Utilities

Powering Malaysia's Next Infrastructure Supercycle

OVERWEIGHT

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Malaysia's power sector has entered a pivotal electrification era, driven by a structural shift from traditional industrial growth to a massive data centre resurgence. After decades of cooling demand, the data centre wave sparked a 6.2% consumption spike in 2024, with a 7,500 MW pipeline now in place. Although 2025 growth saw a temporary timing mismatch due to construction lags, the massive overhead of completed capacity represents a reservoir of pent-up demand poised to materialise through 2026. However, a critical supply gap looms as 6,400 MW of coal capacity retires by 2031, necessitating 12,000 MW of new builds to maintain grid stability. This urgency fast-tracks the NewGen26 tender and gas infrastructure projects like the Lumut RGT and Yan RGT. We maintain our OVERWEIGHT rating for the sector, with TENAGA (OP; TP: RM17.00) as our Top Pick; it is the prime beneficiary of the capex super-cycle to modernise the national grid, a momentum that fundamentally benefits SCGBHD (OP; TP: RM2.71) as well.

Malaysia's power shift, from industrial cooling to data centre surge. Historically, Peninsular Malaysia's electricity sales served as a reliable barometer for macroeconomic health. During the 1990s industrial boom, demand growth averaged a robust 13.8%, maintaining a 1.5x multiplier against GDP. However, subsequent decades saw a structural cooling with growth moderating to 5.9% (2000–2010) and slipped to 4.6% (2011–2019). This marked a decoupling where consumption lagged economic output, with the multiplier falling below 1x as growth averaged just 3.9% post-pandemic. The narrative shifted in 2024 as the data centre wave" drove a 6.2% resurgence. While 2025 growth appeared to soften to 2.3%, this reflects a timing mismatch. A 16.3% surge in non-residential construction highlights heavy investment in data centre shells, which typically take 12–18 months to go live, eventually triggering Malaysia's next major load cycle.

The data centre surge, powering Malaysia's next growth phase. Malaysia has rapidly evolved into a global hub for data centre, with hyperscale giants like AWS, Google, and Microsoft committing over USD16.5b. While strict NDAs often obscure project timelines, construction disclosures from listed companies, alongside upcoming tenders in Springhill Industrial Park, confirm a massive, multi-year build-out. This represents a structural electrification of the economy, as data centres supersede traditional industries as the primary driver of baseload demand. **TENAGA's** 2025 disclosures reveal a staggering 7,500 MW pipeline across 56 projects, though a significant utilisation gap remains. Total completed capacity has reached 4,500 MW, yet actual load stands at just 850 MW. However, with load surging 6-fold since early 2024, this overhead represents a massive reservoir of pent-up demand poised to materialise as facilities reach full server-rack population through 2026.

Malaysia's power evolution, bridging the 2030 capacity gap. Following the 1992 nationwide blackout, Malaysia introduced IPPs to secure grid stability, maintaining a comfortable 30%-40% reserve margin for decades. Recent "Track" projects, including the 2025 commissioning of Pulau Indah Power, provided the essential cushion needed to absorb the current data centre surge, without them, reserve margins would have likely dipped below 25% by 2024. However, a critical supply-demand mismatch looms as 6,400 MW of major coal capacity, including Kapar and Tanjung Bin, is slated for retirement between 2029 and 2031. To offset these exits and meet projected data centre loads, Malaysia requires c.12,000 MW of new capacity by 2031. This urgency places the spotlight on the NewGen26 tender, where players like **MALAKOF (OP; TP: RM1.00)** and **YTLPOWR (OP; TP: RM4.30)** hold a speed-to-market advantage through pre-emptively secured turbines. Bridging this gap will necessitate aggressive greenfield builds, strategic PPA extensions, and the eventual transition toward nuclear baseload.

Securing Malaysia's fuel and grid infrastructure for the energy transition. With 6,400 MW of coal capacity retiring by 2031, natural gas has become Malaysia's primary transition fuel, prompting the fast-tracking of two major RGTs. Petronas is developing RGT3 in Lumut, while **GASMSIA (MP; TP: RM5.23)** is progressing with an offshore RGT in Yan. Strategic vertical integration is emerging as a key trend, with **TENAGA** and **MALAKOF** eyeing equity stakes in these terminals to de-risk fuel supply chains for their upcoming CCGT projects. Simultaneously, **TENAGA** has entered a massive infrastructure super-cycle, with regulated capex jumping 108% to RM42.82b for the current regulatory period. Driven by the Green Lane Pathway for data centres, this front-loaded investment will structurally expand **TENAGA**'s RAB, ensuring long-term earnings growth as the grid modernises to support 7,500 MW of new demand.

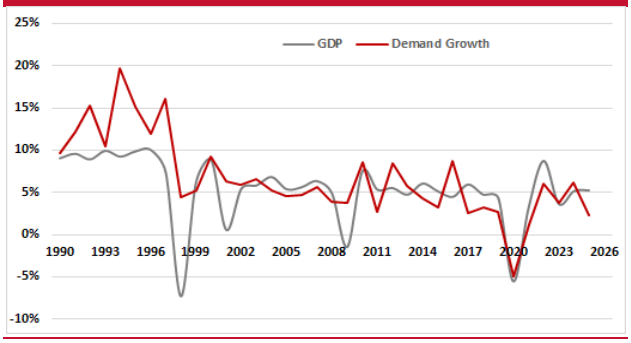
Maintain OVERWEIGHT: navigating the transition and carbon mandate. Ultimately, Malaysia's power evolution is defined by the tension between rapid electrification and aging baseload capacity. While the data centre wave secures multi-year demand upside, the looming retirement of 6,400 MW of coal necessitates an aggressive response through the NewGen26 tender and fast-tracked RGT projects. Parallel to these shifts, the regulatory landscape is tightening; the 2026 Climate Change Bill and the implementation of a National Carbon Tax will act as catalysts for IPPs to accelerate decarbonisation and avoid margin erosion. **We maintain our OVERWEIGHT rating for the sector**, with **TENAGA** as our Top Pick for spearheading the grid super-cycle, while **YTLPOWR** and **SCGBHD** remain prime proxies for the data centre surge and resulting grid reinforcement cycle.

