

Fourteenth session of the IRENA Assembly

Side event

17 April 2024, 13:00 – 14:30 GST

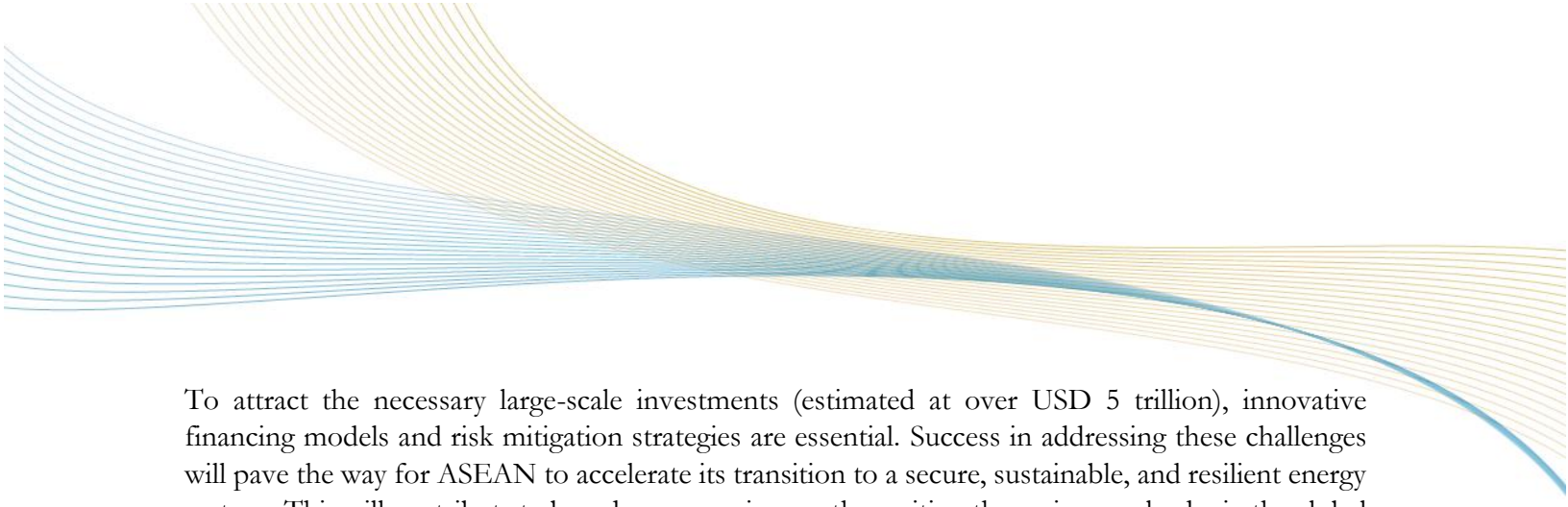
St. Regis Hotel, Saadiyat Island, Abu Dhabi

Accelerating ASEAN's Growth and Resilience: Grid Interconnections Power the Tripling of Renewables

Background

The Association of Southeast Asian Nations (ASEAN) member states face the interconnected challenges of rising energy demand, the urgent need to address the climate crisis, and the pursuit of sustainable economic development. Regional power grid interconnections present a transformative opportunity to meet these challenges, aligning with the global pledge to triple renewable energy deployment by 2030 and the imperative to strengthen Nationally Determined Contributions (NDCs) by 2025.

A recent ASEAN Interconnection Masterplan Study (AIMS) III outlines grid interconnection projects with a combined capacity of 20 GW, highlighting the significant potential for regional power system expansion. Enhanced interconnection offers the opportunity to lower electricity costs, improve overall reliability of the system, and optimise the region's vast solar resources. The operational Lao PDR – Thailand – Malaysia – Singapore – Power Integration Project (LTMS-PIP) framework provides a foundation for discussing and implementing new cross-border initiatives within the region. The development of policies and regulations that facilitate and incentivise renewable energy investment across ASEAN member states is essential to realising this potential. IRENA's Renewable Energy Outlook for ASEAN reveals the substantial potential of this approach: grid interconnections, combined with a strong push for renewables, could boost ASEAN's renewable energy share to 65% of the total energy mix by 2050. This would result in a significant 75% reduction in energy-related carbon emissions compared to current policy projections. IRENA's analysis suggests ASEAN's power sector transformation could drive economic growth and create new opportunities in the renewable energy technology sector. Integrated planning, regulatory alignment focused on streamlined tariffs and a supportive environment for cross-border energy trade will further accelerate this positive transformation. Realising these benefits requires a concerted effort and strategic collaboration. Technical harmonisation, including common grid operation standards and robust cybersecurity protocols, will pave the way for reliable cross-border power exchange.



To attract the necessary large-scale investments (estimated at over USD 5 trillion), innovative financing models and risk mitigation strategies are essential. Success in addressing these challenges will pave the way for ASEAN to accelerate its transition to a secure, sustainable, and resilient energy system. This will contribute to broader economic growth, position the region as a leader in the global energy transition, and demonstrate the power of collaborative action in achieving climate goals.

Objectives

This event will convene stakeholders to:

- **Develop a Shared Vision:** Develop a compelling statement highlighting the transformative potential of regional power grid interconnections to address ASEAN's interconnected energy, climate, and development challenges.
- **Catalyse Partnerships and Investment:** Showcase ASEAN's significant renewable energy potential and highlight investment opportunities. Explore strategic partnerships with international organisations, development banks, and the private sector to unlock investments, access technical expertise, and implement innovative financing models.
- **Facilitate Knowledge Exchange and Regional Coordination:** Identify and share successful initiatives, policies, technical solutions, and financing mechanisms within the ASEAN region and globally. Discuss strategies for strengthening regional institutions and collaboration mechanisms to advance grid interconnection efforts.

Guiding Questions

- How can ASEAN articulate a compelling vision that galvanises political will and public support for grid interconnections?
- What are the most urgent policy reforms and regulatory changes that individual nations must prioritise? What role does an integrated approach to planning play in achieving the goal of a greater interconnected power system?
- What new financing models and risk mitigation strategies are most effective for grid infrastructure projects in the ASEAN context?
- How can ASEAN leverage partnerships to access cutting-edge technologies and best practices?
- What existing ASEAN initiatives can be strengthened or better leveraged to accelerate progress on grid interconnections?
- What lessons can be learned from other regions with successful interconnected power systems?



Associated Publications

[IRENA & ACE \(2022\), Renewable energy outlook for ASEAN: Towards a regional energy transition \(2nd ed.\) \(IRENA and ASEAN Centre for Energy, 2022\).](#)

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