Power Without Borders: Thailand's Energy Diplomacy and the Future of ASEAN Electricity Integration

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A high-angle night shot of central Bangkok, capturing the city's modern skyscrapers, historic temple rooftops, and the Chao Phraya River glowing under city lights.

Why the ASEAN Power Grid Matters Now

Southeast Asia faces a convergence of pressures that has returned regional electricity connectivity to the top of the diplomatic agenda. Energy demand across ASEAN is projected to triple by 2050 (Asian Development Bank [ADB], 2025), while member states pursue decarbonisation commitments and manage the decline of domestic fossil fuel reserves. The political case for pooling the region's renewable resources through an integrated grid is

compelling, yet the ASEAN Power Grid (APG), first conceived in 1997, has progressed slowly. Ember Energy's August 2026 report found that cross-border trade accounts for approximately 0.5% of ASEAN total generation, with roughly 2.8 gigawatts (GW) of grid-to-grid capacity in service (Pham, 2026). The gap between political consensus and investable infrastructure remains the central problem. The region's electricity systems remain nationally bounded precisely because the political economies that sustain them are.

Three developments in 2026 define the current state of progress. In January, utilities from Laos, Thailand and Malaysia signed the second-phase Energy Wheeling Agreement (EWA) under the Laos-Thailand-Malaysia-Singapore Power Integration Project (LTMS-PIP 2.0), expanding a four-country trading arrangement to a maximum of 200 megawatts (MW). In October, Singapore and the World Bank launched a three-year ASEAN Power Grid Mobilisation Partnership to address regulatory and financing obstacles. Days later, ASEAN energy ministers gathered in Manila for the 44th ASEAN Ministers on Energy Meeting (AMEM). This brief argues that the 2026 agreements represent genuine but limited progress, and that understanding why requires examining the competing interests and institutional constraints that shape what any multilateral electricity agreement can deliver.

The ASEAN Power Grid

The APG's core premise is that the region's electricity resources are unevenly distributed. Laos and the Mekong sub-region hold surplus hydropower, and Singapore and parts of Malaysia face constrained domestic generation capacity. An integrated grid could allow surplus generation to reach deficit markets, lower costs, and accelerate the energy transition (ADB, 2025). The gap between that vision and current reality has three structural sources: the APG is a collection of bilateral projects rather than a single integrated system; coordinating institutions can facilitate agreement but hold no enforcement authority, with any member state retaining a de facto veto (Weno et al., 2025); and regulatory environments remain almost entirely national, with each state setting its own rules on generation licensing, transmission access, and tariff structures (Bernama, 2026).

Thailand's Position: Energy Security, Transit and Diplomatic Interests

Thailand occupies an unusual position in ASEAN's electricity architecture. The Electricity Generating Authority of Thailand (EGAT) operates as a state-owned, single-buyer utility, generating approximately 60% of domestic supply from natural gas, a dependence that has become costly as Gulf of Thailand reserves decline and liquefied natural gas (LNG) imports replace them (EGAT, 2026; Majkut & Sawhney, 2025). Thailand has purchased

Lao hydropower for decades, making it the natural transit country for the LTMS-PIP concept. It wheels electricity from Laos across its national grid towards Malaysia and Singapore, receiving wheeling charges for that service. Its interest in regional integration is both commercial and diplomatic, reinforced by Thailand's upcoming ASEAN chairmanship in 2027, during which it has committed alongside Singapore to advance APG progress (Kang, 2026).

The four LTMS-PIP participants have structurally different interests. Laos is the exporting state with the strongest incentive: hydropower accounts for 72.7% of installed capacity, the country exported 40.8 terawatt-hours (TWh) in 2025 (GlobalData, 2026), and electricity revenue is critical given Électricité du Laos (EDL's) sovereign debt of approximately US Dollars (USD) 5.7 billion (Schirren et al., 2025). Yet Laos faces constraints, as roughly 80% of generation is hydropower, leaving its export capacity vulnerable to variability in Mekong rainfall. Malaysia's Tenaga Nasional Berhad (TNB) earns wheeling charges for transmitting Lao electricity towards Singapore and views APG participation as a means of solidifying its regional position (Bernama, 2026). Singapore, the terminal market, aims to import up to 4 GW of low-carbon electricity by 2035, but its primary constraint is contractual security over the life of a power purchase agreement.

The Negotiating Challenges: Why Cooperation Is Difficult

Electricity wheeling, the transmission of power generated in one country through another's network to reach a third, is the technical mechanism at the core of LTMS-PIP. Setting the price is the complication because wheeling charges must be high enough to incentivise the transmission utility, yet low enough to keep the arrangement profitable for the exporter. Asia Link's July 2026 analysis noted that, despite the framework's commercial success, negotiations over wheeling charges had generated tensions (Thompson & Frisandi, 2026). Pham (2026) identified harmonised and transparent wheeling charges as a prerequisite for bankable cross-border projects. The broader difficulty is that ASEAN member states each set their own electricity tariffs, reflecting domestic subsidy regimes and political choices about affordability. Harmonising prices across systems with such different domestic political economies requires either supranational authority, which ASEAN does not possess, or commercially acceptable bilateral agreements despite those underlying differences.