HISTORICAL DEMAND GROWTH: THE END OF DECOUPLING?

From hyper-growth to structural moderation. Electricity sales have historically served as a reliable barometer for Malaysia's macroeconomic health, as evidenced by TENAGA's Peninsular Malaysia demand trends. During the rapid industrialization of the 1990s, prior to the 1997-1998 Asian Financial Crisis, TENAGA registered a robust average demand growth of 13.8% (1990–1997), a 1.5x multiplier against the country's average GDP growth of 9.2%. However, the subsequent decades saw a structural cooling. While Malaysia's GDP growth stabilised at an average of 5% (excluding the 2020 pandemic contraction), electricity demand growth began to decouple from economic output. Demand growth moderated to 5.9% between 2000 and 2010, and further deteriorated to an average of 4.6% during 2011–2019, consistently lagging behind GDP. This downward trend persisted into the post-pandemic era, with demand growth averaging just 3.9% from 2021.

A new catalyst emerges - the data centre inflection. A pivotal shift emerged in 2024, as the "data centre wave" catalysed a resurgence in consumption. Demand growth hit 6.2%, led by the commercial segment due to rising load from data centres, representing a strong 1.21x multiplier against 5.1% GDP expansion. While 2025 saw an apparent divergence, with demand growth softening to 2.3% despite GDP growth inching up to 5.2%, this was largely attributed to a timing mismatch. The 16.3% surge in non-residential construction GDP (within a broader 12.4% sector expansion) reflects the heavy capital expenditure of building data centre shells. This has yet to translate into operational load as these facilities typically lag construction by 12-18 months. Furthermore, this transition is currently masked by a cyclical drag in energy-intensive sectors under the industrial segment, such as steel and cement. This divergence is clearly reflected in the sectoral split - while the commercial segment jumped 10.0% YoY in 2025 (accelerating from +9.2% in 2024), the industrial segment saw demand contracting by 5.8% YoY, a sharp reversal from its 1.6% growth in 2024.

GDP Growth vs. Demand Growth



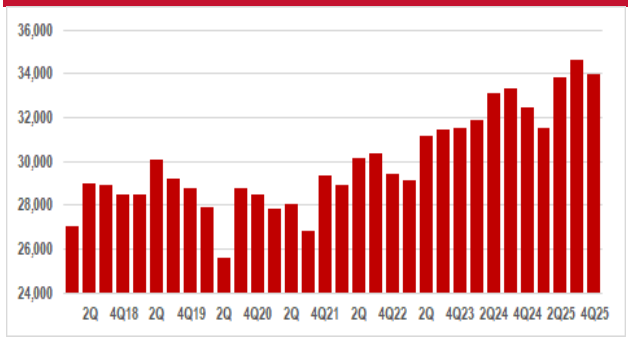
Source: Energy Commission/Tenaga

GDP Growth vs. Demand Growth

Period	Avg. GDP Growth	Avg. Demand Growth	The Multiplier
1990-1997	9.2%	13.8%	1.50x
1998	-7.4%	4.4%	N/A
2000-2010	5.0%	5.9%	1.16x
2011-2019	5.1%	4.6%	0.90x
2020	-5.6%	-4.9%	0.88x
2021-2025	5.1%	3.9%	0.75x

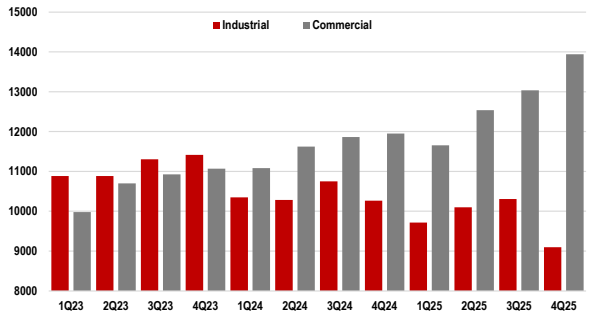
Source: Energy Commission/Tenaga

TENAGA: Monthly Electricity Sales (GWh)



Source: Tenaga

Unit Sales (GWh): Industrial vs. Commercial



Source: Tenaga

FUTURE DEMAND GROWTH: POWERING THE DATA CENTRE BOOM

The energy consumption monster – data centre. Malaysia has emerged as a premier hub for global data centre development, underpinned by strategic geographical advantages and aggressive government incentives. Since March 2023, hyperscale players including Amazon (AWS), Google, Microsoft, and Oracle have collectively committed over USD16.5b toward DC and cloud infrastructure in Malaysia. This land grab is evidenced by the active acquisition of strategic landbanks by Microsoft and Pear Computing for large-scale facility development. While most hyperscale projects are shrouded in strict Non-Disclosure Agreements (NDAs), limiting visibility into the exact load-profile timing for US tech giants, listed contractor disclosures provide a reliable proxy for development progress. Notably, Pearl Computing's footprint has been made transparent through Bursa Malaysia announcements by major construction firms such as **GAMUDA (OP; TP: RM5.30), SUNCON (OP; TP: RM7.76)** and **IJM (OP; TP: RM3.40)**. These include hyperscale facilities in Eco Business Park and Elmina Business Park within the Klang Valley. Furthermore, the pipeline is set to expand into Springhill Industrial Park in Port Dickson, Negeri Sembilan, where tenders are anticipated to commence in 2QCY26. This shift represents a structural

"electrification" of the Malaysian economy, where digital infrastructure begins to supersede traditional industry as the primary driver of baseload demand.

