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Supply Shock

Illuminating a more resilient future for power generation

LNG currently supplies approximately 10% of total electricity generation across Asia Pacific, with more than a quarter of the region's gas imports usually passing through the Strait of Hormuz.[1] Conflict in the Middle East has largely shut off these flows, and prices have responded quickly. Damage to gas production infrastructure in the region means supply impacts are set to persist into the new year.

For power generation across Asia Pacific, exposure is uneven but material. Gas plays very different roles across national power systems: in Australia its role in generation is increasingly firming renewables; in Japan and South Korea it remains central to reliability; and in parts of Southeast Asia it is still being built out as a transition fuel.

Reliance on Middle Eastern LNG also varies, with Singapore, South Korea and Taiwan among the most exposed. However, no LNG-importing market is insulated when global supply tightens, prices rise and competition for cargoes intensifies.

With the Strait still closed to most energy cargoes nearly three months on, this now looks less like a short disruption and more like a structural shock. For some markets, this will accelerate substitution away from gas; for others, it will reinforce the need to secure gas for system stability while broadening the generation mix around it. In both cases, energy productivity becomes more important: operators that extract more value from each unit of fuel, capital and capacity will be better placed to manage volatility and protect performance.

This creates a two-speed agenda. The immediate focus is disciplined action to protect fuel security, dispatch economics and customer outcomes. Alongside this, generators need to accelerate decisions that reduce exposure to gas market shocks and strengthen long-term system flexibility.

Now: Protect fuel security and maximise energy productivity

The priority is tighter operational command and visibility. A cross-functional Control Room can provide that coordination, bringing together fuel supply, generation operations, trading, outages, maintenance and market commitments. This function should drive timely action as conditions shift, including plant re-dispatch, fuel reallocation across units, revised outage sequencing, hedge adjustments and updates to customer positions. In a constrained fuel environment, response speed is critical.

In practice, this often requires a rapid uplift in data and governance frameworks to establish a single, trusted view of operational, fuel and financial performance. Leaders need clarity on which megawatt hours remain commercial at prevailing gas prices, where limited fuel should be prioritised, and how quickly the economics shift under different price scenarios. Use unit-level margin visibility and fuel productivity metrics to inform these decisions. This needs to be asset-specific: sustained high fuel prices may push less efficient open-cycle gas plant out of merit first, while more efficient combined-cycle units can remain competitive for longer where fuel is available.

Demand-side flexibility can also help manage near-term capacity. Where regulatory frameworks allow, structure interruptible supply agreements with industrial customers to provide a controlled way to reduce peak demand. This can avoid high-cost spot procurement while maintaining customer trust. In more mature power markets such as Australia, Japan and Singapore, demand response aggregators add a further lever. Commission these programs or partner with existing providers to mobilise residential and small commercial load at scale, easing pressure on fuel procurement and improving peak reliability.

Strategic scan:

- Does your business have the integrated data and analytics to translate fuel, plant and market signals into dispatch and hedge decisions within days?
- Where is fuel delivering the lowest return, and what immediate operational changes would improve output per unit consumed?
- Which customers can be engaged now on interruptible supply or demand response to reduce peak exposure?

Next: Build portfolio flexibility and capture new value pools

Targeted investments that improve fuel optionality, portfolio flexibility and commercial performance grow in value the longer disruption persists. For gas-exposed generators, this starts with stronger LNG trading capability: more flexible sourcing, firmer portfolio visibility and more sophisticated hedging can materially improve resilience when cargo markets tighten. For some utilities, the case may extend further upstream through selective investment in LNG-producing assets or liquefaction positions that secure offtake and reduce exposure to spot procurement.

Reliability options also need to be considered more pragmatically. In some markets, extending the life of existing coal assets, or delaying retirement, may be part of the medium-term response where domestic or regionally secure coal supply carries lower disruption risk than imported LNG. The trade-off is clear: stronger fuel security can come at materially higher emissions and greater long-term transition risk. Where nuclear plants are available, restarting or extending this capacity should also be on the table for stabilising baseload supply, albeit with clear plans for managing social licence, safety and regulatory challenges.

