MERALCO ENTERPRISE COMMERCIAL AND CONGLOMERATES
Power Competitiveness Champions Group

Positioning the Philippines for Hyperscale Data Center Growth

Power Cost, Incentive Strategy, and Investment Readiness in Southeast Asia

A Strategic White Paper on Enabling Global-Scale Digital and Energy-Intensive Investments

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A Foreword

This document serves as a strategic lens through which all stakeholders—from energy investors and data center operators to policy leaders and dignitaries—can reframe the Philippines' position in Southeast Asia's digital and energy future.

Positioning the Philippines in the Hyperscale Century: A Strategic Call to Action

In every bilateral dialogue, roundtable, and investor engagement we have led over the past year—from boardrooms in Manila to forums across Southeast Asia—one question has echoed louder than the rest:

Is the Philippines truly ready—and cost-competitive—for hyperscale and energy-intensive digital infrastructure investments?

This question comes not only from investors and developers but also from national decision-makers, foreign chambers, dignitaries, and local regulators. The narrative that the Philippines has the "highest power rates in the region" has become a persistent barrier to unlocking the country's full potential. And it has had consequences—real, measurable ones. Investors have walked away. Opportunities have slipped to our neighbors. But today, the context has changed.

This White Paper is not just a technical comparison. It is a **strategic statement of readiness**.

It brings together the insights of industry leaders, technical experts, policy shapers, and ASEAN collaborators to show what the data reveals: When viewed through the real conditions of Meralco's franchise—where most strategic digital infrastructure will land—the Philippines is no longer lagging. In fact, it now stands shoulder-to-shoulder with regional peers like Thailand and Malaysia, often surpassing them in investor value due to flexible power contracting, deeply embedded fiscal incentives, and reforms that make execution possible.

Whether you're an **energy-sensitive investor**, a **hyperscale operator**, a **public official shaping policy**, a **regional dignitary seeking cooperation**, or part of Meralco's own ecosystem of innovation and service—this paper was written with you in mind.

It is designed to answer your questions. To confront lingering perceptions. To equip you with facts. And to challenge outdated assumptions.

The Philippines—through its decisive reforms under the CREATE MORE Act, digitalization of permitting via ARTA, accelerating renewable energy roadmap by the DEPARTMENT OF ENERGY, and the high-reliability backbone of the Meralco franchise—is **no longer a question mark in Southeast Asia's digital future**. It is a viable, scalable, and sustainable destination for long-term growth.

This is our bold signal to the region and to the world:
The Philippines is open, ready, and rising.

Executive Summary

This white paper presents a strategic and data-driven assessment of the Philippines' competitiveness as a regional hub for **hyperscale data centers and energy-intensive investments**, benchmarked against key Southeast Asian markets. The study consolidates insights across five critical pillars: **power rates, fiscal incentives, sustainability and renewable energy strategies, regulatory streamlining, and investor readiness**—with a deliberate focus on the **Meralco franchise area**, which encompasses Metro Manila and adjacent investment corridors.

By isolating the cost and policy conditions within Meralco's service territory—distinct from nationwide averages that are often distorted by fragmented utilities—this report reflects the **real-world conditions experienced by large-scale investors**. The Meralco zone remains the **only Philippine region with the grid capacity, infrastructure depth, and power contracting flexibility** required to support high-density digital infrastructure.

Our analysis shows that when leveraging **negotiated supply contracts under the RCOA (Retail Competition and Open Access) framework**, combined with **fiscal incentives under the CREATE MORE Act**, effective electricity costs for hyperscale customers in the Philippines now approach, and in some cases rival, those of regional peers such as Malaysia and Thailand. Strategic tax benefits—including a **200% deduction on power costs**, a **reduced 20% corporate income tax**, and **zero-rated VAT for export-oriented locators**—directly address the country's historical power cost disadvantage.

In parallel, the **Anti-Red Tape Authority (ARTA)** has significantly improved the regulatory environment through the implementation of **Green Lanes for strategic investments (EO 18)**, the rollout of digital permit systems like **eBOSS**, and stronger inter-agency alignment. These efforts eliminate bureaucratic bottlenecks and reduce permitting timelines for data center developers, energy providers, and infrastructure players.

The report also highlights the Philippines' accelerating transition to **renewable energy**, with national targets of **35% RE in the power mix by 2030 and 50% by 2040**. Mechanisms like the **Green Energy Auction Program (GEAP)** and **Green Energy Option Program (GEOP)** are enabling large users to procure clean power, while data center operators are adopting advanced technologies such as **liquid cooling, AI-powered energy optimization, and green building certifications** to align with global Environmental and Social Governance mandates.

Lastly, the paper outlines the country's **competitive strengths**: a robust technical talent pool, rising renewable capacity, long-term tax stability, and growing digital infrastructure ecosystems. These elements, when combined, solidify the Philippines' emergence as a **future-ready, investment-grade destination** for hyperscale digital infrastructure and advanced industrial platforms.

In conclusion, the Philippines—led by the Meralco franchise area—is no longer just cost-competitive. It is becoming a **strategically aligned, operationally prepared, and policy-enabled market** for global players seeking long-term growth, carbon-conscious development, and regional scale in the heart of Southeast Asia.

1. Introduction

- *Objective:* To deliver a data-driven, strategic comparison of energy costs, sustainability efforts, and government incentives across Southeast Asia, with a dedicated focus on the Meralco franchise area in the Philippines. This approach reflects the true cost environment and operational conditions that major energy-intensive investments—such as hyperscale data centers—experience in the country's only globally competitive utility zone.
- *Scope:*
    - **In-depth comparison of power rates and their components** (generation, transmission, distribution, system loss) as applied within Meralco's service territory, benchmarked against leading Southeast Asian markets.
    - **Evaluation of tax incentives, renewable energy programs, and regulatory frameworks,** with emphasis on the CREATE MORE Law and its direct impact on high-load, export-oriented locators within the Meralco area.
    - **Assessment of sustainability practices and the renewable energy transition,** examining their relevance and implications for large-scale, energy-intensive projects that require both reliability and cost efficiency.

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2. Power Rates and Cost Structure

2.1 Meralco Power Rates and Cost Breakdown

Meralco's current rate structure for very large commercial and industrial customers—such as hyperscale data centers and advanced manufacturing facilities—can be evaluated under two main scenarios:

- **Standard Retail Competition and Open Access (RCOA) Rate**, reflecting the weighted average generation price across licensed RES providers based on ERC's February 2025 CREM/GEOP data.
- **Optimized Negotiated Case**, reflecting potential competitive bilateral supply contracts negotiated under RCOA, especially for customers with high load factors, renewable energy preferences, and fiscal incentives under the CREATE MORE Act.

Cost Components (For Commercial and Industrial Sectors):

- **Generation Charge** – The base price per kWh from suppliers, which is negotiable under RCOA and can significantly decrease for high-consumption, stable-load customers.
- **Transmission & Distribution Charges** – Regulated fees for delivering electricity via NGCP and Meralco infrastructure.
- **Taxes & Levies** – VAT, subsidies, and universal charges. These are substantially reduced or exempted under the CREATE MORE incentive structure for qualified investors.
- **Green Energy Premium** – Additional cost when procuring from RE-only portfolios, which can be offset by long-term contracts or GEOP suppliers.

Table 1: Generation Charge Power Rate Simulation *(Based on ERC Monthly Statistical Data – Competitive Retail Electricity Market (CREM) & Green Energy Option Program (GEOP), as of February 2025)*

Scenario	Gen. Charge (PHP/kWh)	W/ Taxes (USD/kWh)	W/o Taxes (USD/kWh)
Standard RCOA Case	5.50 to 6.00	0.1076 to 0.1174	0.0961 to 0.1048
Optimized Negotiated Case*	4.50 to 5.00	0.0881 to 0.0979	0.0786 to 0.0874

Conversion rate used: PHP 57.23/USD
Tax approximation used: 12% on base rate
Optimized case assumes bilateral procurement under RCOA, including RE supply components

Important Notes and Disclaimers:

- *"Very and Extra-Large Customers"* are defined as accounts with a **minimum contracted demand of 750 kW**, typically operating at high load and power factors **(LF = 0.95, PF = 0.95).**
- **CREATE MORE-qualified entities** such as export-oriented data centers benefit from **zero-rated VAT on electricity** or **claimable input VAT**, significantly lowering the net generation cost. For qualified data centers, VAT is a non-expense item (zero-rated for export or claimable as input VAT), *further lowering effective power cost.*
- These estimates are based on available ERC data and prevailing supply arrangements in Meralco's franchise area as of February 2025.
- **The simulated rates are indicative and subject to market conditions.** Final contracted prices will depend on multiple variables including:
    - Generation availability and mix (RE vs. conventional),
    - Market competition among RES providers,
    - Forward demand vs. committed capacity in Luzon,
    - Grid access, transmission constraints, and bilateral contract structures.
- **As such, these rates are not fixed** and must be understood as part of a dynamic pricing environment. Future changes in fuel costs, policy reforms, or supply-side developments (e.g., RE ramp-up or delays) may materially affect realized costs.
- Meralco *makes no commitment to guarantee these rates* but can support negotiation under the RCOA framework tailored to the customer's load profile and operational strategy.

2.2 Regional Power Rate Comparison

To position the Philippines competitively, our analysis benchmarks Meralco's effective rates against other ASEAN economies using the latest available rates and incorporating all-in cost structures, including generation, network charges, and taxes.

Table 2. Effective Power Rates Across Southeast Asia (USD/kWh, Commercial and Industrial, 2025)

Country	Effective Rate (w/ Tax)	Effective Rate (w/o Tax)**	Government Subsidy
Brunei	$0.040	$0.040	**Yes –** heavily subsidized flat tariff for all consumers; rates far below cost of generation.
Laos	$0.055	$0.050	**Yes –** large state subsidy via Électricité du Laos; tariffs kept below cost-recovery, esp. for industry.
Vietnam	$0.094	$0.085	**Partial –** cross-subsidies between customer classes; industrial rates slightly lower than average.
Indonesia	$0.077	$0.070	**Yes –** direct govt. subsidy to PLN; rates frozen or reduced despite rising fuel costs.
Thailand	$0.128	$0.120	**Partial –** fuel tariff (Ft) adjustments capped by govt.; state-owned EGAT absorbs some cost swings.
Philippines (Meralco – Standard Case) *Gen. Charge: Php 5.63/kWh*	$0.1340	$0.1210	**No –** no direct subsidy; rates fully cost-reflective, only reduced via CREATE VAT zero-rating.
Philippines (Meralco – Optimized Case) *Gen. Charge: Php 5.00/kWh*	$0.1215	$0.1098	**No –** same as above.
Malaysia	$0.140	$0.130	**Partial –** govt. funds ICPT/AFA rebates for selected sectors; base tariff for large users at cost.
Myanmar	$0.154	$0.140	**Yes (was) –** historically subsidized, but large 2024 hike reduced subsidy; still below full cost.
Cambodia	$0.154	$0.140	**Yes –** state subsidizes EDC purchases/imports; selective industrial tariff reductions in 2023–2025.
Singapore	$0.238	$0.220	**No –** fully liberalized market, cost-reflective tariffs with no subsidies.

**Generation charges reflect both standard and optimized negotiated scenarios.*
**Other Bill Components such as Transmission and Distribution Charges are based on June 2025 Meralco Rate Table.*
**W/o tax reflects the scenario for zero-rated or VAT-exempt locators (i.e., under CREATE MORE or registered export-oriented business).*
**Malaysia: Effective rates updated as of July 2025 RP4 tariff hike (ultra-high voltage category ~60 sen/kWh) and subject to monthly Automatic Fuel Adjustment (AFA)*

Key Insights:

- The Philippines' power cost competitiveness has substantially improved within Meralco's franchise area. With optimized generation sourcing and full tax incentives under the CREATE MORE Act, effective rates can drop to **$0.1098**/kWh, moving the country into the same cost tier as Thailand. (Notably, Malaysia's erstwhile ~$0.10/kWh power cost is rising to ~$0.13–$0.14/kWh after a July 2025 tariff hike, narrowing its previous edge.) Under standard RCOA arrangements, the Philippines posts about **$0.1210**/kWh, which remains higher than Thailand but still competitive when factoring in long-term supply reliability, access to renewable energy, and expedited regulatory facilitation.
- Under standard RCOA arrangements, the Philippines posts a rate of **$0.1210 USD/kWh**, which remains relatively higher but still competitive when factoring in long-term supply reliability,

access to renewable energy, and regulatory facilitation through DOE & ARTA's EVOSS.

- **Singapore remains the highest-priced market**, though its premium reflects world-class infrastructure. The Philippines now positions itself as the **cost-efficient, reform-driven alternative**, with strong government support for energy-intensive, digitally advanced industries like hyperscale data centers and cloud operators.

Simulation Assumptions and Methodology:

- **Load Level:** Simulations were based on 10MW to 100MW 24/7 load profiles, typical of data centers and large industrial users with high load and power factors.
- **Currency and Forex:** All Philippine Peso values were converted using PHP 57.23/USD (average ForEx values from January 2025 to May 2025).
- **Geographic Focus:** Rates reflect the Meralco franchise area only, to emphasize the competitiveness of actual investment zones. National blended rates were excluded to prevent distortion in strategic benchmarking.
- **Tax Assumptions:** The w/o tax scenario assumes full VAT exemption and allowable deductions under the CREATE MORE Law, applicable to BOI-registered or export-oriented locators.
- **Data Sources and Validation:**
    - Meralco's June 2025 schedule of rates and internal simulations
    - Official publications from the Department of Energy (DOE), Energy Regulatory Commission (ERC), and Anti-Red Tape Authority (ARTA)
    - Regional utility tariffs (Tenaga Nasional Berhad, PLN Indonesia, EGAT Thailand, EDC Cambodia, EVN Vietnam, etc.)
    - Direct validation with ASEAN counterparts and industry partners, including peer utility specialists, regional data center developers, and investment promotion agencies
    - Interviews with global hyperscale operators, RE developers, and infrastructure investors engaged in Southeast Asia as of Q1–Q2 2025

This comparative analysis confirms that within the Meralco franchise, the Philippines has effectively narrowed the cost gap with regional peers through optimized sourcing and policy-backed incentives. While still slightly above the ASEAN median in the standard case, the country's optimized scenario now benchmarks closely with Malaysia and Thailand—both longstanding FDI hubs. More importantly, this shift is not just about rates, but about **predictability, reform alignment, and localization readiness**. In today's competitive energy landscape, **cost-efficiency paired with structural reform** is what defines long-term investment value—and the Philippines is now delivering both.