Land Sale Transactions

Date	Buyer	Seller	Location	Size (acres)	Value (RM m)
15 Nov 2023	Epoch Digital	CRESNDO	Pulai, Johor	20.4	111.0
17 Nov 2023	Microsoft	CRESNDO	Pulai, Johor	60.3	315.2
04 Apr 2024	Microsoft	CRESNDO	Pulai, Johor	25.3	132.5
08 May 2024	Bridge DC	PGLOBE	Plentong, Johor	47.9	238.3
13 May 2024	Digital Hyperspace	AME	I-Techvalley, Pulai, Johor	34.5	209.8
30 May 2024	Bridge DC	MAHSING	Mah Sing DC Hub	17.6	152.9
07 Jun 2024	Microsoft	ECOWLD	Pulai, Johor	123.1	402.3
02 Jul 2024	Equalbase	Sunway Group	Sunway City Iskandar Puteri, Johor	64.0	380.0
12 Jul 2024	Digital Halo	CRESNDO	Pulai, Johor	20.5	115.9
29 Jul 2024	Equinix	Cyberview	Cyberjaya	4.0	23.0
02 Aug 2024	Bridge DC	PGLOBE	Plentong, Johor	19.8	99.0
26 Aug 2024	NTT Global DC	TROP	Pulai, Johor	68.5	383.1
09 Oct 2024	ZData Technologies	TROP	Gelang Patah	38.5	234.0
28 Oct 2024	Bridge DC	MAHSING	Mah Sing DC Hub	35.7	310.8
27 Jan 2025	Microsoft	CRESNDO	Pulai, Johor	24.1	119.8
17 Feb 2025	Microsoft	ECOWLD	Eco Business Park I, Iskandar	38.5	694.0
25 Feb 2025	Pear Computing	ECOWLD	Eco Business Park V, Selangor	58.2	266.1
05 May 2025	Pear Computing	GAMUDA	Springhill Industrial Park, PD	389.0	455.2
29 Aug 2025	Megaspeed International	CRESNDO	Bandar Cemerlang Industrial Park, Johor	52.5	263.2
14 Nov 2025	Pioneer Real Estate	CRESNDO	Kota Tinggi, Johor	40.1	200.8
09 Apr 2026	Digital Edge	CRESNDO	Kota Tinggi, Johor	49.7	346.5

Source: Bursa & various news reports

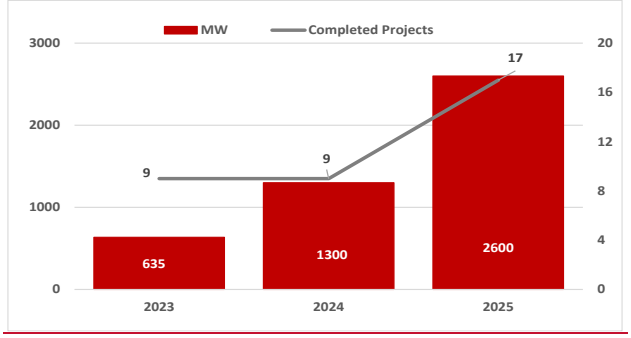
Data Centre Contract Awards

Date	Developer	Contractor	Location	Value (RM m)	Completion
21 Mar 2024	US-based MNC	SUNCON	Cyberjaya	747.8	2Q27
26 Apr 2024	TM Technology	GADANG	Klang Valley DC Block 2, Cyberjaya	280.0	Apr 2026
30 Apr 2024	US-based MNC	PASUKGB	Selangor	57.0	Jun 2025
24 May 2024	Pear Computing	GAMUDA	Elmina Business Park, Selangor	1,743.6	Sep 2026
29 May 2024	NEXT DC	MITRA	Petaling Jaya, Selangor	86.6	Dec 2025
10 Jun 2024	Yondr	SUNCON	Sedenak Tech Park, Johor	1,500.0	Feb 2026
26 Jun 2024	TM Technology	IJM	Iskandar Puteri DC, Johor	331.7	3Q25
19 Aug 2024	EXISM Jalil Link	BNASTRA	EXSIM Hyperscale DC @ Bukit Jalil	574.0	Jan 2026
19 Aug 2024	International DC developer	IJM	Gelang Patah, Johor	254.0	1Q26
06 Sep 2024	Yondr	SUNCON	Sedenak Tech Park, Johor	82.0	Feb 2026
30 Oct 2024	Yondr	SUNCON	Sedenak Tech Park, Johor	265.0	Feb 2026
01 Nov 2024	BCEI	GAMUDA	Cyberjaya	451.4	1Q26
Feb 2025	Unknown	IJM	Johor	259.4	N/A
25 May 2025	K2	SUNCON	Sedenak Tech Park, Johor	392.7	Mar 2026
29 May 2025	US-based MNC	SUNCON	Selangor	1,155	Feb 2027
29 Aug 2025	Pear Computing	GAMUDA	Eco Business Park V, Selangor	2,138	3Q 2027
29 Oct 2025	Pear Computing	IJM	Elmina Business Park, Selangor	2,134	1Q 2028
16 Dec 2025	US-based MNC	SUNCON	Klang Valley	570	Dec 2026
25 Feb 2026	US-based MNC	SUNCON	Klang Valley	1,146	May 2027
01 Apr 2026	Pear Computing	IJM	Elmina Business Park, Selangor	658	3Q 2027
17 Apr 2026	US-based MNC	GAMUDA	Springhill Industrial Park, PD	1,720	3Q 2028
17 Apr 2026	US-based MNC	SUNCON	Bandar Serendah, Selangor	1,750	3Q 2028

Source: Bursa

Massive potential energy load to be utilised by the data centre sector. While tracking data centre development remains challenging due to strict NDAs and the involvement of non-listed entities, **TENAGA's** quarterly disclosures provide a reliable barometer for the sector's trajectory. As of Dec 2025, the pipeline is substantial: 35 projects are already completed and integrated into the system, 14 projects are currently under construction, and seven additional projects have signed Electricity Supply Agreements (ESAs) but have yet to break ground. This brings the total data centre pipeline to 56 projects with a cumulative nameplate demand of 7,500 MW. Despite these massive headline figures, a significant utilisation gap remains. Actual load utilisation stood at 850 MW as of Dec 2025, representing only c.19% of the 4,500 MW total capacity currently completed in the system. However, the momentum is undeniable as actual load surged nearly six-fold from 148 MW at the start of 2024 to 850 MW by year-end 2025, serving as the primary engine for commercial segment growth over the past two years. The sharp acceleration in nameplate completions, with 2,600 MW added in 2025 alone, brings the total capacity to 4,500 MW. This substantial overhead represents a massive pent-up demand for electricity, which will be realised as these facilities move from physical completion to full server-rack population. Consequently, this suggests a significant multi-year demand upside as data centre utilisation matures through 2026 and beyond.

