

Security, integration and delivery certainty

Bolder Vision for ASEAN's energy ambition

During his opening keynote at Enlit Asia 2026, Black & Veatch's Jerin Raj, senior vice president and head of the company's Asia Pacific and India operations, called for improved regional coordination across governments, industry and investors, and more effective and integrated energy system planning, capability and delivery.



ASEAN's energy sector is entering a period of significant opportunity. Realizing and following through on the region's potential, however, faces several persistent constraints. As we move toward 2030, secure, resilient and future-ready energy infrastructure is achievable if countries across ASEAN align energy and digital infrastructure planning, industrial policy and regional cooperation more effectively.

Held as part of Enlit Asia 2026, themed 'Powering Regional Sovereignty, Securing Energy Systems Resilience', the Executive Briefing brought together more than 30 senior government and industry leaders for a private discussion hosted by **Black & Veatch in partnership with Enlit Asia**.

Sequencing infrastructure investments to maximize growth, affordability and reliability

- **The real constraint is no longer generation. Infrastructure sequencing, rather than generation technology, increasingly determines the pace of progress.** Renewable generation, storage, transmission, liquefied natural gas (LNG) infrastructure, industrial loads and digital infrastructure are often planned separately. Success depends on synchronizing these investments so power systems, industry and digital economies can scale together and, as an industry, we can manage constraints across procurement of critical equipment and experienced engineering, procurement and construction (EPC) capabilities
- **Grid expansion and modernization is now critical for growth.** Delegates discussed how the recently announced 100 GWp of solar development program and major industrial expansion in Indonesia cannot be realized without parallel investment in transmission, substations and system flexibility. Demand – evolving industrial load profiles and demand centers – must be integrated into a reliable system. Connections between grids, between the many islands around ASEAN's archipelagic nations, was prominent in conversations
- Capital continues to flow toward generation, but **network investment remains a bottleneck.** Private developers are willing to fund generation projects, while transmission, storage and broader system upgrades remain more dependent on utility balance sheets, regulatory frameworks and public-sector execution capability

- **A last-mile gap remains.** Building more megawatts was seen as less of an issue compared to making sure reliable power is available at the right location, at the right time, whether that's meeting industry or island-community needs
- **Modernization and optimization can unlock additional capacity faster than new build alone.** While attention is focused on large-scale renewable deployment and industrial expansion, participants stressed that existing transmission networks, substations and legacy infrastructure require continued reinvestment, replenishment and modernization to maintain reliability and support future demand. Delegates discussed how better utilization of today's asset base – through integrated system planning, energy mix optimization (not every megawatt is generating with the same efficiency), digital technologies and targeted upgrades – can improve system efficiency, reduce costs and create additional headroom for future industrial and digital growth



Turn regional integration into a practical resilience strategy

- Energy security and regional integration are not competing priorities and must go hand-in-hand. Countries must secure reliable domestic supply first while using regional interconnections to provide additional resilience, flexibility and access to diverse energy resources. **Regional interconnections can provide additional resilience, flexibility and access** to diverse energy resources that no single market can deliver in isolation.
- Delegates discussed how **the true value of the ASEAN Power Grid may be system resilience rather than an export strategy**. Cross-border interconnections enable countries to share reserves, balance renewable variability and improve system reliability, helping reduce overall costs while strengthening energy security across the region.
- **Domestic growth and exports can reinforce one another when properly designed.** Delegates drew parallels with Indonesia's LNG sector, where export opportunities helped attract investment, build supply chains and create capability that also supported domestic development. Clean electricity exports could potentially play a similar role, provided domestic energy needs remain protected.
- **Regional integration could go beyond electrons and molecules.** With the focus on energy self-reliance first, and land availability in Indonesia, delegates also hypothesized the potential of exporting compute power across borders rather than only electrons.

Trust and certainty underpin ASEAN's infrastructure success

- The **greatest barrier to regional integration is not technology**, but confidence. Interconnections, subsea cables and power exchanges can be engineered. The more complex challenge lies in creating long-term trust between governments, regulators, utilities and investors around pricing, reliability, political continuity and commercial risk allocation.