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3. Meralco's Power Infrastructure Readiness for Hyperscale Data Centers

3.1. Scalable High-Capacity Supply for Data Centers

Meralco's electrical network is purpose-built to energize enterprise and hyperscale data centers with scalable, high-capacity supply. Designed to deliver hundreds of megawatts to a single customer node, the

utility's sub-transmission backbone—primarily composed of 115 kV and 69 kV lines—can support large-load campuses exceeding 100–300 MW with sufficient infrastructure build-out.

Recent energizations include hyperscale facilities with ramp-up capacities of 180 MW, demonstrating Meralco's proven ability to scale alongside customer expansion. Key strategic substations such as the **Mesaland Substation in Sta. Rosa** provide N-1 redundancy and 83 MVA of initial capacity, while upcoming **Calamba: Expansion Project, Antipolo and Pasay: Development Project and Amadeo: Expansion Project (RY2028) (for Evolution Data Center (Javalera SS))**

Table 3: Standard Meralco Network Capacities for Hyperscale Integration

Voltage Level	Max Line Capacity	Typical Use	Redundancy Options
115 kV	200–300 MW	Sub-transmission for large customers	Dual feeds, N-1 standard
230/115 kV Injection	600 MVA+ (via 2x300 MVA transformers)	Grid expansion for DC corridors	Strategic capacity ramping

Note: The capacity of Delivery Point Substations is not fixed to 2-300MVA. Some existing Delivery Point Substations has more than 2-300 MVA Power Transformer Banks.

Key Infrastructure Highlights

- **STT GDC Polaris (Fairview, Q.C.):** First in-building 115 kV switching station with dual-bus feed.
- **ePLDT VITRO Sta. Rosa (Laguna):** Served via dedicated 115 kV switching station with 17 MW initial load and ultimate load is 67 MVA.
- **A-FLOW ML1 (Biñan, Laguna):** Under construction, will host dual 115 kV feeds for Tier IV resiliency.
- **Mesaland Substation (Sta. Rosa):** Energized in 2025, with N-1 redundancy.

Figure 1: ST Telemedia Global Data Centres – Polaris, Meralco Indoor Switching Station

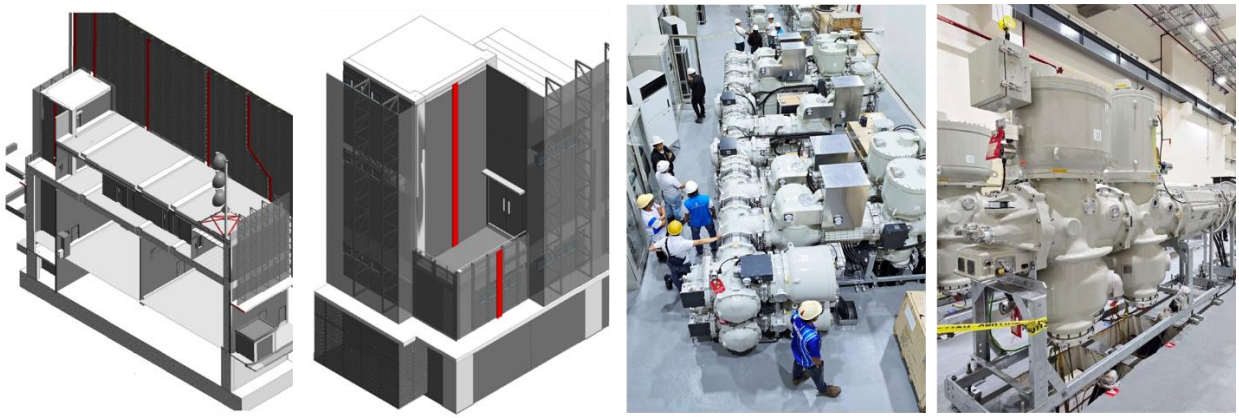


Figure: ST Telemedia GDC's "Polaris" hyperscale data center in Metro Manila's Fairview area. Meralco energized an in-building 115 kV switching station at this facility to ensure stable and redundant power supply.

Meralco's electrical network is engineered to deliver **hundreds of megawatts of scalable capacity** to single large customers, meeting the massive load requirements of enterprise and hyperscale data centers. Its sub-transmission lines at 115 kV (and 69 kV in some areas) can each carry on the order of **200–300 MW** of power with appropriate infrastructure, ensuring that even multi-phase 100+ MW data center campuses can be fully energized. For example, in 2024 Meralco powered new hyperscale data centers with an initial **10 MW** load that can ramp up to **180 MW**, demonstrating the ability to scale supply as the facility expands. To enable such growth, Meralco is augmenting its network with higher-voltage injection points: new 230 kV substations are planned in key areas (e.g. Antipolo in eastern Metro Manila) with dual **300 MVA** transformers, adding **~600 MVA** of capacity to the 115 kV system for future large loads. This backbone capacity ensures that **hyperscale campuses requiring 100–300 MW** can be accommodated within the franchise area.

To serve data centers efficiently, Meralco typically connects hyperscale facilities at the sub-transmission voltage via dedicated **115 kV switching stations** or high-voltage substations on the customer's site. Data centers with applied load **≥10 MVA** located at 34.5 kV distribution voltage level and ≥7 MVA located at 13.8 kV distribution voltage level are directly served at 115 kV or 69 kV sub-transmission voltage level, bypassing the medium-voltage distribution system for better efficiency and capacity headroom. Recent projects illustrate this approach:

Meralco commissioned a new 115 kV switching station for **ePLDT's VITRO Sta. Rosa** facility in Laguna – the Philippines' largest AI-ready hyperscale data center – to meet its **67 MW** initial demand. In Quezon City, Meralco energized an **in-building dual-feed 115 kV station** within **ST Telemedia Global Data Centres'** "Polaris" campus (a first in Meralco's franchise) to provide highly stable power to that [~180 MW] facility. And in Biñan, Laguna, Meralco has partnered with Ayala Logistics and Flow Digital (A-FLOW) to construct a dedicated 115 kV switching station (target completion by late 2025) that will supply the new ML1 data center with **dual 115 kV feeds** for up to Tier IV-level resiliency. These **purpose-built substations and switching stations** are designed to support the demanding power needs of hyperscalers, with **standard connection capacities in the tens to hundreds of MW** and physical provisions to add more transformers or feeders as the load grows.

To further future-proof its capacity, Meralco is working closely with the National Grid Corporation (NGCP) on new **230 kV draw-down substations** at strategic points of its franchise. For instance, a large 230/115 kV substation is planned in **Calamba, Laguna** (a growing industrial/data center hub) with multiple 300 MVA transformers, and similar projects in **Pasay**, **Navotas**, and **Antipolo** will bolster the grid in Metro Manila's south, north, and east, Calamba: Expansion Project Antipolo and Pasay: Development Project Amadeo: Expansion Project (RY2028) (for Evolution Data Center (Javalera SS)). Each of these bulk supply points will enable **several hundred megawatts** of additional load capacity to support new data center clusters, ensuring that power availability will not be a bottleneck for digital infrastructure investments in Meralco's area.

3.2. Strategic Power Zones and Cluster Development

Meralco is the largest private sector electric distribution utility company in the Philippines ***covering 39 cities and 72 municipalities. Its franchise area of over 9,685 km2 is just 3% of the total land area of the Philippines, but accounts for 55% of the country's electricity output.***

Meralco's franchise spans Metro Manila and surrounding provinces (entire provinces of Cavite, Laguna, Rizal, Bulacan and portions of Laguna, Batangas and Quezon Province), and within this territory several **data center clusters** have emerged where robust power infrastructure is in place or being expanded.

Figure 2. Meralco Franchise Map

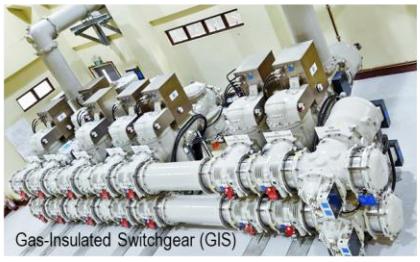
In **Metro Manila (NCR)**, current enterprise data centers are mostly in urban centers (e.g. Makati, Pasig) with moderate loads, but hyperscale activity is picking up on the metro's fringes: **Quezon City** now hosts a major hyperscale site (STT GDC's Fairview facility) served by redundant 115 kV lines. To the east, the Cainta–**Pasig–Antipolo** corridor is seeing investments in tech parks and cloud availability zones, prompting Meralco to reinforce substations like Dolores and Manggahan and plan new 230 kV injections (as noted for Antipolo). Meanwhile, the **southern NCR** area (Pasay–Muntinlupa) sits near the Makati CBD and Ninoy Aquino International Airport; here Meralco is upgrading capacity (e.g. expanding its BGC 2 substation in Taguig) anticipating future large data center or telecommunication hub loads in and around the capital's business districts.

The greatest focus, however, is in the **CALABARZON** region just south of Manila – specifically **Cavite and Laguna** provinces – which has become the Philippines' primary hyperscale data center corridor. These areas offer large land parcels in industrial estates and are within Meralco's high-voltage network, making them ideal for campus-style data center developments. **Santa Rosa, Laguna** is a case in point: already an automotive and electronics industrial zone, it now hosts PLDT's 50 MW VITRO Sta. Rosa data center and is attracting other cloud operators. Meralco energized a new **Mesaland 115 kV–34.5 kV substation in Sta. Rosa** in 2025 to fortify this area's power supply. The Mesaland substation provides N-1 redundant feeds (cutting into two separate 115 kV lines) and an initial 83 MVA capacity, directly improving power quality and reliability for Sta. Rosa and adjacent zones like Cabuyao, Binan Silang, and Tagaytay. This investment supports not only residential and commercial growth, but explicitly the **industrial and IT loads** – including data centers – clustering in Laguna's techno-parks. Further west in **Cavite**, Meralco likewise serves data center sites such as STT GDC's facility in the province and has upgraded multiple substations to accommodate new technology parks. Both provinces benefit from their proximity to NGCP's backbone (with draw-down substations in Dasmariñas and Calamba) and are priority areas for Meralco's capacity expansion.

Emerging Hyperscale Power Corridors within Meralco Franchise

- **Northeast Metro Manila (Q.C.):** Polaris campus now energized at full dual-feed capacity.
- **CALABARZON (Sta. Rosa, Biñan, Dasmariñas):** New substation builds and 115 kV switching projects ongoing.
- **Eastern Corridor (Antipolo–Cainta–Pasig):** NGCP injection point planned; GIS upgrades underway.

Indoor Gas-Insulated Switchgear Switching Station Perspective



Gas-Insulated Switchgear

It is notable that **99% of hyperscale data center investments to date are choosing Meralco's franchise areas**, owing to the ready availability of large power capacity and infrastructure depth. Even as new sites are considered in emerging areas (e.g. New Clark City in Tarlac is outside Meralco's franchise), the **Meralco zone is uniquely positioned** with the grid heft to support multi-hundred-megawatt developments. Within this zone, the utility works proactively with local governments and economic zones to identify suitable

"digital parks" where power, fiber, and land converge. For example, Meralco has been coordinating with the government's **Green Lane** program to fast-track permits in strategic areas and ensure that by the time a data center is built, the nearest substation or high-voltage line has been uprated or looped for the new load. The result is a **geographically distributed readiness**: whether in metro-edge locales like **Quezon City** and **Pasig**, or in suburban tech hubs of **Cavite-Laguna**, Meralco's network has or is putting in place the feeders, transformers, and backup paths needed to energize current and future data center clusters.

3.3. Reliability, Redundancy and SLA Performance

Data center operators demand **Tier III/Tier IV levels of reliability** – often targeting **99.99%+ power uptime** – and Meralco has aligned its network design and operations to meet these stringent service-level agreements. **Redundancy** is built into every critical supply point: major data centers are offered a **"dual source" feed configuration**. The 2N+1 configuration only applies at medium voltage level via two (2) different 34.5 kV sources and one (1) back-up source. It is not applicable to 115 kV sub-transmission system since it uses a closed-loop configuration which means an outage of 1-115 kV will not result in power outage. In practice, this means a fault on one line or substation will not interrupt the data center's service. For instance, the A-FLOW ML1 facility in Laguna is being provided with **dual 115 kV feeds** via a new switching station, giving it the *highest redundancy and resiliency* standard available for a commercial grid connection. The STT GDC Polaris data center in Q.C. similarly uses an **in-building dual-bus 115 kV switching station** to isolate the facility from any single point of failure on the incoming supply. Meralco's standard for large critical customers is to maintain at least an **N-1 contingency** on all supply routes – as exemplified by the Mesaland substation in Sta. Rosa, which was built with two high-voltage sources so that it can lose one and still carry the full load. In addition, Meralco installs high-reliability equipment (GIS switchgear, protective relays, etc.) and performs rigorous maintenance on the dedicated feeders serving data centers to minimize unplanned outages.

Meralco has adopted N-1 configurations for dedicated data center supply, deploying high-reliability assets (GIS, relays, digital substations). Switching stations are designed for N-1 contingency only (2 line sources and 2 metering). Its **2024 system reliability index (SAIFI)** of 1.04 and **SAIDI** of 108.21 minutes were its best performance on record.

Table 4: Meralco Power Reliability Metrics vs Hyperscale SLA Standards

Metric	2024 Meralco Performance	Hyperscale SLA Target	Status
SAIFI	1.04 outages/year	≤ 2 outages/year	Exceeded
SAIDI	108.21 minutes/year	≤ 150 minutes/year	Exceeded
Power Quality	±5% voltage fluctuation	IT-grade standards	Compliant

Meralco supports 2N and N+1 configurations through multiple substation feeds, GIS tech, and smart grid automation (FLISR, ADMS, SCADA). Hyperscale sites experience minimal to zero unplanned outages per year.

These redundancy measures are reflected in Meralco's **industry-leading reliability metrics**. In 2024, Meralco achieved its *best ever* system reliability performance, with the average customer experiencing **just 1.04 sustained outages in the year** (System Average Interruption Frequency Index) and a total downtime of **108.21 minutes/year** (SAIDI). This marked improvement – the lowest interruption frequency and duration since Meralco began regulated benchmarking in 2012 – benefits all customers, but especially critical loads like data centers. It translates to a **99.98% power availability** on the distribution level. Many data center operators further note that Meralco's urban service areas often experience **zero** utility outages year-round at their facilities; and on the rare occasions an outage occurs, the **restoration is swift** (often within minutes) thanks to network automation. The utility has deployed an advanced **Outage Management System and SCADA** that immediately detect feeder faults and can re-route power or dispatch crews rapidly. For example, Meralco's distribution automation scheme uses auto-reclosers and *FLISR* (Fault Location, Isolation, and Service Restoration) technology to sectionalize faults and restore power to unaffected sections in seconds, significantly reducing the impact of equipment failures or line disturbances on mission-critical customers.