Completed DC Projects in the System by Year

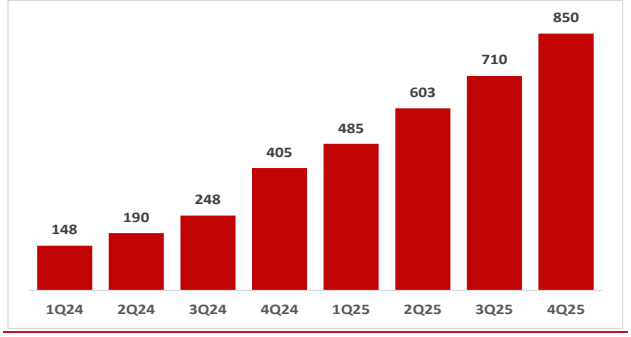


Source: Tenaga

Data Centre Progress Updates

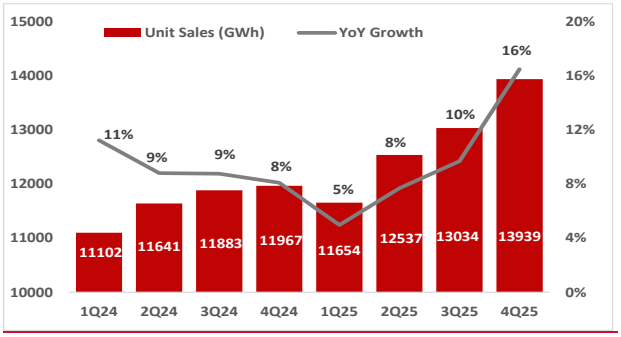
Source: Tenaga

Data Centre Actual Load Utilisation



Source: Tenaga

Demand Growth Trends: Commercial Segment

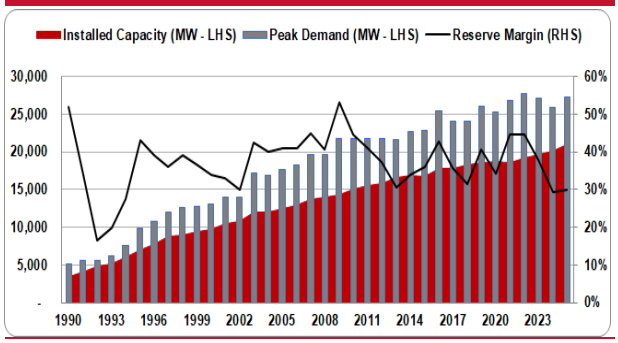


Source: Tenaga

THE SUPPLY-DEMAND DYNAMIC: EFFICIENCY VS. SECURITY

The role of IPP generations in securing Malaysia's energy future. Rapid industrialization and robust economic growth in the early 1990s caused Malaysia's reserve margin to fall below the critical 20% threshold between 1992 and 1993. This vulnerability culminated in a nationwide blackout on 29 Sep 1992, triggered by a lightning strike on a transmission facility between Paka and Teluk Kalong in Terengganu. The resulting rolling failure left some areas without power for up to 48 hours, though most states saw restoration within 6 to 10 hours.

Installed Capacity vs. Reserve Margin



Source: Energy Commission, Single Buyer, Tenaga

In response, the government ended the generation monopoly and introduced the First Generation (Gen1) of Independent Power Producers (IPPs). **YTLPOWR** secured the first concession, fast-tracking the 808 MW Paka Power Plant and the 404 MW Pasir Gudang Power Plant to reach COD by 1994. In total, five Gen1 IPPs added c.4,000 MW of capacity between 1994 and 1996, causing the reserve margin to surge to 43% by 1995.

List of IPPs					
IPP	**Capacity**	**COD**	**IPP**	**Capacity**	**COD**
Gen 1			**Gen 3**		
YTLPOWR - Paka & Pasir Gudang	1,212 MW	1994	TNB Manjung 1-3	2,100 MW	2003
Genting Sanyen	675 MW	1995	Kapar Energy Venture	2,420 MW	2004
Segari Energy Venture	1,303 MW	1996	Tanjung Bin	2,100 MW	2006
Powertek	440 MW	1995	Jimah Energy Venture	1,400 MW	2009
PD Power	440 MW	1995	Tanjung Bin Energy	1,000 MW	2016
Gen 2			**Track Projects**		
NUR Generation	220 MW	1998	Track 1: TNB Prai	1,071 MW	2016
Panglima Power	720 MW	2001	Track 3A: Manjung 4	1,010 MW	2015
GB3	651 MW	2001	Fast Trak 3A: Manjung 5	1,000 MW	2017
Prai Power	350 MW	2003	Track 3B: Jimah East	2,000 MW	2019
TTPP	650 MW	2003	Track 4A: Southern Power (SIPP)	1,440 MW	2021
			Track 4B: Edra Energy	2,242 MW	2022
			Track 4C: Pulau Indah (PIPP)	1,200 MW	2025

Source: Energy Commission, Tenaga, Malakoff, YTL Power, Edra

While the 1997-1998 Asian Financial Crisis subsequently slowed demand, it kept reserve margins well above the comfortable 30% level. The Second Generation (Gen2) followed, adding c.2,400 MW between 1998 and 2003. Unlike the gas-fired focus of the first two generations, the Third Generation (Gen3), commissioned between 2004 and 2016, introduced larger-scale coal-fired plants (>1,000 MW), adding a total of c.6,900 MW to the system. Collectively, these generations maintained a stable reserve margin between 30% and 40% over the past two decades.