Each member state retains authority over generation licensing, transmission access, grid codes and export taxes; no body is empowered to resolve conflicts (Weno et al., 2025). For investors, this fragmentation complicates bankability. Long-term project revenues depend on regulatory stability in transit and destination countries; if national regulators can unilaterally modify wheeling charges or access terms, risk premiums rise and financing becomes unavailable at an acceptable cost of capital. The Singapore-

World Bank ASEAN Power Grid Mobilisation Partnership, launched 1 October 2026, targets this problem by promoting regulatory cooperation and addressing cross-border wheeling arrangements (Ministry of Finance Singapore, 2026). Its significance lies in the acknowledgement that regulatory uncertainty, rather than the absence of infrastructure, is the binding constraint. Whether a three-year partnership can produce durable regulatory agreements across a ten-member consensus organisation remains an open question. EWA Phase 2 sidesteps this problem by using existing infrastructure on a two-year renewable basis, avoiding the investment decisions that bankability barriers would otherwise block (Malay Mail, 2026).

Each LTMS-PIP participant maintains domestic energy-security objectives that constrain the depth of its integration commitments. Thailand's Power Development Plan 2024 targets a 51% share of renewables by 2036, with imports from neighbouring countries listed as a supplementary rather than a structural source of supply (Praiwan, 2024). The result is a pattern of asymmetric interdependence (Keohane & Nye, 1977): each country benefits from the arrangement, but the nature of its dependence differs. Singapore can diversify through alternative submarine cable routes; Laos has few customers with Singapore's purchasing power; Thailand is indispensable as a transit country but entails corresponding grid-management complexity.

Development Finance and the Role of Multilateral Institutions

Multilateral development banks can prepare projects, reduce risks and mobilise private capital, but cannot substitute for the commercial and regulatory agreements that determine whether a project is fundable. The ASEAN Power Grid Financing Initiative, launched by ASEAN, the Asian Development Bank (ADB) and the World Bank in October 2025, committed up to USD 10 billion from the ADB and USD 2.5 billion from the World Bank, including USD 12.7 million in project-preparation grants (Kang, 2025).

Implications for the Wider Indo-Pacific

The LTMS-PIP experience establishes a demonstrated model for multilateral electricity trade in a region where most cross-border arrangements remain bilateral. Four countries with different regulatory systems and energy-security priorities have produced a functioning trading arrangement, confirming that consensus-based ASEAN institutions can deliver when interests converge sufficiently. The limitation is scale: at up to 200 MW across a four-country chain, LTMS-PIP 2.0 works because it relies on existing infrastructure and short-term agreements. Scaling to a truly regional grid requires qualitatively different institutional arrangements.

The 2026 developments also illustrate a broader Indo-Pacific trend: the increasing importance of infrastructure and regulatory diplomacy as a medium of influence. China's financing role in several Lao hydropower projects means that commercial and regulatory choices in the ASEAN

energy sector are not insulated from great-power competition. The ADB's and World Bank's engagement with the APG is, among other things, a means of establishing governance norms in regional infrastructure finance. For middle powers such as Australia and Japan, the APG offers a specific opportunity to contribute development finance in support of those norms (Thompson & Frisandi, 2026).

Thailand's transit role also offers a lesson for wider Indo-Pacific connectivity. Transit states face structurally different incentives from exporters or importers, and the commercial arrangements that satisfy their interests are more complex than simple revenue-sharing formulae suggest. Putnam's (1988) two-level logic applies directly: any energy minister negotiating a regional electricity agreement faces both international counterparts and domestic constituencies. The two-year duration of EWA Phase 2 is one consequence; it is a renewable arrangement that preserves each party's option to renegotiate as domestic conditions change.

Conclusion

The two 2026 developments together define the current frontier of ASEAN electricity integration. EWA Phase 2 demonstrates that multilateral electricity trading is operationally achievable. The most consequential barriers are institutional and political. Regulatory fragmentation, the absence of harmonised wheeling charges, the difficulty of long-term commercial agreements across states with different domestic tariff regimes, and the asymmetric distribution of costs and benefits among exporting, transit and importing states are the binding constraints. Development finance can reduce risk, but it cannot resolve the underlying negotiating problems that determine whether projects proceed. Thailand's success in managing its obligations as a transit country will be a significant determinant of how far the LTMS-PIP model can expand. For any infrastructure corridor in the Indo-Pacific where transit, exporting and importing states must negotiate terms across regulatory boundaries, the LTMS-PIP experience is an instructive case study in both the possibilities and the limits of cooperative infrastructure diplomacy.

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