Power **quality and stability** are also maintained within tight standards. Meralco's substation upgrades (to modern power transformers and digital controls) have improved voltage regulation, keeping voltage fluctuation and frequency within the limits required for IT equipment stability. The new GIS **smart substations** that Meralco has installed (e.g. in North Caloocan, Commonwealth, Pamplona Uno, and Sampaloc) use intelligent controls to actively balance load and mitigate voltage sags. Additionally, Meralco coordinates closely with NGCP to ensure the transmission grid feeding its substations remains stable even as large inductive loads from data centers come online. This includes deploying **power factor correction** as needed and advising hyperscale customers on harmonic filtering if their equipment might introduce distortion.

The end result is a highly stable electrical environment – a crucial foundation for data centers to achieve **continuous, uninterrupted operations**. Meralco publicly **commits to "unwavering reliability"** for data centers and has backed this by meeting strict SLA targets for redundancy and outage response. Notably, Meralco's support for hyperscalers aligns with national priorities on infrastructure resilience and energy security, reinforcing confidence among developers that the grid will uphold their uptime requirements.

3.4. Grid Modernization and Strategic Support Programs

Beyond adding capacity, Meralco has been **modernizing its grid** to a smarter, more robust system – a strategy that directly benefits hyperscale digital infrastructure. A flagship effort is the **Meralco Smart Grid Program**, which is transforming the network through automation, advanced monitoring, and integration of new technologies. Key elements include **substation automation** (adopting IEC 61850 standard digital relays and remote control for all new substations), an Advanced Distribution Management System (**ADMS**) that centrally manages outages and optimizes the network in real-time, and **SCADA** upgrades for two-way monitoring of even the mid-voltage (34.5 kV) network. Through these upgrades, Meralco can isolate faults and restore power faster (as discussed) and dynamically balance load and voltage – critical for preventing even momentary disturbances to sensitive data center equipment. The utility is also piloting a **Distributed Energy Resource Management** system (DERMS) to handle the growing presence of **energy storage and solar** in its grid. This means future hyperscale campuses that deploy on-site batteries or co-located solar

farms can be smoothly integrated, with Meralco ensuring stability and even allowing these resources to support the grid during peak times or outages.

On the infrastructure front, Meralco has launched special programs to support hyperscale growth. Its **Enterprise Commercial and Conglomerates Segment** - a **One-Stop Shop** service for strategic investors, essentially guiding data center developers from planning to energization – including power requirement studies, regulatory approvals, and even engineering services via Meralco subsidiaries. For example, Meralco's engineering arm (MIESCOR) and energy solutions unit (MSERV) have actively contributed to data center projects by constructing high-voltage lines and supplying critical electrical equipment on fast timelines. Meralco is also aligning with the government's **Green Lane (Executive Order 18)** initiative, prioritizing grid connection projects for declared "strategic investments" such as large data centers.

To ensure digital infrastructure resilience, Meralco is investing in:

- **Smart Grid Rollout:** ADMS, digital substations (IEC 61850), DERMS for RE integration
- **One-Stop Shop for Strategic Investors:** Covers load studies, permitting, fast-track energization
- **Meralco Enterprise Commercial and Conglomerates Segment:** Meralco's customer-facing arm, directly engaging with both private and public sector stakeholders to deliver seamless, end-to-end energy solutions for data centers and other foreign direct investments (FDIs).

Meralco also provides RE sourcing via **GEOP and utility-scale renewables**, aligned with customer ESG goals.

Table 5: Timeline of New Meralco Substation Builds (2022–2025)

Year	Substation	Capacity (MVA)	Area Served
2022	North Caloocan GIS	83 MVA	North Caloocan
2022	Pamplona Uno GIS	83 MVA	Las Piñas
2024	Sampaloc GIS	83 MVA	Manila City
2024	Arcovia GIS	83 MVA	Pasig
2025 and 2028 Expansions	Calamba 230/115 kV Expansion (with existing capacity of 600MVA)	600 MVA Total 1,200MVA	Laguna Corridor

Strategically, Meralco recognizes that supporting the digital economy is a long-term endeavor. It has publicly stated its commitment to *"energizing critical digital infrastructure to meet global standards"* and has aligned its innovation roadmap accordingly. One highlight is sustainability: with Philippine energy policy aiming for 35% renewable energy by 2030, Meralco is enabling data center clients to **go green** through programs like the Green Energy Option (GEOP) and utility-scale renewables contracting. Within its franchise, Meralco's supply affiliates now offer renewable energy sourcing, allowing hyperscale facilities to run on significant shares of solar or wind power without sacrificing reliability. This complements the operators' own initiatives (e.g. efficient cooling, green building design) and ensures the power infrastructure is not only robust but also aligned with ESG goals. Furthermore, Meralco's investments in **battery energy storage systems (BESS)** at select substations will in the future help smooth

out peaks and provide ride-through support for the grid, an added resilience layer for large data centers drawing power in those areas.

Conclusion: Scalable Grid, Hyperscale Ready

Meralco's power infrastructure is well-prepared and continually evolving to support data center investments. The combination of ample scalable capacity, targeted expansion in the key geographic clusters (NCR and CALABARZON), high reliability with N-1 redundancies, and an aggressive grid modernization program provides data center developers with confidence that their power needs will be met both today and in the future. As the Philippines aspires to be a regional hyperscale hub, the Meralco franchise stands out as the high-reliability backbone that underpins this vision – delivering not just electricity, but a strategic advantage for digital infrastructure growth.

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4. Incentives, Policies, and Government Programs

4.1 The Philippines CREATE MORE ACT: Corporate Recovery and Tax Incentives for Enterprises (CREATE) to Maximize Opportunities for Reinvigorating the Economy Act (MORE) and Strategic Incentives

The CREATE MORE Act (Republic Act No. 12066), enacted in November 2024, provides the most comprehensive and tailored suite of tax incentives in Philippine history for strategic investments—especially hyperscale data centers and energy-intensive projects—under the Strategic Investment Priority Plan (SIPP).

The Meralco Franchise Area, already advantaged by scale, reliability, and grid infrastructure, now offers further competitiveness through the following validated and clarified provisions:

- **200% Power Cost Deduction (Enhanced Deductions Regime - EDR) -** Confirmed by FIRB, hyperscale data centers are qualified under the 2022 SIPP (Tier I - Infrastructure and Logistics – Telecommunication Infrastructure) and may avail of the **200% power cost deduction** under the EDR. However:
    - **Only power costs directly incurred for the registered project/activity** are eligible. Non-operational areas such as administrative offices are **not covered**.
    - A **registered export enterprise (REE)** opting for the 5% SCIT cannot **simultaneously avail** of EDR benefits.
- **20% Corporate Income Tax (CIT) for Registered Business Enterprises (RBEs) -** All RBEs under the EDR are **automatically eligible** for the reduced **20% CIT (previously from 25%)**, as provided under Sections 27(A) and 28(A)(1) of the Tax Code. This applies **only to taxable income from registered activities** during the applicable taxable year.
- **Extended Incentive Periods:** Incentive duration is based on project type and approver:
    - **Investment Promotion Agency (IPA)-approved** projects: 14 to 17 years.
    - **Fiscal Incentives Review Board (FIRB)-approved strategic projects**: up to **24–27 years**, including combinations of ITH and EDR.

However, **project scale alone** (e.g., exceeding PHP 15B) does **not guarantee** maximum terms or full incentives.

- **VAT Incentives – Strict Eligibility:** VAT zero-rating and exemptions apply **only to:**
  - **Registered Export Enterprises (REEs)**
  - **High-Value Domestic Market Enterprises (HVDMEs)** that meet one of the following:
    - Investment capital > PHP 15 billion in **import-substituting sectors**
    - **Export sales** ≥ USD 100 million annually in foreign currency

Ordinary Domestic Market Enterprises (DMEs) are **not eligible** for VAT-related incentives, regardless of capital size.

- **RBE Local Tax Predictability & Net Operating Loss Carryover (NOLCO)**
  - Local tax caps require an **ordinance** from the LGU.
  - Enhanced NOLCO applies only to losses **within the first 3 years** from commercial operations—not during ITH.
  - Deductions can be carried over for **5 consecutive years** after the loss.

Table 6: Sample Tax Computation under CREATE MORE Incentives

This simulation reflects the official clarification from the Fiscal Incentives Review Board (FIRB) on the allowable deduction of power costs for registered business enterprises (RBEs) under Title XIII of the Tax Code, as amended by the CREATE MORE Law.

Particulars	Registered Business Enterprise (under CREATE) *in Php*	Registered Business Enterprise (under CREATE MORE) *in Php*	Difference *in Php*
Gross Income	100,000,000.00	100,000,000.00	-
Less: 100% Deduction of Power Cost (Ordinary)	9,000,000.00	9,000,000.00	-
Less: Additional 50% Deduction on Power Cost under CREATE	4,500,000.00	N/A	
Less: Additional 100% Deduction on Power Cost under CREATE MORE	N/A	9,000,000.00	
Total Deductions	13,500,000.00	18,000,000.00	(4,500,000.00)
Taxable Income	86,500,000.00	82,000,000.00	4,500,000.00
Corporate Income Tax Rate	**25%**	**20%**	**5%**
Computed Tax Due	21,625,000.00	16,400,000.00	5,225,000.00
Net Income	**69,375,000.00**	**74,600,000.00**	**(5,225,000.00)**

The above simulation reflects FIRB's official clarification on how additional deductions under CREATE and CREATE MORE should be treated. **These deductions are tax shields—reducing taxable income and corporate tax payable—but are not actual operating expenses.**

- Under Section 34 of the Philippine Tax Code, enterprises not eligible for enhanced deductions are entitled to deduct actual power expenses as part of their ordinary and necessary business expenses. Meanwhile, an additional 100% deduction on power cost—on top of the ordinary deduction—can be claimed by RBEs registered under Title XIII and eligible for enhanced deductions under CREATE MORE.

- Under CREATE, enterprises may deduct 150% of actual power costs (100% ordinary + 50% additional deduction).
- Under CREATE MORE, enterprises may deduct 200% of actual power costs (100% ordinary + 100% additional deduction), while also benefiting from a reduced 20% Corporate Income Tax (CIT) rate.
- For a representative enterprise with Php 100M in gross income and ₱9M in power costs, this results in **Php 5.225M in tax savings under CREATE MORE versus CREATE.**

Key Implication

While the CREATE MORE Act offers an unprecedented array of fiscal incentives, it is important to emphasize that not all hyperscale data center projects are automatically entitled to the full suite of benefits—such as zero-rated VAT on local purchases, enhanced Net Operating Loss Carry-over (NOLCO), or maximum incentive durations.

Eligibility is contingent upon several factors, including:

- The project's **business model** (export-oriented vs. domestic market)
- The **classification of activities** under the Strategic Investment Priority Plan (SIPP)
- The **nature of the clientele served** (i.e., foreign vs. local market consumption)

Projects that are aligned with SIPP priorities, serve export markets, or engage in sectors considered import-substituting with investment capital exceeding **PHP 15 billion or with export sales in the immediately preceding year of at least One Hundred Million US Dollars ($100,000,000),** or its equivalent in an acceptable foreign currency, remain well-positioned to qualify for the most comprehensive benefits available under CREATE MORE.

Bottom Line

The **CREATE MORE Act** is the most progressive and strategically aligned investment framework the Philippines has enacted to date for energy-intensive and digital infrastructure sectors. It enhances the after-tax profitability of energy-intensive investors such as hyperscale data centers. By allowing 200% deductibility of power costs and lowering the CIT rate to 20%, CREATE MORE creates direct and measurable tax savings that improve financial runway and investor returns. It offers a suite of incentives that can materially improve project viability and investor returns:

- An **additional 100% tax deduction on power costs**, on top of the ordinary deduction—effectively allowing **200% total deductibility** for registered business enterprises (RBEs) under Title XIII of the Tax Code
- A **reduced Corporate Income Tax (CIT) rate of 20%**, down from the standard 25%, for qualified RBEs engaged in registered activities
- **Zero-rated VAT on electricity** and **duty-free importation** of capital equipment for export-oriented and HVDME

- Up to **27 years of cumulative incentives** for strategic, high-impact investments—through a mix of income tax holidays, enhanced deductions, and special corporate income tax (SCIT), or at the onset of both EDR and SCIT approved by the Fiscal Incentives Review Board (FIRB)

For developers of hyperscale data centers—where power costs account for 40–60% of operating expenses—this incentive is a decisive factor in project viability. FIRB's confirmation ensures clarity: CREATE MORE provides real tax relief, not by inflating expenses, but by shielding taxable income and reducing tax due. These benefits are critical levers in improving the Philippines' competitiveness in the ASEAN data center landscape, especially when supported by open access to the energy market via RCOA.

More than a theoretical promise, these benefits are already being operationalized—strengthening the country's investment proposition and aligning it more competitively with regional peers. Importantly, FIRB's clear policy guidelines ensure that incentives are granted with **integrity, transparency, and precision**—thus providing investors with both substantial financial advantages and long-term regulatory certainty.

This alignment of fiscal incentives with infrastructure readiness strengthens the Philippines' position as one of Southeast Asia's most cost-competitive destinations for hyperscale and other energy-intensive investments.

4.2 Comparative Incentive and Policy Movements in ASEAN

Singapore

1. **Escalating Carbon Tax Trajectory**:
   Singapore's carbon tax is projected to increase from the current S$25 per tonne of CO_2e to between S$50–S$80 by 2030. The government continues to assess the pace of escalation based on feedback and emissions reduction progress.
2. **Coverage Scope**:
   The tax currently applies only to top emitting facilities—those generating more than 25,000 tonnes of CO_2e annually—estimated to include around 50 key installations, which notably includes large-scale manufacturing and energy operations.
3. **Offset Mechanism via Carbon Credits:**
   Emitters can partially or fully offset their carbon tax liabilities using approved international carbon credits, the cost of which may be lower than the prevailing carbon tax rate. Singapore has already signed bilateral implementation agreements with Papua New Guinea, Ghana, Bhutan, and Peru.
4. **Impact on Digital Infrastructure Development:**
   There is a growing policy trade-off between environmental goals and economic competitiveness. The data center industry, in particular, has faced uncertainty due to the tight constraints on green energy supply. To date, the Singapore government has limited new DC licenses, fluctuating on how many additional megawatts may be allowed due to sustainability concerns. This policy

indecision has raised investor apprehension, as some hyperscale players begin exploring regional alternatives in Malaysia and Indonesia.