More recently, the "Track" projects, including TNB Prai, Manjung 4 & 5, Jimah East, Southern Power (SIPP), Edra Energy and Pulau Indah Power (which achieved COD in March 2025), have provided the essential capacity cushion required to meet the current surge in data centre demand. Without these strategic capacity injections, especially for the last three IPPs, the reserve margin would likely have plummeted below the 25% mark by 2024, potentially risking grid stability during the current industrial expansion.

NewGen25: a focus on longevity over new builds. The EC has concluded the NewGen25 cycle, which resulted in only 1,400 MW of genuine greenfield capacity, the Paka CCGT awarded to the **TENAGA**-led consortium with a targeted COD of Dec 2028. To manage the immediate reserve margin, the EC leaned heavily on PPA extensions totalling 4,869 MW across nine IPPs. This included three **TENAGA** plants (SJ Gelugor, SJ Putrajaya, and SJ Tuanku Ja'afar), three **MALAKOF** assets (Prai Power, GB3, and SEV), two Edra plants (Panglima Power and Kuala Langat Power), and one Petronas unit (Pengerang Power).

NewGen26: the critical replacement cycle. The focus now shifts to NewGen26, released in late Feb 2026 with a Jul 2026 submission deadline. We anticipate an aggressive tender process given the massive supply-demand mismatch looming at the turn of the decade. The math is stark:

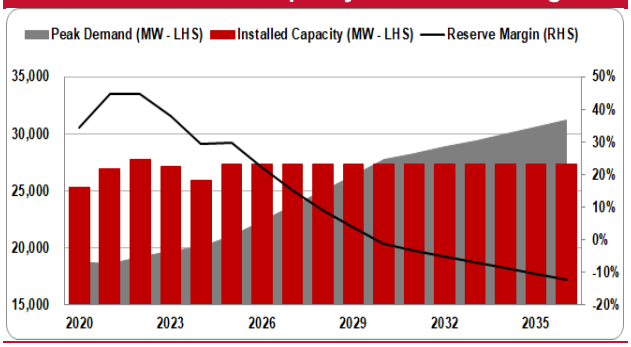
Installed Capacity Pipeline		
Upcoming Capacity	**Capacity**	**COD**
Nenggiri Hydro	300 MW	2027
Sungai Perak Hydro Life Extension	648 MW	2028
Paka CCGT Power	1,400 MW	Dec 2028
Retiring Capacity	**Capacity**	**Expire**
Kapar Energy Venture (gas & coal)	2,200 MW	Jul 2029
TNB Manjung 1-3 (coal)	2,100 MW	Aug 2030
Tanjung Bin Power (coal)	2,100 MW	Sep 2031
Jimah Energy Ventures (coal)	1,400 MW	Mar 2034
Manjung 4 (coal)	1,010 MW	Apr 2040
Tanjung Bin Energy (coal)	1,000 MW	Mar 2041
Manjung 5 (coal)	1,000 MW	Aug 2042
Jimah East (coal)	2,159 MW	Aug 2044

Source: Energy Commission, Tenaga

- Retiring capacity: Between 2029 and 2031, three major coal-fired plants—Kapar Energy Venture, TNB Manjung 1-3, and Tanjung Bin Power—representing 6,400 MW are scheduled to retire.
- The net deficit: When netting off the confirmed builds, i.e., 1,400 MW (Paka), 300 MW (Nenggiri Hydro), and the 648 MW Sg Perak Hydro, against the 7,500 MW of projected data centre demand, the country requires c.12,000 MW of new capacity by 2031 to maintain a healthy 30% reserve margin. We view this as a tall order for the industry to execute in such a compressed timeframe.

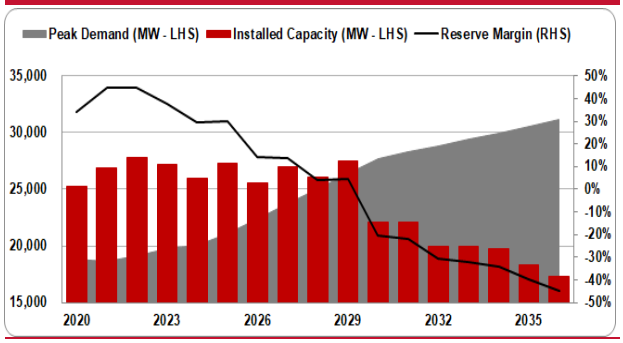
The role of RE and BESS integration. While the 4,000 MW of expected solar from LSS5 and LSS5+ will help stabilise the grid during peak daylight hours, it remains insufficient as a direct replacement for baseload thermal plants. However, the integration of Battery Energy Storage Systems (BESS) is a game-changer. It helps to mitigate intermittency by shifting excess solar energy generated during the day to meet the evening net peak demand. This peak-shaving capability reduces the stress on aging thermal assets and is a mechanical necessity to push the country toward its 40% RE capacity target by 2035.

Scenario 1: Installed Capacity vs. Reserve Margin



Source: Kenanga Research

Scenario 2: Installed Capacity vs. Reserve Margin



Source: Kenanga Research

The approaching reserve margin deficit. Based on current projections, the Peninsular Malaysia power grid faces a critical supply-demand imbalance toward the end of the decade. As illustrated in the chart above on the left, assuming installed capacity remains static until 2036, while factoring in a surge in data centre demand of 1,330 MW annually through 2030 and a 2% annual growth rate thereafter, the reserve margin is expected to flip from a 3.7% surplus into a 1.3% deficit by 2030. The scenario becomes significantly more acute when accounting for scheduled asset retirements. According to the chart on the right, which models the same demand growth against actual PPA expiry dates and confirmed new builds, the reserve margin is projected to collapse from 4.3% to a staggering 20.2% deficit by 2030. This decline is primarily driven by the retirement of 6,400 MW of coal and gas capacity between 2029 and 2031, including Kapar Energy Venture (2,200 MW), TNB Manjung 1-3 (2,100 MW), and Tanjung Bin Power (2,100 MW). While new projects like the Nenggiri Hydro (300 MW), Sg Perak Hydro Extension (648 MW), and Paka CCGT (1,400 MW) are scheduled to come online between 2027 and 2028, their combined capacity of 2,348 MW is insufficient to offset the impending retirements and rising data centre loads. This data underscores the urgent necessity for the NewGen26 tender and strategic PPA extensions to prevent a total system supply crunch by 2030. Looking at the broader landscape, Malaysia currently operates c.12,000 MW of coal-fired capacity, all of which is slated for phased decommissioning through 2044, ending with the PPA expiry of Jimah East Power in Aug of that year.