- Policy consistency must accompany policy ambition, and **the most successful countries will be those that establish effective policy first before rushing into project or program delivery.** With governments across the region announcing increasingly ambitious targets for renewables, transmission expansion, industrial development and digital infrastructure, the differentiator will be the ability to provide predictable frameworks that allow private capital to invest with confidence and scale projects efficiently.
- There was also discussion on the importance of **empowered regulators with appropriate autonomy from utility operation** that could shape industry direction more effectively, faster and more dynamically. There was discussion on the importance of modelling scenarios to prepare for future shocks and enable better system adaptation, recognizing that new pathways for domestic alternative energy need to be planned for now even if their full commercialization may be years away. There was a discussion to modernize regulations or government support to help fast track certain infrastructure investments such as energy imports that have national impact.

Factor industrial and digital demand into infrastructure planning now

- **Data centers** are no longer simply large electricity consumers. They are becoming **catalysts for wider infrastructure transformation.** Their requirements are accelerating investment in generation, transmission, digital connectivity, water systems and regional power markets while challenging governments and utilities to rethink how infrastructure is planned, financed and delivered.
- **Data centers are exposing the limitations of existing power system planning models.** Higher rack densities, AI workloads and “five-nines” reliability requirements create a fundamentally different demand profile from conventional commercial loads. Utilities, governments and developers must now plan for a new class of asset that requires large-scale power capacity, near-zero interruption tolerance and accelerated delivery timelines, often years ahead of traditional grid investment cycles.
- **Demand from industry needs to be more accurately factored into investment and planning pathways.** Delegates discussed exploring incentive structures that could help meet firm power requirements from captive mining and processing operations with a greater share of renewable energy, moving the mining industry away from a reliance on fossil-fuel based captive power.

Close the gap between ambition and execution capacity

- **Execution capability will be a defining competitive advantage for ASEAN nations.** The greatest risks are no longer technology-related. Procurement, permitting, supply chains, workforce capacity, financing structures and project delivery capability will ultimately determine whether Indonesia and ASEAN convert energy potential into economic growth, digital infrastructure and industrial sovereignty.
- Delegates noted that ambitions around renewables, gas turbine generation, grids, data centers and exports are accelerating faster than the industry’s ability to procure and deploy critical equipment, creating a **growing gap between announced targets and execution capability.**
- **Supply chain readiness may ultimately determine the pace of the transition.** Discussion highlighted concerns around how rapidly the industry can scale manufacturing, sourcing and construction resources to support renewable energy deployment, storage systems, transmission infrastructure and industrial growth simultaneously. Delegates called for ways to overcome equipment supply bottlenecks such as centralized procurement systems.

“The next phase of ASEAN’s energy transition will not be constrained by a shortage of generation technologies or natural resources. It will be constrained by the ability to connect, finance, coordinate and deliver infrastructure at the speed required by industrial growth, data center demand and regional integration ambitions.” Jerin Raj, senior vice president and head of Asia Pacific and India, Black & Veatch.

What’s possible out there? Everything.

In an increasingly complex environment, clients need more than engineering or consulting alone. Black & Veatch brings together strategy, digital innovation, project delivery and operating asset expertise to clients across the infrastructure lifecycle, helping organizations move from ambition to execution with greater certainty, resilience and long-term value.

Who we serve. What we do.

MARKET SEGMENTS

ENERGY MAJORS & FUEL PRODUCERS



MINING, FOOD & AGRICULTURE



PUBLIC SECTOR



WATER UTILITIES



POWER PROVIDERS



FEDERAL AGENCIES



INDUSTRIAL & MANUFACTURING



TECHNOLOGY & DATA CENTERS



SOLUTIONS & SPECTRUM OF PROJECT LIFECYCLE SERVICES

POWER GENERATION	WATER	POWER DELIVERY/GRID	OPERATING ASSETS	INFRASTRUCTURE DEVELOPMENT
MISSION CRITICAL	PROCESS SOLUTIONS	LIQUEFIED NATURAL GAS	ENVIRONMENTAL SERVICES	CYBERSECURITY & RESILIENCY

INFRASTRUCTURE ADVISORY

STRATEGY

PLANNING & PROJECT DEVELOPMENT

ENGINEERING

PROCUREMENT

CONSTRUCTION

OPERATIONS

MODERNIZATION

DECOMMISSIONING

Looking for a partner in innovation? Let’s talk

[Connect with us here](#) or reach out to the team in Asia Pacific. Email Keith Morrison, Director of Marketing, APAC — morrisonkw@bv.com — and learn more about participating in Black & Veatch’s Executive Roundtable series in the region, and connecting with the team at next year’s Enlit Asia in Bangkok.