These policy dynamics underscore a crucial differentiator: while Singapore remains a global leader in regulatory sophistication and infrastructure quality, the Philippines—through the Meralco franchise area—can now position itself as a more scalable and cost-predictable location, especially for energy-intensive investments seeking long-term certainty and green growth potential.

Malaysia

Rising Costs Amid Strong Fundamentals. Malaysia remains a key data center destination due to robust infrastructure and aggressive incentives, **but recent power tariff reforms have introduced new cost pressures.** After a brief deferment, the government **implemented a Regulatory Period 4 (RP4) tariff hike on July 1, 2025**, raising base electricity rates by roughly **14%** for major users. A new *"ultra-high voltage"* customer category was introduced for the largest energy consumers (e.g. hyperscale data centers), with an average energy charge of about **~60 sen/kWh (≈$0.13–$0.14)** – up from the previous ~$0.10/kWh level. Concurrently, the traditional ICPT surcharge system (which adjusted tariffs biannually) was **replaced by a monthly Automatic Fuel Adjustment (AFA)** mechanism. Under AFA, fuel cost changes are passed through **every month** (July's AFA was set at 0 sen), introducing frequent rate fluctuations in place of the prior fixed 6-month periods.

- **Situational Overview**
  - **Investment Momentum**
    Malaysia has attracted an estimated USD 45 billion in data center investments between 2021 and 2024, with major global players such as Amazon Web Services and YTL committing to fully renewable energy (RE)-powered operations. This signals investor confidence in the country's energy roadmap and digital infrastructure readiness.
  - Data Center Capacity Outlook
    Malaysia currently hosts 18 operational data centers totaling over 800 MW. Capacity is expected to expand significantly to 81 facilities by 2035, driven by hyperscale demand and policy support.
- **Government Programs and Energy Access Mechanisms**
  - Electricity Tariff Adjustment (Pending Implementation)
    A 14% increase in electricity tariffs originally scheduled for July 2025 has been temporarily deferred. This development has intensified industry interest in alternative and cost-stable energy sourcing models.
  - Alternative Energy Procurement Mechanisms
    Malaysia offers multiple structured programs enabling access to renewable energy, particularly suited for high-load industries like data centers:
    - Green Electricity Tariff (GET): Certified RE purchase via TNB.
    - Corporate Green Power Programme (CGPP): Direct corporate procurement of RE.
    - Clean Energy Supply (CRESS): Grid-based RE supply via licensed third parties.
    - Clean Energy Market (CREAM): Aggregation of rooftop solar through leasing models.
    - Self-consumption (SELCO): On-site RE generation and consumption.
    - Feed-in Tariff (FiT): Sell RE to the grid at a fixed premium rate.

- Net Energy Metering (NEM): Offset grid use with self-generated solar.
- Malaysian Green Attribute Tracking System (mGATS): RE Certificate (REC) tracking and trading platform.

- **Enabling Policy Instruments**
  - Tax Incentives (GITA/GITE): Up to 100% capital allowance and 70% tax exemption for solar investments, supporting RE adoption in commercial and industrial sectors.
  - Green Financing Options: Includes GTFS 4.0, Low Carbon Transition Facility (LCTF), and Green Sukuk to lower the cost of capital for clean energy investments.
  - Carbon Tax Roadmap: A national carbon pricing mechanism will be introduced in 2026, starting with high-emission industries, providing clarity on future environmental cost implications.
  - Data Centre Nexus 2025: Malaysia's sectoral roadmap aims to develop an integrated and sustainable DC ecosystem, focusing on local supply chains, RE integration, and digital economy alignment.
  - Digital Economy Contribution: Under the 12th Malaysia Plan, the digital economy—including data centers—is projected to contribute 26% to national GDP by 2025.

Indonesia

- **Heavily Subsidized Power, but Reform Pressure**:
  Industrial rates are low due to direct subsidies and price freezes for business/industry, but there's growing momentum to rationalize this.
- **Renewable Investment Incentives**:
  100% tax holidays for up to 20 years for major RE projects; import/VAT exemptions for green equipment; guarantees for PPA fulfillment (e.g., geothermal).
- **Carbon Market & Tax (In Development)**:
  Pilot ETS launched for power in 2023; carbon tax to start at IDR 30,000/tCO_2 in 2025 and expand to more sectors.

Vietnam

- **Tariff Increases and Quarterly Adjustments**:
  First major retail price hikes in years (7.5% in 2023); tariffs now reviewed quarterly to better reflect market and cost changes.
- **Direct Power Purchase Agreements (DPPA)**:
  Launched in 2024: large users (e.g., factories, data centers) can contract directly with renewable generators—either private wire or via grid—with pilot capacity capped.
- **Land and Fee Incentives for Renewables**:
  New projects get 3-year land or sea fee exemptions; offshore wind gets extra reductions.
- **General Tax Holidays for RE/High-Tech**:
  CIT rates as low as 5–10% for strategic sectors; 4-year CIT exemption, then 9 years at 50%.

Table 7: ASEAN Incentives Snapshot (2024–2025)

Country	Power Cost Offset	Tax Incentives	Renewables/Carbon	Other Major Changes
PHILIPPINES	200% deduction on power	20% CIT, up to 27 yrs incentives, Zero-Rated VAT	N/A	Local tax predictability, flexible regime
SINGAPORE	Energy efficiency grants	Carbon tax rebates, capex allowances	Green Data Centre	Cap on DC capacity, S$10B clean fund
MALAYSIA	GITA/GITE, NEM, soft loans	100% allowance, 70% solar lease tax-free	NEM, CRESS, carbon tax 2026	Tariff reform, targeted subsidies
INDONESIA	Subsidized tariffs	100% RE tax holiday, VAT/import exemptions	ETS pilot, carbon tax 2025	Likely subsidy reform
VIETNAM	DPPA (renewable PPAs)	4-yr CIT holiday, 9 yrs 50% CIT	Fee/land exemptions	Quarterly tariff review, grid priority

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Table 8: Comparative Incentive Impact (USD, Based on $100M Net Profit)
This illustrates the comparative financial impact of fiscal incentives across selected ASEAN countries by simulating corporate income tax liabilities based on a $100 million net profit. It highlights the relative advantage of the Philippines' CREATE MORE incentives in reducing tax exposure for qualified investors.

Country	Standard Tax (USD Mn)	Net Tax Savings (USD Mn)	Energy Cost Offset (USD Mn)	Total Effective Incentives (USD Mn)	Notes
Philippines	$25.00	**$5.00**	**$3.50**	**$8.50**	Based on CREATE MORE incentives and 100% power cost deduction. Assumes 20% CIT for qualified RBEs and RCOA access.
Malaysia	$24.00	$10.00 (Pioneer Status + RE grants)	$3.00 (RE subsidy & FTAs)	$13.00	Energy subsidy varies by zone
Thailand	$24.00	$8.50 (BOI incentives)	$2.50 (RE tariff exemption)	$11.00	BOI status required
Singapore	$25.00	$7.00 (Tax rebate/capex)	$0.50 (Green fund rebates)	$7.50	High reliability, limited RE
Vietnam	$25.00	$5.00 (CIT holidays)	$2.00	$7.00	Lower reliability risk

Notes:

1. Assumes USD 100M profit, 25% standard CIT baseline. Energy offset assumes 100 MW DC load, RE incentive participation, and current average rates.
2. USD 100M net profit is a modeling reference commonly used to assess the relative impact of fiscal and energy incentives across locations for hyperscale-scale digital infrastructure. Actual profitability will vary based on tenant mix, utilization, local operating costs, and tax structuring.
3. For Philippines, figures derived from FIRB sample and adjusted for $100M profit case with average annual power cost of ~₱1B (USD ~$17.5M). Tax savings assume full qualification under CREATE MORE and Title XIII of the Tax Code.

Table 9: Estimated Annual Net Income for 100 MW Hyperscale Data Center (ASEAN Region)

This represents a comparative simulation of projected annual net income for a typical 100 MW hyperscale data center operating across key ASEAN countries. The estimates account for prevailing effective power rates (including applicable taxes and exemptions), localized operating cost assumptions, and region-specific fiscal incentives such as enhanced deductions or tax holidays. The objective is to highlight how differences in energy pricing and policy regimes directly affect profitability. Notably, locations with lower electricity costs and generous incentives—like the Philippines under the CREATE MORE framework—demonstrate stronger net income potential, reinforcing the critical role of power competitiveness in digital infrastructure investment decisions.

Country	Estimated Revenue (USD Mn)	Estimated Net Income (USD Mn)	Gov't Subsidy / Power Incentives	Assumptions & Notes
Philippines (RCOA + CREATE MORE)	300–400	60–90	**No direct subsidy -** incentives via CREATE MORE and RCOA	Competitive power cost with offset by CREATE MORE incentives and RCOA access
Malaysia	320–430	70–105	**Yes** – subsidized power rates and RE export incentives	Strong incentives (Pioneer Status tax holiday), RE tariff programs, excellent infrastructure *(net income range reduced from 70–105 to 55–90 reflecting higher ~$0.13/kWh power cost baseline.)*
Thailand	310–420	65–100	**Yes** – EEC incentives and government-backed RE programs	BOI incentives, growing RE access, moderate infra cost
Singapore	340–450	80–120	**No power subsidy;** tax and structuring incentives only	High opex offset by low tax regime and strong tenant demand
Indonesia	290–400	65–95	**Yes** – subsidized base load power and land grants	Low power cost and high demand; infra still improving
Vietnam	280–390	55–85	**Yes** – partial RE subsidies, land lease incentives	Growing ecosystem; good labor cost; infra reliability still catching up
Cambodia / Laos /	220–300	40–65	**Limited or no formal subsidies** for hyperscale	Limited tenant mix, infra constraints, moderate utilization rates

Country	Estimated Revenue (USD Mn)	Estimated Net Income (USD Mn)	Gov't Subsidy / Power Incentives	Assumptions & Notes
Myanmar / Brunei				

Notes:

1. **Estimated Revenue Basis**
   Revenue estimates assume colocation and hyperscale lease models at an average monthly rate of USD 30–45 per kW, across 100 MW of installed IT load operating at ~80% utilization. Annual revenue range is derived from:
   a. Structure Research, Southeast Asia Data Center Market Outlook 2024
   b. Synergy Research Group, Global Hyperscale Forecast Q1 2025
   c. CBRE APAC Data Center MarketView 2024
2. Net Income Margins
   Net income is modeled at 20–28% of revenue, depending on power efficiency (PUE), incentives, OPEX structure, and tax environment. Operating cost assumptions based on:
   - McKinsey & Company (2023), "Optimizing Cost Structure of Hyperscale Data Centers"
   - Uptime Institute Global Survey 2024
3. **Power Cost Assumptions**
   - Power comprises 40–60% of OPEX in hyperscale environments,
   - Power rates vary across markets:
     - Philippines (under RCOA): USD 0.085–0.105/kWh (per Table 1)
     - Malaysia/Thailand: USD 0.07–0.09/kWh (government-subsidized rates for RE-heavy supply)
     - Singapore: USD 0.10–0.14/kWh (no subsidy)
     - Source: ERC Philippines, EGAT Thailand, SEDA Malaysia, EMA Singapore
4. **Tax and Incentives**
   - **Philippines**: CREATE MORE Law offers a 100% additional deduction on power cost and reduced CIT to 20% for RBEs (Source: FIRB clarification, 2025)
   - **Malaysia**: Pioneer Status = 5–10 years income tax holiday; RE producers enjoy subsidized grid access
   - **Thailand**: BOI grants 50–100% tax exemptions + land incentives under the Eastern Economic Corridor (EEC) initiative
   - **Indonesia/Vietnam**: Apply partial RE subsidies and import tax exemptions
   - **Singapore**: No power subsidy; benefits derive from fiscal structuring and capex support
   - Sources:
     - ASEAN Investment Report 2024
     - Board of Investments Thailand (BOI), 2024
     - Malaysian Investment Development Authority (MIDA)
     - FIRB Philippines, 2025 correspondence
5. **Exchange Rate Used:** All PHP-USD conversions use the rate of **₱57.23 = 1 USD**, as of June 2025 (Source: BSP Official FX Rate).

6. **Utilization & Load Profile:** Model assumes **baseline PUE of 1.35** and **Power Factor = 0.95**, consistent with Tier III/Tier IV designs in tropical and RE-integrated deployments.

Summary

The Philippines, with its upgraded CREATE MORE framework and focused incentives for energy-intensive investments, is now far better positioned against traditional FDI destinations in ASEAN. While Singapore and Malaysia remain formidable due to infrastructure and capital programs, rising carbon/tariff costs are beginning to narrow the gap. Vietnam and Indonesia are moving toward market-reflective pricing but still offer targeted RE incentives.

The bottom line: for energy-intensive industries and data centers, the Philippines is now squarely in the running—not only on tax, but finally, on effective power cost competitiveness.

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5. Sustainability and Renewable Energy Integration

5.1 Philippines' Renewable Energy Strategy and Regional Context

- **Current Energy Mix:**
  As of 2025, fossil fuels continue to dominate the Philippine power generation mix, accounting for 78% of total energy output. Renewables contribute the remaining 22%, primarily from hydropower and geothermal sources, with solar and wind steadily scaling but still in nascent stages. Despite the absence of operational nuclear facilities, the country has committed to exploring nuclear energy as part of its long-term diversification.
- **Government Roadmap and National Targets:**
  Under the Philippine Energy Plan (PEP) 2023–2050 and the National Renewable Energy Program (NREP), the country is pursuing one of Southeast Asia's most ambitious RE transitions:
  - **35% renewable share by 2030**
  - **50% by 2040**
  - **More than 50% by 2050**, aiming for RE dominance in the generation mix

The government has operationalized a robust framework through the **NREP 2023–2040**, anchored in a **whole-of-nation and whole-of-government approach**. This includes both **mandatory pathways** (e.g., Renewable Portfolio Standards, GEAP) and **voluntary market mechanisms** (e.g., GEOP, net-metering, RCOA).