Navigating the 2030 supply-demand gap. Given the urgent need to bridge the looming capacity gap, we believe there is a high probability that existing gas-fired IPPs with expiring PPAs will secure extensions to maintain grid stability. **MALAKOF** and **YTLPOWR** are well-positioned for the upcoming NewGen26 cycle as the frontrunners for new greenfield developments due to their strategic procurement of equipment with long lead times. Amidst a global shortage of power generation hardware, **MALAKOF** has already secured four gas turbines (capable of supporting 2.8 GW) and **YTLPOWR** has secured two units (capable of 1.4 GW). This pre-emptive securing of critical turbines significantly de-risks their project execution timelines and provides a superior speed-to-market advantage over other bidders. Furthermore, the EC may utilise strategic such as short-term PPA extensions for retiring coal plants as a necessary contingency to prevent a supply crunch. This ensures a reliable transition until new generation capacity is fully commissioned, maintaining grid security while strictly adhering to the national policy of zero new coal-fired power plant developments.

The nuclear option: a necessary baseload complement. While the National Energy Transition Roadmap (NETR) initially prioritised solar and hydro, the government has officially expanded its scope to include nuclear energy. During the tabling of the 13th Malaysia Plan (13MP: 2026–2030) in Jul 2025, the PM confirmed that nuclear power would be formally integrated into the national energy mix as a clean, competitive, and safe source of baseload power. This pivot marks a complete reversal of the 2018 policy that previously shunned nuclear energy. According to the DPM, who also serves as the Energy Transition and Water Transformation Minister, the current focus is centred on technical feasibility and long-term energy security. Nuclear energy offers stable, low-carbon baseload power that is essential for reducing fossil fuel dependence. However, while nuclear energy is now a formal policy objective, the construction and regulatory lead time for a newcomer nation like Malaysia typically spans 10 to 15 years. This suggests that nuclear power will serve as a post-2035 solution rather than a viable bridge for the critical 2030 demand surge. Furthermore, public acceptance remains a significant hurdle, as historical concerns regarding nuclear safety and leakages continue to shape domestic sentiment.

The ASEAN power grid: a strategic lever for regional interconnectivity. Beyond domestic builds, the ASEAN Power Grid (APG) offers a critical mechanism to balance grid security with operational efficiency. By transitioning from simple bilateral deals to a multilateral framework, as seen in the Lao PDR-Thailand-Malaysia-Singapore (LTMS-PIP) project, Malaysia can leverage regional diversity to optimise its reserve margins. This interconnectivity effectively serves as a virtual reserve,

allowing the grid to draw on regional surpluses to mitigate domestic load fluctuations or unexpected outages. For Malaysia, positioned as a central transit hub, the APG provides a vital safety net to bridge the timing mismatch between retiring coal assets and the commissioning of new capacity. Ultimately, these cross-border links de-risk the energy transition, ensuring stability without requiring excessive, underutilised domestic redundancy during the push toward 2030.

Parallel to these long-term baseload shifts, the regulatory landscape is tightening to enforce immediate decarbonisation. The anticipated tabling of the Climate Change Bill (RUU PIN) in 2026 establishes the legal foundation for the National Carbon Tax, initially targeting the energy sector. We expect this to act as a catalyst for IPPs to accelerate their NETR aligned transition projects to avoid margin erosion, effectively bridging the gap between today's fossil heavy mix and the eventual evolution of the energy grid. The financial stakes are substantial. Based on TENAGA's Scope 1 emissions of 38.74 mtCO_2e as at 31 Dec 2024, a carbon tax priced within a **RM15–RM50/tCO_2e** range could imply an annual carbon tax liability of approximately **RM0.6b–RM1.9b**, equivalent to around **3%–10% of EBITDA** and **12%–41% of PAT**, depending on the final tax rate and available mitigation mechanisms. Such costs would directly compress earnings as an operating expense unless mitigated through the ICPT pass-through mechanism or accelerated decarbonisation initiatives.

The gas pivot: from clean alternative to transition bridge with carbon costs. While natural gas remains the primary feedstock for Malaysia's power sector, the investment thesis has matured. Under the National Gas Roadmap (NGR) finalised in early 2026, gas is being repositioned as the necessary baseload to facilitate the coal phase out by 2044. However, for IPPs and gas infrastructure players, this bridge now carries a fiscal toll. The implementation of the 2026 Carbon Tax means that unabated gas generation will face margin compression unless paired with Carbon Capture, Utilisation and Storage (CCUS), which is now regulated under the 2026 CCUS Act.

