during the monsoon. Together, they can support a more reliable electricity supply throughout the year, facilitate the electrification of cooking, transport and industry, and strengthen Nepal's energy security agenda.

In this regard, Nepal can leverage this complementarity to build on its existing energy partnerships to develop a broader regional energy partnership. Harnessing available renewable energy potential can help Nepal serve its domestic demand while creating opportunities to export surplus power to India and other neighbouring countries and accessing a broader regional electricity market. For India specifically, such cooperation can add clean hydro power to an already greening grid, improve seasonal power balancing and, in the longer term, further enhance the relationship between the two nations that share a historical friendship.

These synergies provide a basis for mutually beneficial India–Nepal energy cooperation and can also help the development of the broader regional electricity market in the BIMSTEC region. Nepal's substantial hydropower potential and other emerging renewable sources, alongside India's experience in project development across the power sector value chain, established energy-sector institutions with strong regulatory frameworks, and access to private sector investment, expertise in manufacturing and a booming demand centre, offer significant avenues for enhanced collaboration. Taken over time, sustained cooperation along these lines will support seasonal power balancing, strengthen regional energy security, and contribute to the respective countries' clean energy transition goals.

With this background, Chintan Research Foundation (CRF), India, in partnership with the Asian Institute of Diplomacy and International Affairs (AIDIA) and Kathmandu University in Nepal, aims to organise a half-day symposium that will bring together policymakers, industry, researchers and energy experts to deliberate and examine how Nepal can use its renewable energy potential to advance domestic economy wide electrification and energy security, and how India–Nepal cooperation, particularly in the domain of private investments and energy markets can turn this potential to mutually beneficial outcomes.

The symposium is structured around two interactive panel discussions:

Panel 1: From Potential to Power: Building a Resilient Energy Future for Nepal

Despite its significant renewable energy potential, Nepal's energy sector faces multiple challenges, including delays in project implementation, seasonal variability in hydropower generation, climate-related risks to generation and evacuation assets, and the need to mobilise investment, especially in transmission infrastructure to meet growing electricity demand. This session aims to explore how Nepal can address these challenges to harness its hydropower and include other renewable energy

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[2]Bhatta, Geeta & Lohani, Sunil & Kc, Manisha & Bhandari, Ramchandra & Palit, Debajit & Anderson, Timothy. (2025). Harnessing solar PV potential for decarbonisation in Nepal: A GIS based assessment of ground-mounted, rooftop, and agrivoltaic solar systems for Nepal. Energy for Sustainable Development. 85. 10.1016/j.esd.2024.101618.

resources in the mix, accelerate project development, and strengthen domestic energy security. It will also examine approaches to developing climate-resilient infrastructure, establishing effective benefit-sharing mechanisms, protecting energy assets against emerging risks, and enabling utilities to be future-ready to support a reliable, sustainable, and resilient energy system.

Panel 2: From Capacity to Market: Advancing India–Nepal Electricity Cooperation

India and Nepal have made steady progress in strengthening bilateral electricity cooperation, supported by cross-border transmission infrastructure, power trade agreements, and growing opportunities for Nepal to export its surplus hydropower. As Nepal expands its generation capacity and India's demand for clean electricity grows, cooperation can extend beyond bilateral exchanges towards greater participation in a broader electricity market. This session aims to explore opportunities to expand cross-border electricity trade, strengthen transmission connectivity, and facilitate Nepal's access to regional markets. It will also examine the regulatory coordination and investment requirements needed to translate Nepal's generation potential into sustained economic gains, enhanced energy security, and mutual benefits for both countries.

About Chintan Research Foundation (CRF)

CRF is an independent think tank based in New Delhi, India and is dedicated to shaping policy in the Global South through rigorous research and thought leadership focusing on three core domains – Climate Change & Energy Transition, Economy & Trade, and Geopolitics & Strategic Studies.

For more details visit www.crfindia.org

About Asian Institute of Diplomacy and International Affairs (AIDIA)

AIDIA is an independent, non-partisan, and non-profit think tank based in Kathmandu, Nepal. Since its founding in 2014, AIDIA has been a leading platform for research and dialogue on foreign policy, geopolitics, economy, trade, energy, and security.

For more details visit www.aidiaasia.org

About Kathmandu University (KU)

KU is an autonomous, not-for-profit, self-funding public institution established by an Act of Parliament in December 1991. It is an institution of higher learning dedicated to maintaining the standard of academic excellence in various classical and professional disciplines.

For more details visit ku.edu.np

Tentative Agenda

Time	Agenda item	Details/Speakers
09:00-09:30 am	Registration	Participant arrival and networking
09:30-10:10 am	Inaugural Session	• **Welcome Remarks:** Dr Debajit Palit, Centre Head, Centre for Climate Change and Energy Transition, CRF • **Keynote Address:** Hon. Mr Biraj Bhakta Shrestha, Minister, Ministry of Energy, Water Resources and Irrigation, Nepal (TBC) • **Special Address:** Dr Ram Prasad Dhital, Chairman, Electricity Regulatory Commission, Nepal
10:10-10:30 am	Tea/Coffee	Networking break
10:30-11:45 am	**Panel 1: From Potential to Power: Building a Resilient Energy Future for Nepal**	**Presentation by Prof. Sunil Prasad Lohani**, Professor, School of Engineering, Kathmandu University **Panellists** • **Mr Gokarna Raj Pantha**, Joint Secretary at the Ministry of Energy, Water Resources and Irrigation, Nepal • **Mr Mohan Kumar Dangi**, President, Independent Power Producers Association of Nepal (TBC) • **Mr Nawa Raj Dhakal**, Executive Director of Alternative Energy Promotion Centre (AEPC) **Moderator:** Prof Tri Ratna Bajracharya, Professor, Institute of Engineering, Tribhuvan University
11:45 am-12:00 pm	Tea/Coffee	Networking break
12:00-01:15 pm	**Panel 2: From Capacity to Market: Advancing India–Nepal Electricity Cooperation**	Keynote address by **Mr Sunil KC**, Founder, Asian Institute of Diplomacy and International Affairs (AIDIA), Vice President at Nepal-India Chamber of Commerce & Industry (NICCI) **Panellists** • **Mr Batu Lamichhane**, Chairperson of the Renewable Energy Committee, Federation of Nepalese Chambers of Commerce & Industry (FNCCI) (TBC) • **Mr Mohan Das Manandhar**, Chairman, Nepal Energy Foundation (TBC) • **Mr Paras Kharel,** Executive Director, South Asia Watch on Trade, Economics and Environment (SAWTEE) (TBC) • **Prof. Shree Raj Shakya**, Director at Centre for Energy Studies, Institute of Engineering, Tribhuvan University **Moderator:** Dr Debajit Palit, CRF
01:15-01:30 pm	Closing Remarks & Wrap-up	Synthesis of discussion and actionable steps forward
01:30 pm onwards	Networking Lunch	End of Symposium