

Building the ASEAN Community

ASEAN Power Grid

Enhancing Electricity Interconnectedness



Secure and reliable electricity infrastructure is vital to support regional economic growth and integration process. The ASEAN Power Grid (APG) is an initiative to construct a regional power interconnection to connect the region, first on cross-border bilateral terms, and then gradually expand to sub-regional basis and subsequently leading to a total integrated South East Asia power grid system. As one of the physical energy infrastructure projects in the Master Plan of the ASEAN Connectivity, the APG project is expected to enhance electricity trade across borders that would provide benefits to meet the rising electricity demand and improve access to energy services in the region.

As of today, six bilateral interconnections have been in operations, linking Singapore and Peninsula Malaysia, Thailand and Peninsula Malaysia, and via Thailand to Cambodia, Lao PDR and Vietnam. Six APG projects are under construction with a schedule of completion in 2017. The Sarawak-West Kalimantan interconnection was planned to be completed early this year, but due to some issues in the project site, the completion of the project was rescheduled to mid of the 2015. Recently, a new initiative was announced by four ASEAN Member States, namely: Lao PDR, Thailand, Malaysia, and Singapore (LTMS), to undertake a pilot (study) project to explore multilateral cross border power trade from Lao PDR to Singapore which could serve as pathfinder to further enhance multilateral electricity trading.

The APG project provides opportunities for private sector involvement in terms of investment, including financing and technology transfer. According to the International Energy Agency, through the year 2035, about USD 990 billion investments will be required in the ASEAN's power sector development, which represent more than 50% of the total amount needed in the region's energy-supply infrastructure according to the International Energy Agency¹. Nonetheless, as the expansion of the interconnections under APG is continuing, financing investment for particularly less-developed Member States on this project remains a challenge. Private and foreign companies' involvement is thus expected to play an important role in developing the ASEAN power infrastructure.

A significant number of future interconnection projects will require marine/undersea cable interconnections, which will involve the grid of Peninsular Malaysia – Sumatera Indonesia, or inland interconnections, involving the grid of Cambodia, Lao PDR, Myanmar and Viet Nam. The APG project will also require optimisation of generation fuel mix, establishment of a regional regulatory and technical framework as well as development of a mechanism for raising capital to create market confidence for the funding and investment of the APG.

TO LEARN MORE

1. [MoU on the ASEAN Power Grid \(APG\)](#)
2. [Heads of ASEAN Power Utilities/Authorities \(HAPUA\)](#)

For more information, please visit <http://www.asean.org/communities/asean-economic-community/category/asean-ministers-on-energy-meeting-amem> or send an email to aimo@asean.org