SECURING THE FEEDSTOCK: BRIDGING THE 2030 CAPACITY GAP

Two RGTs in the pipeline. With 6,400 MW of coal capacity slated for retirement between 2029 and 2031, natural gas has emerged as the definitive primary transition fuel for Malaysia. Against this backdrop, two major Regasification Terminals (RGTs) are being fast-tracked to ensure feedstock security:

- RGT3 (Lumut, Perak): The government has mandated Petronas to develop a third RGT in Lumut, strategically located near major power clusters including **TENAGA's** Janamanjung and **MALAKOF's** GB3 and Segari Energy Venture assets. Given its established track record with the Sungai Udang (Melaka) and Pengerang (Johor) terminals, **PETGAS (MP; TP: RM18.80)** is the frontrunner to manage this facility, which is expected to utilize a Floating Storage and Regasification Unit (FSRU) to meet a 2029–2030 COD.
- Yan RGT (Kedah): In March 2026, **GASMSIA** received a formal "Letter to Proceed" from the EC for a RM2b–RM3b offshore RGT in Yan, Kedah. With a planned capacity of up to 6 MTPA, this terminal is a critical infrastructure anchor for the northern region, designed to support the burgeoning industrial demand in Kulim and the upcoming CCGT plants in the area.

Strategic vertical integration: IPPs as equity partners. We view the potential equity participation of IPPs in these midstream assets as a savvy move toward fuel supply de-risking. By holding stakes in the RGTs that feed their own generators, IPPs can better manage their supply chains and potentially capture a larger slice of the regulated gas tariff value chain.

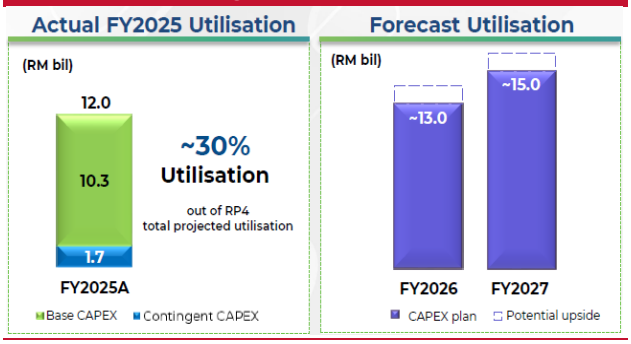
- It was reported that **TENAGA** has interest in the Lumut RGT. This aligns with their massive repowering agenda, which includes the recently awarded 1,400 MW Paka CCGT under the NewGen25 tender and the separate ongoing Paka repowering project. Securing equity in RGT3 provides **TENAGA** with an integrated "fuel-to-power" hedge as it navigates Regulatory Period 4 (RP4).
- **MALAKOF** is widely expected to partner with its sister company, **GASMSIA**, in the Yan RGT. This is a logical synergy given that **MALAKOF** has already secured four Mitsubishi M701JAC gas turbines in anticipation of the NewGen26 tender. These turbines are destined for two new 1,400 MW plants, making **MALAKOF** a natural anchor off-taker for the Yan terminal.

BUILDING THE GRID: LIGHTING UP THE DATA CENTRE HUB

Structural step-up in RP4 capex. TENAGA has entered a high-growth phase with a significantly expanded regulated budget for Regulatory Period 4 (RP4: 2025–2027). The EC has approved a total regulated capex of RM42.82b, a massive 108% jump from the RP3 approved budget of RM20.55b. This shift is primarily driven by the Green Lane Pathway, a strategic initiative to fast-track grid connections for data centres, which have seen load utilisation double to 850 MW by the end of 2025. A key differentiator in RP4 is the inclusion of RM16.27b in contingent capex, alongside a RM26.55b base capex. This contingent portion is specifically earmarked for demand-driven triggers, such as rapid data centre clusters and RE integration. The recovery mechanism for this contingent portion has been formalised, meaning that as demand triggers actual spending, ensuring the actual capital outlays translate directly into clear earnings visibility. **TENAGA** has guided for an acceleration in this segment, forecasting a total utilisation of RM13b in 2026 and RM15b in 2027, sitting well above the historical RM6b-RM7b annual average since RP2.

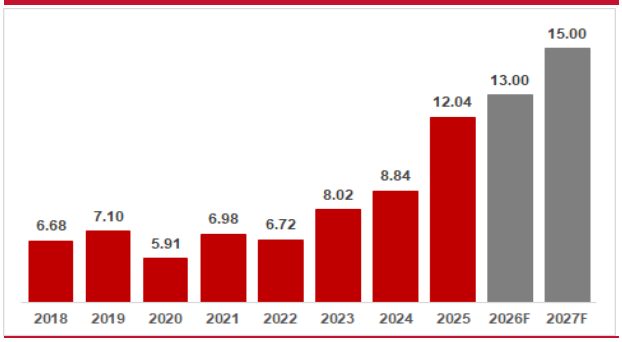
RAB expansion as an earnings driver. TENAGA's actual CAPEX utilisation in 2025 reached RM12.04b (88% base, 12% contingent), pushing its Regulated Asset Base (RAB) to RM75.78b. As **TENAGA** continues to front-load its grid reinforcement to support the projected 7,500 MW of data centre load by 2030, the expanding RAB will serve as a structural engine for stronger core earnings. We believe TNB is the prime beneficiary of this infrastructure super-cycle, as the regulated framework offers a stable, recurring income stream with a 7.3% return on RAB.

TENAGA's RP4 Regulated Capex



Source: Tenaga

TENAGA's Regulated Capex (RM b)



Source: Tenaga

INVESTMENT STRATEGY: NAVIGATING THE ENERGY SUPER-CYCLE

The grid growth champion: TENAGA (OP; TP: RM17.00)
TENAGA remains our Top Pick as the primary beneficiary of the RP4 capex super-cycle. The 108% jump in the approved regulated budget provides a massive structural boost to its RAB, ensuring core earnings growth insulated from fuel price volatility via the AFA mechanism. Furthermore, the aggressive pipeline of new-build power plants is set to drive non-regulated generation earnings significantly higher over the medium term. Maintain OUTPERFORM with TP of RM17.00

The strategic value play: MALAKOF (OP; TP: RM1.00)
While near-term earnings may remain stagnant, **MALAKOF** offers high-growth potential post-2030. Their proactive move to secure Mitsubishi turbines early gives them a significant head start for the NewGen26 tender. Additionally, a potential equity stake in the Yan RGT secures its long-term fuel transition. Our TP of RM1.00 has already priced in a new 1,400 MW gas-fired plant, contributing RM0.28 to our valuation. OUTPERFORM maintained.