Key enabling initiatives include:

- **Green Energy Auction Program (GEAP)** – Fast-tracking over 15 GW of RE capacity through successive auctions (GEA-1 to GEA-4), including energy storage systems.
- **Green Energy Option Program (GEOP)** – Empowering large consumers to directly procure renewable energy from licensed suppliers.
- **RE Market Operationalization** – Launched in December 2024, the **Renewable Energy Market (REM)** enables RE certificate trading and bolsters investor confidence.

- **Incentives under the RE Act** – Combined with CREATE MORE, RE developers and consumers benefit from fiscal incentives such as:
    - 200% tax deduction on power costs
    - Zero-rated VAT on local power purchases
    - Duty-free importation of RE equipment
    - Income tax holidays and reduced CIT (20%) for eligible locators

As of **April 2025**, the Philippines has significantly scaled up its renewable energy (RE) pipeline, with over **117 GW** of capacity identified across both committed and indicative projects. This includes projects that have achieved financial close or are undergoing advanced pre-development, and which are already reflected in the **NGCP's transmission grid planning**.

Table 10: According to the Department of Energy (DOE), the current RE development pipeline includes:

Technology	Committed Projects (MW)	Indicative Projects (MW)	Total Pipeline (MW)
Solar	8,453.24	18,951.46	27,404.70
Wind	2,233.24	71,765.73	73,998.97
Hydro	847.34	9,280.32	10,127.66
Geothermal	122.22	434.00	556.22
Biomass	50.28	177.00	227.28
Total RE	**11,706.33**	**100,608.50**	**112,314.83**

Source: Department of Energy (DOE) – Committed and Indicative Power Projects Summary, as of April 2025. Used for NGCP's grid planning. https://legacy.doe.gov.ph/private-sector-initiated-power-projects

This unprecedented RE pipeline, complemented by forward auctions and demand-pull programs, positions the Philippines as a credible destination for **utility-scale solar and wind development**, **offshore wind**, and **geothermal resurgence**.

Regional Comparison: Energy Mix and 2030 Outlook

In comparison with its ASEAN peers, the Philippines shows a clear policy commitment to a renewable energy transition (e.g. 35% RE target by 2030, a coal moratorium). However, the pace of execution remains a critical concern. Renewable deployment has lagged in recent years – the Philippines was the only SEA country not to increase its renewables share from 2015 to 2023 – largely due to grid limitations and permitting bottlenecks. Accelerating grid modernization and streamlining of approvals will be vital for the country to hit its 2030 RE goal and fully capitalize on its strong policy framework.

Table 11: Projected Energy Mix Comparison Across Southeast Asia & Asia Pacific 2030

Country	2030 Fossil (%)	2030 RE (%)	2030 Nuclear (%)	Notes
Philippines	~65%	35% (target)	0%	Ambitious RE policies are in place, but historical implementation challenges—including permitting and grid readiness—warrant cautious optimism. Actual realization rates

Country	2030 Fossil (%)	2030 RE (%)	2030 Nuclear (%)	Notes
				of DOE targets have historically varied, highlighting the need for proactive execution support to sustain investor confidence.
Singapore	~80%	10–20%	0%	Import-based RE growth (plans to import ~30% of supply by 2035); very limited land for domestic RE.
Malaysia	~62%	38% (target)	0%	Hydro, solar, and biomass lead RE expansion; considering nuclear post-2035 (feasibility studies underway).
Indonesia	~66%	34% (target)	0%	JETP-supported transition – committed to at least 34% renewables by 2030 under Just Energy Transition Partnership.
Thailand	~60–65%	35–40% (target)	0%	Gas-dominated mix; new PDP aims for **51% RE by 2037** (up from ~20% in 2023), implying a significant RE surge post-2030.
Vietnam	60–70%	30–39%	0%	Rapid solar/wind growth in recent years; PDP-8 targets ~31% RE by 2030 (up to ~47% with foreign support). No nuclear in mix until after 2030 (earlier nuclear plans were shelved and only revived for post-2035).
Brunei	~90%	~10%	0%	Heavily reliant on gas; small solar projects underway. **30% RE by 2035** is the new goal, but <15% by 2030 is expected.
Cambodia	~35%	~65% (target)	0%	Large hydro projects dominate RE (target ~55% hydro + 10% other RE by 2030); remainder from coal and imports (no nuclear).
Lao PDR	~15%	~85%	0%	Primarily powered by hydropower (≈80% of generation); expanding hydro capacity to ~20 GW by 2030. Minimal fossil generation and no nuclear.
Myanmar	~53%	~47% (target)	0%	Aims for 38% of capacity from large hydro *plus* 9% other RE by 2030. Political and financing challenges cast uncertainty on project execution; no nuclear plans.

Note: Singapore's renewable share remains low in 2030 due to domestic constraints, but it is poised to rise significantly after 2030 through imported clean electricity and renewable energy certificates (e.g. ~6 GW imports planned by 2035, which would be ~30% of demand)

From 2015 to 2023, the Philippines was the only country in Southeast Asia that did not increase its share of renewables in total generation. Key constraints—such as **grid limitations**, **complex permitting**, and **financing hurdles**—have delayed project delivery and eroded investor confidence.

A recent assessment by **NGCP**, based on **DOE's June 2020 Private Sector-Initiated Power Projects (PSIPP)** list, shows that as of **October 2024**, **only 28% of proposed power projects had reached commercial operations**. This realization rate raises concerns about the feasibility of hitting the 2030 RE target, especially given the high share of **indicative and committed projects still pending execution** (see Figure 2.5 below, from NGCP Transmission Development Plan 2025–2050).

Projected grid capacity appears adequate until 2035 based on committed power plants' target commissioning dates. However, one of the significant concerns in transmission planning is the low realization rate of committed and indicative power plants. Figure 2.5 shows that from the list of June 2020 PSIPP based on the DOE data, only 28% of the planned power plants have reached commercial operation.

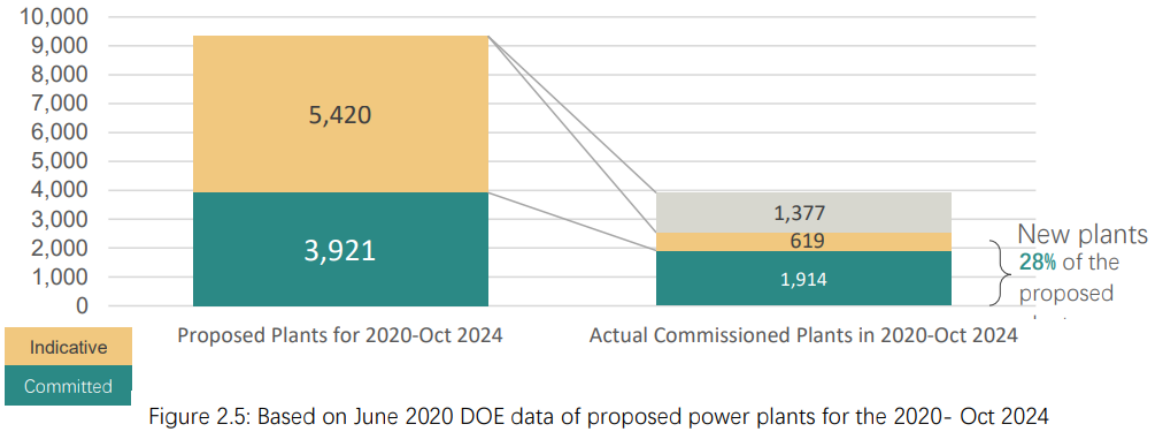

Figure 2.5: Based on June 2020 DOE data of proposed power plants for the 2020- Oct 2024
**excluding projects with commercial operation beyond Oct 2024*

Figure 2.5:** From the 9,341 MW of proposed PSIPP plants (June 2020–Oct 2024), only 2,533 MW were commissioned as of October 2024 — equivalent to **a 28% realization rate.
***Source:** NGCP Transmission Development Plan 2025–2050, Page 14 https://www.ngcp.ph/Attachment-Uploads/TDP%202025-2050%20REPORT-2025-03-11-10-38-56.pdf*

Thus, while the Philippine RE policy framework remains robust on paper, the **implementation track record warrants cautious optimism.** Accelerating **grid modernization**, improving **permitting timelines**, and strengthening **inter-agency execution** will be key to regaining investor confidence and achieving RE goals.

Policy Levers and Investment Momentum
Across ASEAN, governments are intensifying renewable energy programs using various policy levers to attract investment:

- **Competitive Auctions and PPAs:** Several countries have launched schemes for transparent procurement of RE. For example, the Philippines' Green Energy Auction Program (GEAP) has auctioned over 13 GW of renewables since 2022. Vietnam approved a direct power purchase agreement (DPPA) pilot in 2023 to allow developers to sell clean power directly to corporate off-takers, boosting private investment in renewables. Malaysia's Corporate Green Power Programme (CGPP) similarly enables corporate PPAs for solar projects. These auction and PPA mechanisms provide price discovery and bankable long-term contracts, spurring growth in solar and wind capacity.
- **Carbon Pricing and Emissions Trading:** Market-based incentives for decarbonization are emerging. Indonesia implemented a cap-and-trade trial covering dozens of coal power plants in 2023 as a step toward a national carbon market. Vietnam and Thailand are developing carbon market frameworks as well. Singapore, as a regional leader in carbon pricing, has imposed a carbon tax (set to rise to S$50–80/ton by 2030) to drive low-carbon investments. These carbon

pricing efforts signal to investors that future fossil generation will face higher costs, improving the relative economics of renewables.

- **Financial Incentives and Green Financing:** Many ASEAN governments offer sweeteners like soft loans, tax holidays, and green investment funds to lower the cost of renewable projects. In Malaysia, for instance, the National Energy Transition Roadmap outlines financing facilities for RE developers, and Indonesia's JETP package includes concessional funding to accelerate the coal-to-renewables shift. Such tools, combined with support from development banks, are catalyzing a pipeline of clean energy projects across the region.

In the **Philippine context**, a convergence of new investment incentives and pro-RE policies is creating a uniquely robust momentum. The recently enacted **CREATE MORE** law augments the country's attractiveness for renewable energy investors by expanding fiscal incentives – notably, extending tax incentive availabilities up to **27 years** (from 17) and providing *double* deductions on certain operating expenses like power costs. These generous perks dramatically improve project economics (for example, allowing a 100% additional deduction on electricity expenses effectively lowers operating costs for energy-intensive facilities) and give investors long-term certainty.

Equally important, the Philippines has moved to address non-financial hurdles through ease-of-doing-business reforms. The government's **Green Lane** initiative under *Executive Order No. 18* (2023) established one-stop "green lanes" to fast-track permits and licenses for strategic investments, including large renewable energy projects. By cutting red tape and accelerating approval timelines, this measure – overseen by the Anti-Red Tape Authority (ARTA) and the Board of Investments – directly tackles one of the biggest pain points in project development.

Combined with ongoing power sector reforms (like the Renewable Energy Act's 100% foreign ownership allowance for RE projects and the Renewable Portfolio Standards enforcing demand for green power), the Philippines now offers a rare synergy of incentives and regulatory support. This improves both cost-competitiveness and policy predictability for renewable energy ventures. The result is a more favorable landscape for clean energy advocacy and a strong signal to investors that the country is committed to realizing its renewable targets in a sustainable, bankable manner.

5.2 Sustainability in Data Centers: Regional Best Practices

- **Energy Efficiency Metrics:** The importance of energy-efficient designs, including green building certifications (LEED, EDGE), in data center operations.
    - Power Usage Effectiveness (PUE): The leading benchmark for data center energy efficiency, with top operators targeting PUE values below 1.3.
    - Green Certifications: Adoption of global standards such as LEED and EDGE is now standard for new builds, with additional recognition for energy and water efficiency.
- **Sustainable Practices:** Use of solar and wind energy, efficient cooling systems, and grid optimization.
    - **Renewable Energy Procurement:** Major data center operators are signing Corporate Power Purchase Agreements (PPAs) for solar, wind, and hydro, both on-site and off-site. Some are investing directly in renewable assets to power their facilities.

- **Advanced Cooling Solutions:** Rapid adoption of liquid cooling (direct-to-chip and immersion) is reducing the energy required for cooling high-density and AI workloads, often cutting cooling power needs by up to 80% compared to traditional systems.
- **AI-Driven Optimization:** AI and machine learning platforms are being deployed to optimize HVAC and IT load balancing, delivering up to 30% energy savings in cooling alone.
- **Grid and Demand Flexibility:** Operators are piloting flexible consumption strategies, including battery storage, to shift demand toward periods of high renewable generation and support grid stability.
- **Public Commitments:** Regional hyperscalers (e.g., STT GDC, Vitro Data Centers, and global firms like AWS, Google, Meta) have announced targets for 100% renewable energy sourcing and net-zero operations, driving broader ecosystem change.
- **Local Example:** Industry leaders in the Philippine data center sector are rapidly scaling up their use of renewable energy, leveraging both on-site installations and utility-scale green PPAs to cover a significant portion of their electricity needs. Advanced facilities are adopting liquid cooling and AI-based monitoring to achieve best-in-class energy efficiency, with some next-generation sites reporting Power Usage Effectiveness (PUE) targets as low as 1.25. These measures are enabling operators to substantially reduce their annual carbon footprint, demonstrating the Philippines' progress toward global benchmarks for sustainable digital infrastructure.

Summary

The Philippines and its regional peers are racing to ramp up renewable integration and sustainability—spurred by policy, market incentives, and the demands of digital transformation. The data center industry is at the forefront, pioneering new models for green energy procurement, AI-driven energy management, and technology adoption that sets a new baseline for low-carbon, high-efficiency operations in Southeast Asia.

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6. ARTA's Role in EODB for Energy and Infrastructure

The Anti-Red Tape Authority (ARTA), as the principal implementing agency of the Ease of Doing Business (EODB) Act, has significantly advanced regulatory streamlining and digital transformation efforts in the Philippines—particularly targeting foreign direct investments (FDIs) and large-scale infrastructure developments. Since 2023, ARTA's reform agenda has delivered improvements across five core areas: strategic investment facilitation, digital permitting, unified clearance systems, sectoral streamlining, and inter-agency collaboration. These efforts collectively support an enabling environment for data centers and other energy-intensive digital industries.