Assess these choices across the full asset portfolio, balancing reliability needs against longer-term cost, emissions and risk factors. Consider reviewing and refreshing energy transition strategies to ensure they remain robust under a wider range of fuel price and supply scenarios, while positioning for the power sector's clear decarbonisation trajectory. Resilient grids will be those with both expanded capacity and a diverse energy mix.

This is also the right moment to reframe the conversation with large customers about long-term power supply. Many industrial and commercial customers that resisted green premiums are now facing the commercial consequences of fossil fuel volatility directly. Position long-term power purchase agreements for renewable or low-carbon supply first as resilience and price stability propositions. Reduced exposure to future fuel shocks will be a powerful driver for large energy customers.

Revenue diversification deserves equal attention. As renewable penetration rises across the region and synchronous generation retires, frequency regulation and inertia services from dispatchable thermal assets are becoming more valuable. Many operators are yet to fully capture that value; registering assets, optimising dispatch and actively shaping participation in ancillary service markets all create diversification opportunities. Engage early with system operators on market frameworks, asset readiness and participation rules to unlock a more resilient earnings base, particularly for younger gas assets likely to remain operational for decades.

These shifts will favour operators that can build and run repeatable capital programs across renewables, storage, grid-facing assets and associated customer infrastructure – creating competitive advantage through delivery capability. Invest in building stronger public-private partnership and contracting expertise, and the capacity to run a continuous portfolio of capital deployment.

Strategic scan:

- How much additional resilience would stronger LNG sourcing, hedging and upstream offtake provide?
- Which existing coal, gas or nuclear assets warrant life-extension analysis on reliability, emissions and economics grounds?
- Where does storage improve portfolio economics by displacing fuel exposure rather than simply adding capacity?

Future: Reduce structural exposure to disruption

The longer-term implications of the Strait of Hormuz closure will play out differently across markets. In some Asia Pacific markets, including Australia, Australia, focus on energy resilience is likely to accelerate forces already reshaping power generation: deeper renewable penetration, rising battery deployment, and further electrification of households and industry.

That impacts the generation mix and the wider gas value chain: pipelines, distribution networks and storage assets will have to recover fixed costs across declining throughput. Businesses exposed to those assets should carefully test how long costs can continue to be passed through, and at what point to exit, repurpose or rebalance portfolios.

Across the region more broadly, grid and electrification infrastructure becomes more strategic as a tool for resilience, alongside enabling integration of renewable energy. Networks, interconnectors, flexible dispatch pathways and system-strength investments reduce exposure to imported fuel shocks and allow capacity to be moved to where it is most valuable. Gas is still likely to retain an important role in many systems, but increasingly as firming capacity and a source of stability rather than as the dominant growth platform.

As Asia Pacific economies continue to electrify gas will play a critical balancing role. Maintaining operational discipline whilst broadening exposure across the electricity asset base will help underpin long term success. Invest in building stronger public-private partnership and contracting expertise, and the capacity to run a continuous portfolio of capital deployment.

Strategic scan:

- Which gas infrastructure assets face declining throughput risk first, and what are the triggers for exit, repurposing or rebalance?
- Where would stronger grid connectivity or interconnection most improve resilience, flexibility and renewable integration?
- Do you have the delivery model needed to build renewables and related infrastructure at sustained scale?

The immediate task is to keep fuel available, dispatch disciplined and customer impacts manageable. Durable commercial advantage will come from building a resilient power generation portfolio that is more flexible, less exposed to imported gas disruption, and better positioned for Asia Pacific's accelerating energy transition.

[1]IEA (2026) The Middle East and Global Energy Markets; IEA (2025) Asia Pacific energy supply

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