The data centre + AI proxy: YTLPOWR (OP; TP: RM4.30)
With secured gas turbines and the rapid scaling of its Johor data centre park, **YTLPOWR** is the most direct play on the "power + data centre" convergence. In early April, management revealed an aggressive data centre capacity target of raising from 500 MW to 1,000 MW via a colocation model, underscores its ambition. While we maintain a conservative valuation based on 500 MW (with 188 MW committed offtake in our earnings model), the upside potential remains substantial as commitments solidify. Maintain OUTPERFORM with TP of RM4.30, which includes a new 1,400 MW gas-fired plants (RM0.16)

The regulated yield anchor: PETGAS (MP; TP: RM18.80)
PETGAS offers resilient, defensive earnings with over 90% of its bottom line safeguarded by the IBR framework. The finalised RP3 parameters have reinforced this stability, supporting a consistent dividend yield of c.4%. We maintain a MARKET PERFORM rating at a TP of RM18.80, which incorporates the 3rd Lumut RGT (valued at RM2.00), viewing the stock as a core yield anchor with emerging infrastructure upside.

The infrastructure evolution play: GASMSIA (MP; TP: RM5.23)
GASMSIA is undergoing a fundamental shift from a gas merchant to an infrastructure owner. The materialisation of the Yan RGT (in which we model a 55% equity stake) adds RM0.73 to our TP. Its robust free cash flow generation continues to support a reliable dividend yield of >4%, balancing growth with income. Reiterate MARKET PERFORM with TP of RM5.23.

The grid proxy pure play: SCGBHD (OP; TP: RM2.71)
SCGBHD is the key proxy for Malaysia's accelerating grid upgrade cycle. With c.3,000 MWac of ESAs in the pipeline, the demand for power cables, a critical and high-utilisation component of power infrastructure, is expected to remain firm, driving sustained margin expansion over the medium term. Retain OUTPERFORM with TP of RM2.71.

Peer Table Comparison

Name	Rating	Last Price (RM)	Target Price (RM)	Upside	Market Cap (RM m)	Shariah Compliant	Current FYE	Core EPS (sen)		Core EPS Growth		PER (x) - Core Earnings		PBV (x)	ROE	Net. Div. (sen)	Net Div Yld
								1-Yr. Fwd.	2-Yr. Fwd.	1-Yr. Fwd.	2-Yr. Fwd.	1-Yr. Fwd.	2-Yr. Fwd.	1-Yr. Fwd.	1-Yr. Fwd.	1-Yr. Fwd.	1-Yr. Fwd.
Stocks Under Coverage																	
CHEEDING HOLDINGS BHD	OP	0.720	0.700	-2.8%	574.0	Y	03/2026	4.3	5.3	30.8%	23.5%	16.9	13.7	6.4	48.6%	1.1	1.5%
GAS MALAYSIA BHD	MP	5.37	5.23	-2.6%	6,895.1	Y	12/2026	31.7	32.1	5.6%	1.3%	17.0	16.7	4.2	25.4%	25.3	4.7%
KJTS GROUP BHD	OP	0.905	1.37	51.4%	625.0	Y	12/2026	3.2	4.0	24.2%	23.9%	28.1	22.6	2.8	12.1%	0.6	0.7%
MALAKOFF CORP BHD	OP	0.855	1.00	17.0%	4,178.4	Y	12/2026	3.6	4.8	58.2%	32.9%	23.9	18.0	0.9	3.9%	2.9	3.4%
PEKAT GROUP BHD	OP	1.60	1.72	7.5%	1,131.3	Y	12/2026	8.5	9.2	22.4%	7.3%	18.7	17.5	2.9	18.6%	0.0	0.0%
PETRONAS GAS BHD	MP	18.18	18.80	3.4%	35,973.3	Y	12/2026	95.9	97.2	12.1%	1.4%	19.0	18.7	2.4	13.1%	72.0	4.0%
SAMAIDEN GROUP BHD	OP	1.32	1.94	47.0%	667.4	Y	06/2026	6.3	7.5	21.3%	18.8%	20.9	17.6	3.3	17.4%	1.1	0.8%
SOLARVEST HOLDINGS BHD	OP	2.85	3.45	21.1%	2,717.3	Y	03/2026	10.3	13.3	51.9%	29.5%	27.7	21.4	5.6	22.7%	0.0	0.0%
SWIFT ENERGY TECHNOLOGY BHD	OP	0.180	0.470	161.1%	180.1	Y	09/2026	1.3	2.0	-29.3%	53.8%	13.9	9.0	2.3	19.1%	0.0	0.0%
TENAGA NASIONAL BHD	OP	14.66	17.00	16.0%	85,455.2	Y	12/2026	85.6	88.1	2.9%	2.8%	17.1	16.6	1.3	7.8%	50.8	3.5%
YTL POWER INTERNATIONAL BHD	OP	3.90	4.30	10.3%	33,702.0	N	06/2026	24.5	22.6	-27.1%	-7.5%	15.9	17.2	1.5	9.6%	8.0	2.1%
SECTOR AGGREGATE					**172,099.2**					**-3.1%**	**1.3%**	**17.7**	**17.5**	**3.1**	**18.0%**		**1.9%**

Source: Kenanga Research

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Stock Ratings are defined as follows:

Stock Recommendations

OUTPERFORM : A particular stock's Expected Total Return is MORE than 10%
MARKET PERFORM : A particular stock's Expected Total Return is WITHIN the range of -5% to 10%
UNDERPERFORM : A particular stock's Expected Total Return is LESS than -5%

Sector Recommendations***

OVERWEIGHT : A particular sector's Expected Total Return is MORE than 10%
NEUTRAL : A particular sector's Expected Total Return is WITHIN the range of -5% to 10%
UNDERWEIGHT : A particular sector's Expected Total Return is LESS than -5%

******Sector recommendations are defined based on market capitalisation weighted average expected total return for stocks under our coverage.***

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