6.1. Streamlined Permitting Timelines and Service Guarantees

The Philippine Anti-Red Tape Authority (ARTA) was established under the **Ease of Doing Business (EODB)** Act (Republic Act No. 11032) to enforce simpler, faster government transactions. A cornerstone of this reform is the **"3-7-20" service standard**, which mandates agencies to act on simple requests within 3 working days, complex ones in 7 days, and highly technical cases in 20 days. These clear permitting timelines – along with a provision that applications are deemed approved if an agency fails to decide within the prescribed period – give investors predictable turnaround times. ARTA requires all offices to publish Citizen's Charters with processing times and has authority to hold agencies accountable to these guarantees. By cutting bureaucratic drag and imposing "automatic approval" for overdue permits, ARTA helps ensure energy and infrastructure projects are not stymied by indefinite delays. Notably, these expedited timelines apply even under special programs like the Green Lane for strategic investments, reinforcing that **regulatory decisions should take days or weeks, not months**.

6.2. Digitalization and One-Stop Platforms

Accelerating project approvals also means removing physical paperwork and redundant steps. ARTA is spearheading the **digitalization of permitting** through electronic one-stop shops. All national agencies and local government units (LGUs) are directed to accept online applications, digital signatures, and e-payments for permits. In fact, ARTA's mandate is to streamline *and digitalize* all government processes. This has driven the rollout of Electronic Business One-Stop Shops (eBOSS) in cities and municipalities, allowing businesses to apply for building permits, licenses, and clearances via a single online portal. To support lagging LGUs, ARTA forged partnerships with the private sector – for example, **Meralco** provided 500 computers to help dozens of municipalities automate their business permit systems. Each beneficiary LGU can now process applications electronically from submission to payment, aligning with the national push for ease of doing business. Early results are promising cities that fully implemented eBOSS saw a surge in new business registrations and higher local revenues, thanks to quicker and more convenient permit issuance.

In the energy sector, ARTA is working closely with the Department of Energy (DOE) to integrate multi-agency workflows into the **Energy Virtual One-Stop Shop (EVOSS)** system. This web-based platform streamlines all requirements for power generation, transmission, and distribution projects. A directive from the Office of the President in 2023 ordered national agencies and LGUs to coordinate with DOE, the ICT Department, and ARTA to fast-track the integration of all energy project permits into EVOSS. ARTA is even developing a model ordinance for LGUs to harmonize local processes with national energy plans – establishing unified permitting steps so host communities can more easily facilitate energy investments. Through EVOSS, proponents of power plants, grid expansions, or large electricity connections (e.g. data center facilities) can fulfill all regulatory requirements via one portal, drastically reducing the back-and-forth between different offices. ARTA also champions the creation of one-stop shops within agencies: for instance, **Executive Order No. 59 (2024)** now requires a dedicated one-stop shop and "account officer" in every agency or LGU handling flagship infrastructure projects, to serve as a single point of contact coordinating all necessary permits. These digital and institutional one-stop platforms enhance transparency, cut processing time, and curb opportunities for red tape in energy and infrastructure development.

6.3. Green Lanes for Strategic Investments

To further bolster investor confidence, the government launched **Green Lanes for Strategic Investments** via Executive Order No. 18 (2023). This policy, implemented with ARTA's support, assigns a fast-track mechanism for projects deemed "strategic" – such as those in the Strategic Investment Priority Plan or major ventures endorsed by the investment promotion agencies. Under EO 18, all relevant agencies, government corporations, and LGUs must prioritize and streamline the issuance of permits, licenses, and certifications for these high-impact investments. A **One-Stop Action Center** housed at the Board of Investments now serves as the single-entry point for strategic project applications, ensuring investors have a central office to coordinate all approvals. ARTA, for its part, sits on the technical working group that monitors compliance and addresses any bureaucratic snags or violations of the Anti-Red Tape Act. Crucially, the same 3-7-20 day processing timeline governs Green Lane transactions – meaning even complex energy or infrastructure endeavors flagged as strategic must receive decisive agency action (or automatic approval) within the statutory timeframe. By removing redundant requirements and placing strategic projects on a fast lane, the Green Lane program shortens the lead time for groundbreaking investments. ARTA's Director-General emphasized that this initiative will **"streamline… approval processes for strategic investments,"** helping attract more foreign direct investment and create jobs. Data center proponents, in particular, stand to benefit if their projects qualify for Green Lane treatment, as they would navigate a considerably simplified regulatory path aligned with the government's pro-investment agenda.

6.4. Inter-Agency Streamlining and ARTA Interventions

ARTA's cross-cutting authority has enabled reforms that tackle entrenched permitting bottlenecks involving multiple regulators. Its approach often convenes all agencies in a sector to eliminate overlapping requirements and unify processes under standard timeframes. A notable success was ARTA's role in slashing the permitting time for telecommunications infrastructure: in 2020, ARTA co-led a Joint Memorandum Circular with DICT and other agencies that trimmed the average approval time for a telecom tower from 8–9 months down to just **16 days**. This was achieved by reducing the number of separate permits from 30 to 8 and required documents from 86 to 35, while enabling parallel processing across offices. That dramatic improvement in telco roll-out, credited with improving internet speeds nationwide, exemplifies how ARTA-driven streamlining can accelerate infrastructure projects. A similar template is being applied to other utilities: in 2023, ARTA launched a joint circular to simplify water and wastewater infrastructure permits, which *"institutionalizes a harmonized, transparent, and efficient permitting framework"* for water projects. This reform integrates barangay clearances into city permits and enforces **standardized timelines aligned with RA 11032** across all relevant offices – clearing the way for faster implementation of water systems.

In the **energy sector**, ARTA's interventions are helping to synchronize the actions of many stakeholders (DOE, DENR, ERC, NGCP, LGUs, etc.) involved in power projects. ARTA sits on the EVOSS Steering Committee, working alongside agencies to identify and remove procedural roadblocks in approvals. It has encouraged LGUs to streamline local fees and requirements for energy facilities, even proposing model local policies so that hosting a new power plant or a large industrial load becomes frictionless. ARTA also acts on specific bottlenecks through its complaint and automatic approval mechanisms. For example, if a permit for a substation or generation project is stuck beyond the deadline, ARTA can step in to remind the agency of EODB rules – under E.O. 59 and the EODB law, any lapsed action is effectively an approved or extended permit by default. This "red tape to red carpet" approach has tangible impact: by coordinating

agencies and cutting duplicative steps, ARTA has **accelerated project permitting and regulatory coordination** in practice. Whether it's an expedited Energy Regulatory Commission clearance or a fast-tracked local construction permit, ARTA's oversight ensures that energy and infrastructure investments (such as hyperscale data centers) spend less time in bureaucratic limbo and move more swiftly toward execution.

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7. Competitive Advantages for the Philippines

- **Strategic Asia-Pacific Gateway**
  The Philippines sits at the crossroads of major Asia-Pacific trade and digital corridors, making it a natural hub for hyperscale data centers and energy-intensive industries. With proximity to rapidly growing economies (China, ASEAN, and Oceania), the country offers robust connectivity via extensive submarine cable networks, supporting low-latency operations and future-ready regional expansion.

- **Scalable, High-Voltage Power Infrastructure**
  Meralco's grid is engineered for hyperscale growth. With sub-transmission lines operating at 115 kV and planned 230 kV draw-down substations across the franchise, Meralco can reliably energize facilities requiring up to 300 MW per site. Dedicated switching stations, in-building dual feeds, and redundant supply configurations (N-1, N-2) ensure Tier III and Tier IV reliability standards are met. Over 99% of current hyperscale projects are situated in Meralco's franchise, affirming its unmatched infrastructure depth and scalability.

- **Accelerating Renewable Energy Integration**
  The Philippines is now one of the most ambitious markets in Southeast Asia for clean energy transition, targeting 35% renewable power generation by 2030 and 50% by 2040. Through policies like the Green Energy Auction Program (GEAP) and Green Energy Option Program (GEOP), the country is rapidly increasing solar, wind, hydro, and geothermal capacity. This surge in renewables not only ensures a more sustainable power supply, but also provides long-term price stability—a key draw for global digital infrastructure and manufacturing investors prioritizing decarbonization.

- **World-Class Incentive Regime under CREATE MORE**
  With the implementation of the **CREATE MORE Act** and access to optimized negotiated generation rates under RCOA, the Philippines now offers effective power prices as low as **$0.1093 USD/kWh** (VAT-exempt, optimized scenario) – rivaling the cost levels of Malaysia and Thailand. This power cost reform is complemented by strategic sourcing mechanisms, flexible supply contracting, and government-backed transmission augmentation.

  The 2024 CREATE MORE Act delivers Southeast Asia's most forward-looking incentive package for energy-intensive investments:
  - 20% corporate income tax rate for qualified enterprises (down from the standard 25%)
  - 200% tax deduction on power costs—a unique advantage directly addressing electricity expense for data centers and large-scale industrial users

- Up to 27 years of incentives for strategic, large-scale projects
- Zero VAT on local electricity purchases and VAT exemption on imports for export-oriented businesses
- Predictable local taxation via the 5% SCIT or RBE Local Tax option
  This combination dramatically reduces net operating costs, enhances after-tax returns, and ensures long-term investment certainty.

- **Sharply Improved Energy Cost Competitiveness within the Meralco Franchise**
  Recent reforms have significantly narrowed the power cost gap between the Philippines and traditional FDI magnets like Malaysia, Thailand, and Vietnam. The effective cost per kWh for large users—after accounting for tax deductions and zero VAT—now rivals or even beats regional peers.

  When tax incentives under the CREATE MORE Act (such as the 200% deduction on power costs) and zero-rated VAT for export-oriented locators are fully applied, the **effective electricity cost per kWh for large users now rivals—and in some cases outperforms—regional benchmarks** in Malaysia, Thailand, and Vietnam.

  While these countries are gradually phasing out industrial subsidies or transitioning to market-reflective tariffs, the Meralco franchise offers a stable, investor-aligned ecosystem: **negotiable supply contracts under RCOA, world-class grid reliability, and fiscal structures that directly reduce energy costs for hyperscale and energy-intensive operations.**

  These conditions make the Meralco service area not just a localized advantage—but a **durable, scalable competitive edge** in Southeast Asia's race for digital and industrial investments.

- **Green Digital Infrastructure Leadership**
  The Philippines is emerging as a leader in sustainable data center development:
  - Major operators are contracting directly for renewable power through corporate PPAs and on-site generation.
  - New facilities increasingly feature advanced cooling (liquid/immersion), AI-driven efficiency, and target best-in-class PUEs (≤1.3).
  - Adoption of international green building certifications (LEED, EDGE, BERDE) is becoming standard. This sustainability drive future-proofs investments against evolving global ESG expectations and carbon standards.

- **Skilled Talent and Robust Ecosystem**
  The country offers a deep pool of technical and engineering talent, a mature BPO sector, and a thriving ecosystem of digital service providers, partners, and suppliers. Government and private sector collaborations are expanding workforce upskilling—ensuring operational excellence and innovation for investors.

- **Institutional Reform and Regulatory Transparency through ARTA**
  The Anti-Red Tape Authority (ARTA) has catalyzed a nationwide regulatory transformation, **positioning the Philippines as not only open for business, but structurally ready to support large-scale, capital-intensive investments**—particularly in energy, technology, and digital infrastructure.

Strategic investors—especially those in the data center, manufacturing, and renewable energy sectors—now benefit from a reengineered regulatory environment, which includes:

- **Green lanes and one-stop shops under Executive Order No. 18**, enabling fast-tracked permitting for strategic investments.
- **Digitalized local and national permitting via the eBOSS and EVOSS platforms**, reducing manual bottlenecks and allowing multi-site investors to process permits concurrently. For energy projects, the **Energy Virtual One-Stop Shop (EVOSS)** ensures timely, transparent issuance of over 150 permits required for RE and other power infrastructure.
- **Regulatory clarity and synchronized inter-agency processes** across energy, environmental, and construction permits, improving timeline predictability and reducing investor risk.

Importantly, ARTA is now advancing **mandatory compliance timelines** for LGUs to fully adopt **eBOSS**, and is working with the **Department of the Interior and Local Government (DILG)** and the **Department of Information and Communications Technology (DICT)** to ensure **harmonization with the Philippine Business Regulations Information System (PBRIS)**. These efforts target **full digital migration for all Highly Urbanized Cities (HUCs)** and designated **investment corridors**, where the bulk of strategic energy and digital infrastructure projects are concentrated.

In parallel, ARTA is leading the development of **Regulatory Impact Assessment (RIA) Guidelines for LGUs**, using a **phased implementation approach starting with HUCs**. These guidelines aim to embed evidence-based, transparent regulatory practices into local governance—ensuring that reforms are not just national directives, but deeply localized and sustainable.

These EODB reforms—aligned with ASEAN best practices and executed in close partnership with DTI, BOI, DOE, PEZA, and now DILG and DICT—reinforce the country's evolving identity: **from a high-friction environment to a regulation-ready destination** for global investment.

Summary

The Philippines is no longer a peripheral option—it is now a central pillar in ASEAN's digital and energy-intensive growth narrative. With a robust high-voltage grid primed for hyperscale capacity, globally competitive power costs underpinned by strategic generation contracts and tax deductions, and a forward-leaning policy regime that clears the path for investment through Green Lanes and EVOSS, the country has transformed itself into a premier destination for sustainable data center development.

This White Paper presents clear and data-backed evidence that the convergence of five critical enablers—geostrategic location, renewable energy scale-up, world-class fiscal incentives under CREATE MORE, competitive power rates within Meralco's franchise, and far-reaching ease-of-doing-business reforms—has repositioned the country for global investment relevance.

For hyperscale data centers and other energy-intensive sectors, the Philippine value proposition is no

longer aspirational—it is actionable. The combination of 24/7 clean power, lower effective energy costs, streamlined permitting through ARTA and EVOSS, and tax deductions that rival global standards creates a fertile ground for long-term, future-proof infrastructure.

With institutional commitment from the highest levels of government and private sector collaboration, the Philippines is now ready to compete—not just on incentives, but on execution, energy readiness, and digital resilience. This is not merely an invitation; it is a call to action for investors, policymakers, and global partners to co-create the next generation of sustainable growth, right at the heart of Southeast Asia.

Contributors Page

This white paper was prepared by the **Enterprise Commercial and Conglomerates (EC&C) Power Competitiveness Champions Group** of **Meralco**, as part of its strategic effort to position the Philippines—and the Meralco franchise area in particular—as a competitive destination for energy-intensive investments across Southeast Asia.

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Ms. Garcia–Rama served as the principal architect and strategic lead of this White Paper, steering its overall vision, narrative framework, and analytical direction. As Meralco's Head for Enterprise Commercial and Conglomerate accounts, she brought to this work a deep understanding of investor needs, regulatory dynamics, and power infrastructure planning. Her leadership ensured that the paper reflects both regional competitiveness and the Philippines' readiness to support next-generation, energy-intensive investments—particularly in the hyperscale and digital infrastructure sectors.

Core Contributors

This White Paper was strengthened through the expertise and collaborative input of the EC&C Power Competitiveness Champions Group, alongside critical technical and sectoral guidance from key Meralco stakeholders. Their collective insights shaped the power benchmarking analysis, policy alignment, and industry-specific applicability of this report:

- **Mr. Lawrence S. Fernandez** – Vice President and Head, Utility Economics and Regulatory Affairs
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Peer Review and Regional Insights

We gratefully acknowledge the valuable insights and peer reviews provided by ASEAN collaborators and subject matter experts:

- **Mr. Kin Wong (Singapore)**
  Head of Sembcorp Ventures and CFO of GoNetZero
  Leads clean energy investments and sustainability-driven infrastructure programs across Southeast Asia. Contributed strategic guidance on green power pricing models, decarbonization pathways, and regional energy transition best practices.

- **Mr. Haseef Hizan (Malaysia)**
  Regional Manager, BASF Stationary Energy Storage, Southeast Asia
  Shared expertise on battery storage integration, utility-scale renewable systems, and policy trends shaping energy reliability and resilience across ASEAN.

Government and Institutional Validation

We extend our deep appreciation to our government and regulatory partners whose critical validation, policy guidance, and sectoral insights have reinforced the institutional integrity and strategic relevance of this White Paper. Their collaboration ensured that the content reflects the most current reforms, aligns with national priorities, and serves as a credible reference for both local and international stakeholders.

- **Ms. Mylene C. Capongcol**
  Under Secretary, Department of Energy (DOE)
  Provided strategic guidance and validation of the Philippines' renewable energy roadmap, including policy mechanisms for forward auctions, green energy programs, and transmission readiness. The Department also offered key insights into the operationalization of the Energy Virtual One-Stop Shop (EVOSS) and its role in streamlining permitting for energy and digital infrastructure projects aligned with the Philippine Energy Plan.

- **Mr. Mark DV. De Claro**
  Division Chief, Anti-Red Tape Authority (ARTA)
  Provided strategic inputs on institutional reforms, regulatory streamlining initiatives, and digitalization programs such as eBOSS. ARTA's insights on inter-agency alignment, Whole-of-Government process reengineering, and the phased implementation of regulatory impact assessments significantly contributed to the paper's section on ease of doing business and investment facilitation for energy-intensive sectors.

- **Mr. Mark Lester L. Aure**
  Executive Director, National Tax Research Center (NTRC)
  Provided official guidance on the implementation of strategic fiscal support measures under the CREATE MORE Act, particularly the 200% enhanced deduction for power costs. FIRB's

clarifications on policy coverage, allowable claims, and conditions for Registered Business Enterprises (RBEs) helped ground the white paper's simulation and case modeling for energy-intensive and export-oriented locators.

Appendices

- **Meralco Rates Detailed Comparative Tables (Standard and Optimized RCOA)**
- **Meralco Summary Schedule of Rates: June 2025 Rate Table**
- **ERC: RES and Local RES Average Prices**: Chart of Competitive Retail Electricity Market (CREM) and Green Energy Option Program (GEOP) Average Rates as of February 2025.
- **Summary of Committed Power Projects (2025–2030)**: DOE Committed Power Projects (April 2025). Breakdown by plant type and region (Luzon, Visayas, Mindanao). Energy storage capacity included.
- **Summary of Indicative Power Projects (2025–2033)**: DOE Indicative Power Projects (April 2025). Includes large-scale solar, wind, hydro, geothermal, and natural gas. Pipeline supports long-term power availability and pricing trajectory.
- **Power Cost Benchmarking for Commercial/ Industrial Loads Across ASEAN (June 2025)**
- **Sources and References**
    1. Meralco internal data and rate simulations (March–June 2025).
    2. DOE, ERC, ARTA official reports and circulars.
    3. Regional utility data from TNB (Malaysia), PLN (Indonesia), EGAT (Thailand), EVN (Vietnam), and others.
    4. ASEAN Centre for Energy, IEA, and direct validation with regional industry players and investors.

Appendix 1: Meralco Rates Detailed Comparative Tables (Standard and Optimized RCOA)

- *Generation Charge at Php 5.00/kWh*

Scenarios	Load (in MW CC)	*Assumed Negotiated Generation Charge @ Php5.0/kWh*	Transmission & Distribution Fees (USD/kWh)*	Subsidies/ Rebates/Others (USD/kWh)	Taxes & Levies (USD/kWh)	Effective Electricity Rate ($/kWh) with Tax	Effective Electricity Rate ($/kWh) w/o Tax
1	10.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092
2	20.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092
3	30.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092
4	40.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092
5	50.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092
6	60.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092
7	70.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092
8	80.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092
9	90.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092
10	100.0 MW	0.0874	0.0154	0.0064	0.0117	0.1209	0.1092

- *Generation Charge at Php 5.63/kWh*

Scenarios	Load (in MW CC)	*Ave. of RES Generation Charge @ Php5.63/kWh***	Transmission & Distribution Fees (USD/kWh)*	Subsidies/ Rebates/Others (USD/kWh)	Taxes & Levies (USD/kWh)	Effective Electricity Rate ($/kWh) with Tax	Effective Electricity Rate ($/kWh) w/o Tax
1	10.0 MW	0.0984	0.0154	0.0064	0.0130	0.1332	0.1202
2	20.0 MW	0.0984	0.0154	0.0064	0.0130	0.1331	0.1202
3	30.0 MW	0.0984	0.0154	0.0064	0.0130	0.1331	0.1202
4	40.0 MW	0.0984	0.0154	0.0064	0.0130	0.1331	0.1202
5	50.0 MW	0.0984	0.0154	0.0064	0.0130	0.1331	0.1202
6	60.0 MW	0.0984	0.0154	0.0064	0.0130	0.1331	0.1202
7	70.0 MW	0.0984	0.0154	0.0064	0.0130	0.1331	0.1202
8	80.0 MW	0.0984	0.0154	0.0064	0.0130	0.1331	0.1202
9	90.0 MW	0.0984	0.0154	0.0064	0.0130	0.1331	0.1202
10	100.0 MW	0.0984	0.0154	0.0064	0.0130	0.1331	0.1202

Appendix 2: Meralco Summary Schedule of Rates: June 2025 Rate Table

SUMMARY SCHEDULE OF RATES* EFFECTIVE JUNE 2025 BILLING	Generation Charge[1]	Transmission Charge[2]		System Loss Charge[3]	Distribution Charge[4]		Supply Charge[5]		Metering Charge[6]		AWAT (Refund)/Collect[7]	Regulatory Reset Fees Adjustment[8]	Lifeline Eligibility		Senior Citizen Subsidy[9]	Current RPT Charge[10]	Universal Charge				FIT-All (Renewable)[14]	Power Factor Adj[15]	
													For Non-lifeline: Lifeline Subsidy[7]	For Lifeline: Applicable Discounts[7]			UC-ME for (NPC-SPUG)[12]	UC-ME for (RED-C)[11]	UC-EC[12]	UC-SD[13]			
	per kWh	per kWh	per kW	per kWh	per kWh	per kW	per kWh	per cust/mo	per kWh	per cust/mo	per kWh	per kWh	per kWh	discount %	per kWh	per kWh	per kWh	per kWh	per kWh	per kWh	per kWh	Penalty	Disc
Residential																							
0 TO 20 KWH	7.3552	0.8114		0.6506	0.9803		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)	100.00%	0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
21 TO 50 KWH	7.3552	0.8114		0.6506	0.9803		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)	50.00%	0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
51 TO 70 KWH	7.3552	0.8114		0.6506	0.9803		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)	35.00%	0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
71 TO 100 KWH	7.3552	0.8114		0.6506	0.9803		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)	20.00%	0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
101 TO 200 KWH	7.3552	0.8114		0.6506	0.9803		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
201 TO 300 KWH	7.3552	0.8114		0.6506	1.2908		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
301 TO 400 KWH	7.3552	0.8114		0.6506	1.5837		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
OVER 400 KWH	7.3552	0.8114		0.6506	2.0941		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
General Service A																							
0 TO 200 KWH	7.3552	0.8114		0.6506	0.9803		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
201 TO 300 KWH	7.3552	0.8114		0.6506	1.2908		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
301 TO 400 KWH	7.3552	0.8114		0.6506	1.5837		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
OVER 400 KWH	7.3552	0.8114		0.6506	2.0941		0.4979	16.38	0.3350	5.00	(0.2024)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
General Service B	7.3552		256.0500	0.6506	0.1339	232.20		363.73		354.78	(0.1308)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
General Power (GP) Secondary																							
MEDIUM SECONDARY	7.3552		276.7900	0.6506	0.1339	232.20		827.54		831.72	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
LARGE SECONDARY	7.3552		276.7900	0.6506	0.1339	232.20		3,432.33		3,451.57	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
VERY LARGE SECONDARY	7.3552		276.7900	0.6506	0.1339	232.20		12,460.82		11,823.21	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
GP 13.8 KV and below																							
MEDIUM 13.8 KV AND BELOW	7.3552		286.3700	0.2658	0.0502	178.85		827.54		831.72	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
LARGE 13.8 KV AND BELOW	7.3552		286.3700	0.2658	0.0502	178.85		3,432.33		3,451.57	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
VERY LARGE 13.8 KV AND BELOW	7.3552		286.3700	0.2658	0.0502	178.85		12,460.82		11,823.21	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
GP 34.5 KV																							
MEDIUM 34.5 KV	7.3552		323.2900	0.2658	0.0502	178.85		827.54		831.72	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
LARGE 34.5 KV	7.3552		323.2900	0.2658	0.0502	178.85		3,432.33		3,451.57	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
VERY LARGE AND EXTRA LARGE 34.5 KV	7.3552		323.2900	0.2658	0.0502	178.85		12,460.82		11,823.21	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
GP 115 KV / 69 KV																							
MEDIUM 115 KV/69 KV	7.3552		345.4900	0.1361	0.0502	140.12		827.54		831.72	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
LARGE 115 KV/69 KV	7.3552		345.4900	0.1361	0.0502	140.12		3,432.33		3,451.57	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
VERY LARGE AND EXTRA LARGE 115 KV/69 KV	7.3552		345.4900	0.1361	0.0502	140.12		12,460.82		11,823.21	(0.0587)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189	1.4%	0.7%
GHMSCI	7.3552	0.9271		0.6506	0.8487			272.78		272.64	(0.0845)	(0.0023)	(0.0045)		0.0001	0.0057	0.1949	0.0044	0.0000	0.0428	0.1189		
FLAT STREETLIGHTS																							
Per Lamp																							
125 W Mercury, 70 W HPS (or equivalent)	308.92	34.85		27.33	82.58		26.71				(9.25)	(0.10)	(0.19)		0.0042	0.24	8.19	0.18	0.00	1.80	4.99		
250 W Mercury, 150 W HPS (or equivalent)	492.80	55.60		43.59	131.74		42.61				(14.75)	(0.15)	(0.30)		0.0067	0.38	13.06	0.29	0.00	2.87	7.97		
400 W Mercury, 250 W HPS (or equivalent)	823.78	92.94		72.87	220.23		71.22				(24.66)	(0.26)	(0.50)		0.0112	0.64	21.83	0.49	0.00	4.79	13.32		
400 W HPS (or equivalent)	1,279.80	144.39		113.20	342.14		110.65				(38.31)	(0.40)	(0.78)		0.0174	0.99	33.91	0.77	0.00	7.45	20.69		

VAT RATES	
Generation	11.43%
Transmission	10.80%
System Loss	11.37%
Current RPT, Local Franchise Tax, Universal Charge, FIT-All & Energy Tax	0.00%
Other Charges	12.00%

TOU GCA (adjustment per kWh)[16]	1.6517

ENERGY TAX[17]		
First 650 kWh		no charge
Next 350 kWh at		0.10 per kWh
Next 500 kWh at		0.20 per kWh
Excess kWh		0.35 per kWh

GEN SERVICE A (GS-A)
Non-residential customers with connected load of less than 5 kW

GEN SERVICE B (GS-B) & GEN POWER (GP)
GS-B (5 kW ≤ demand < 40 kW)
General Power
Medium (40 kW ≤ demand < 200 kW)
Large (200 kW ≤ demand < 750 kW)
Very Large (750 kW ≤ demand < 10,000 kW)
Extra Large (10,000 kW ≤ demand)

LOCAL FRANCHISE TAX[18]
Varies per LGU

SENIOR CITIZEN DISCOUNT[19]	
Residential	5.00%
Institution	50.00%

SPECIAL DISCOUNT[19]	
GS-A	5.00%
GS-B & GP	3.00%

Source: https://company.meralco.com.ph/news-and-advisories/rates-archives

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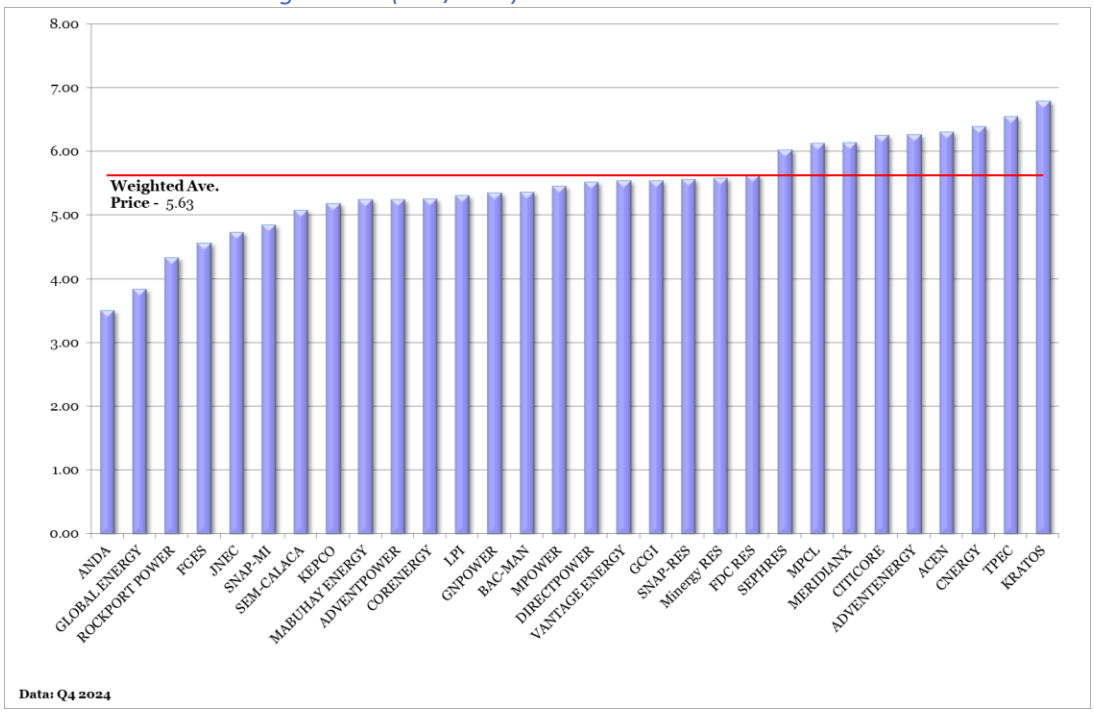
Appendix 3: Energy Regulatory Commission – RES and Local RES Average Prices, covering the Competitive Retail Electricity Market (CREM) and Green Energy Option Program (GEOP) average rates as of February 2025.

Source: https://buyyourelectricity.erc.ph/Reports

RES' & Local RES' Average Prices (PhP/kWh)



Key Highlights

- The **weighted average CREM generation rate** stands at **₱5.63/kWh**, aligning with Meralco's reported average.
- CREM rates generally include VAT, while GEOP offerings typically exclude VAT as they focus on RE-only supply.
- Local and foreign RES suppliers vary slightly in price range, with GEOP generally offering more competitive RE pricing (~₱5.35–5.45/kWh).

Demand Concentration per RES Group

RES Groups	No. of CREM EUs	Demand (MW)	Market Share	WAP (PhP/kWh)
Aboitiz Group	513	1,273.65	28.07%	5.66
Ayala Group	229	341.42	7.52%	5.99
San Miguel Group	150	668.37	14.73%	5.66
MERALCO Group	747	1,139.44	25.11%	5.45
FGEN Group	176	341.37	7.52%	5.38

Citicore Group	55	68.42	1.51%	6.25
Marubeni Group	65	174.37	3.84%	6.54
Others	241	530.50	11.69%	5.55
Total	**2,176**	**4,537.53**	**100.00%**	**5.63**

Appendix 4: Summary of Committed Power Projects (2025–2030): DOE Committed Power Projects (April 2025). Breakdown by plant type and region (Luzon, Visayas, Mindanao). Energy storage capacity included.

SUMMARY OF COMMITTED POWER PROJECTS
As of 30 April 2025

LUZON	ANNUAL SUMMARY OF TARGET COMMERCIAL OPERATION (MW)							
Plant Type	2025	2026	2027	2028	2029	2030	TBD	TOTAL
COAL	350.00	350.00	-	-	600.00	-	-	1,300.00
OIL-BASED	11.04	-	-	-	-	-	-	11.04
NATURAL GAS	440.00	-	-	-	-	-	3,470.00	3,910.00
NON-RENEWABLE ENERGY	801.04	350.00	-	-	600.00	-	3,470.00	5,221.04
RENEWABLE ENERGY	3,248.667	4,650.369	975.688	88.500	-	600.000	14.960	9,578.18
GEOTHERMAL	38.57	-	-	-	-	-	-	38.57
HYDROPOWER	30.55	23.90	63.00	1.00	-	600.00	14.96	733.41
BIOMASS	1.68	1.20	3.40	-	-	-	-	6.28
SOLAR	2,633.71	3,555.74	909.29	87.50	-	-	-	7,186.24
WIND	544.15	1,069.53	-	-	-	-	-	1,613.68
TOTAL	4,049.71	5,000.37	975.69	88.50	600.00	600.00	3,484.96	14,799.22
ENERGY STORAGE SYSTEM (ESS)	280.00	56.00	-	-	-	-	1,060.00	1,396.00
BATTERY ESS	280.00	56.00	-	-	-	-	1,060.00	1,396.00
PUMPED HYDRO	-	-	-	-	-	-	-	-

Note: Atimonan One Energy Inc. power project is for further evaluation and discussion, thus, not counted in the summary.

VISAYAS	ANNUAL SUMMARY OF TARGET COMMERCIAL OPERATION (MW)							
Plant Type	2025	2026	2027	2028	2029	2030	TBD	TOTAL
COAL	-	-	-	135.00	-	-	-	135.00
OIL-BASED	103.70	-	-	-	-	-	-	103.70
NATURAL GAS	-	-	-	-	-	-	-	-
NON-RENEWABLE ENERGY	103.70	-	-	135.00	-	-	-	238.70
RENEWABLE ENERGY	709.91	959.70	116.57	22.80	-	-	54.00	1,862.98
GEOTHERMAL	30.00	5.65	-	-	-	-	48.00	83.65
HYDROPOWER	22.26	2.00	4.57	5.30	-	-	-	34.13
BIOMASS	38.00	-	-	-	-	-	6.00	44.00
SOLAR	606.09	346.05	112.00	17.50	-	-	-	1,081.64
WIND	13.56	606.00	-	-	-	-	-	619.56
TOTAL	813.61	959.70	116.57	157.80	-	-	54.00	2,101.68
ENERGY STORAGE SYSTEM (ESS)	80.00	20.00	30.00	-	-	-	180.00	310.00
BATTERY ESS	80.00	20.00	30.00	-	-	-	180.00	310.00
PUMPED HYDRO	-	-	-	-	-	-	-	-

Source: https://legacy.doe.gov.ph/private-sector-initiated-power-projects

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Appendix 5: Summary of Indicative Power Projects (2025–2033): DOE Indicative Power Projects (April 2025). Includes large-scale solar, wind, hydro, geothermal, and natural gas. Pipeline supports long-term power availability and pricing trajectory.

SUMMARY OF COMMITTED POWER PROJECTS
As of 30 April 2025

MINDANAO	ANNUAL SUMMARY OF TARGET COMMERCIAL OPERATION (MW)							
Plant Type	2025	2026	2027	2028	2029	2030	TBD	TOTAL
COAL	-	-	135.00	-	-	-	135.00	270.00
OIL-BASED	56.00	-	-	-	-	-	-	56.00
NATURAL GAS	-	-	-	-	-	-	-	-
NON-RENEWABLE ENERGY	56.00	-	135.00	-	-	-	135.00	326.00
RENEWABLE ENERGY	193.17	40.00	-	32.00	-	-	-	265.17
GEOTHERMAL	-	-	-	-	-	-	-	-
HYDROPOWER	47.80	-	-	32.00	-	-	-	79.80
BIOMASS	-	-	-	-	-	-	-	-
SOLAR	145.37	40.00	-	-	-	-	-	185.37
WIND	-	-	-	-	-	-	-	-
TOTAL	249.17	40.00	135.00	32.00	-	-	135.00	591.17
ENERGY STORAGE SYSTEM (ESS)	40.00	108.00	-	-	-	-	80.00	228.00
BATTERY ESS	40.00	108.00	-	-	-	-	80.00	228.00
PUMPED HYDRO	-	-	-	-	-	-	-	-

PHILIPPINES	ANNUAL SUMMARY OF TARGET COMMERCIAL OPERATION (MW)							
Plant Type	2025	2026	2027	2028	2029	2030	TBD	TOTAL
COAL	350.00	350.00	135.00	135.00	600.00	-	135.00	1,705.00
OIL-BASED	170.74	-	-	-	-	-	-	170.74
NATURAL GAS	440.00	-	-	-	-	-	3,470.00	3,910.00
NON-RENEWABLE ENERGY	960.74	350.00	135.00	135.00	600.00	-	3,605.00	5,785.74
RENEWABLE ENERGY	4,151.75	5,650.06	1,092.26	143.30	-	600.00	68.96	11,706.33
GEOTHERMAL	68.57	5.65	-	-	-	-	48.00	122.22
HYDROPOWER	100.61	25.90	67.57	38.30	-	600.00	14.96	847.34
BIOMASS	39.68	1.20	3.40	-	-	-	6.00	50.28
SOLAR	3,385.17	3,941.79	1,021.29	105.00	-	-	-	8,453.24
WIND	557.71	1,675.53	-	-	-	-	-	2,233.24
TOTAL	5,112.49	6,000.06	1,227.26	278.30	600.00	600.00	3,673.96	17,492.07
ENERGY STORAGE SYSTEM (ESS)	400.00	184.00	30.00	-	-	-	1,320.00	1,934.00
BATTERY ESS	400.00	184.00	30.00	-	-	-	1,320.00	1,934.00
PUMPED HYDRO	-	-	-	-	-	-	-	-

Note:
1. Period Coverage is from 2024-2030, including Projects without firm commercial operations date and/or beyond 2030 tagged as To be Determined (TBD).

Appendix 6: Power Cost Benchmarking for Commercial/ Industrial Loads Across ASEAN (June 2025)

This annex presents a comparative view of effective electricity rates for large industrial and commercial users (10 MW and above, high load factor ~95%) across selected ASEAN economies, as of June 2025. The data covers both with-tax and without-tax effective rates and indicates the extent to which tariffs are subsidized or cost-reflective. Anchoring all country data to mid-2025 enables a uniform basis for comparison, giving hyperscale investors a reliable snapshot of regional cost competitiveness and the stability of long-term energy supply.

Electricity Tariff Comparison (Mid-2025)

Below we provide updated, validated sources for the effective electricity rates (with and without tax) and subsidy status of various Southeast Asian countries. All figures are as of **mid-2025** (around June 2025) and

correspond to large industrial/commercial consumers (approximately 10 MW demand, high load factor ~95%, power factor ~95%).

Brunei Darussalam

- **Effective Rate: ~US$0.04/kWh** (with or without tax).
- **Subsidy: Yes (heavy)** – Brunei's power tariffs are flat and massively subsidized by the government, kept far below generation costs. For over two decades, Brunei has not changed its nominal rates due to subsidies; electricity is priced at roughly **B$0.06 per kWh (≈US$0.044)**researchgate.netthescoop.co. The tariff structure is regressive – larger consumers pay lower per-kWh rates, e.g. commercial users pay as low as B$0.05 per kWh (≈US$0.035) at high usage levelsdes.gov.bn. This generous subsidy regime keeps Brunei's power price around 4 ¢/kWhresearchgate.net, among the cheapest in the world. (No additional taxes are applied, hence "with tax" equals "without tax".)

Laos (Lao PDR)

- **Effective Rate: ~US$0.05/kWh** (excl. VAT); **US$0.055/kWh** (incl. VAT ~10%).
- **Subsidy: Yes (large)** – The state-owned Électricité du Laos (EDL) heavily subsidizes tariffs, which are kept below cost-recovery, especially for industry. As of 2025, EDL's average cost of supply is about **7.29 US¢/kWh** while the average retail tariff is only ~3 ¢/kWh for householdsasianews.networkasianews.network – the government bridges this gap with subsidies. Industrial customers pay slightly more (around 5 ¢/kWh) but still below true cost. In fact, due to past currency depreciation, industry tariffs that were officially 10–12 ¢/kWh effectively fell to **~5 ¢/kWh** in recent yearslaotiantimes.comlaotiantimes.com. The Lao government in mid-2025 acknowledged these unsustainably low rates and planned renegotiations to reduce subsidiesasianews.networkasianews.network, but as of mid-2025, industrial electricity remains ~US$0.05/kWh with state support.

Vietnam

- **Effective Rate: ~₫2,204 per kWh** (VND, excluding VAT) ≈ **US$0.09/kWh**; about **US$0.10/kWh** with 10% VATen.evn.com.vn. (Table shows $0.085 no tax, $0.094 with tax, roughly consistent.)
- **Subsidy: Partial** – Vietnam operates a cross-subsidy system between customer classes. Industrial power rates are slightly **lower** than the average tariff, while residential rates (especially for higher consumption tiers) are higher to compensate. In May 2025, EVN (the state utility) raised the **average retail tariff** to **₫2,204.0655/kWh (excl. VAT)**en.evn.com.vn, citing rising fuel costs. Under a new tariff structure (Decision 14/2025), industrial **"production"** customers at high voltage enjoy base rates around **84–86% of the average tariff** in normal hoursdfdl.comdfdl.com. By contrast, residential tariffs range from 90% up to 180% of the average for heavy usagedfdl.com. This means large industries pay slightly under the average (~₫1,850–1,900 per kWh, before VAT) while households cross-subsidize. The Vietnamese government does **not** directly subsidize tariffs, but it approves periodic adjustments (Fuel Cost Adjustments) to ensure EVN's costs are covered. The mid-2025 pricing (~9 ¢/kWh net of taxen.evn.com.vn) is essentially **cost-reflective**, with only these built-in class cross-subsidies rather than any direct government subsidy.

Indonesia

- **Effective Rate: ~US$0.07/kWh** (excl. tax); **~US$0.077/kWh** (incl. 10% VAT).
- **Subsidy: Yes** – Indonesia's government directly subsidizes PLN (the state utility) to freeze or even lower electricity rates despite high generation costs. Throughout 2025, the Energy Ministry has **frozen quarterly tariff adjustments** for all consumer categories to support the economyjakartadaily.idjakartadaily.id. For instance, in **Q3 2025** the government kept tariffs **unchanged** for 13 non-subsidized groups (including large industrial users) and 24 subsidized groupsjakartadaily.idjakartadaily.id, despite surging fuel costs. The government allocated huge funds – **Rp 87.72 trillion** (≈US$5.1 billion) in the 2025 budget – to cover electricity subsidies for PLNen.antaranews.comen.antaranews.com. This allows Indonesia to maintain industrial tariffs around 7 ¢/kWh (before VAT) even when true costs are higher. *In short, rates are essentially "frozen" by government decree, and PLN is compensated via subsidies.* jakartadaily.iden.antaranews.com

Thailand

- **Effective Rate: ~฿4.15 per kWh** (Thai Baht, excl. VAT) ≈ **US$0.12/kWh**; about **US$0.128/kWh** with 7% VATnationthailand.com.
- **Subsidy: Partial** – Thailand uses a Fuel Adjustment Tariff (Ft) mechanism, but the government often caps Ft increases and lets the state-owned EGAT absorb the extra fuel cost. For May–August 2025, the Energy Regulatory Commission **froze the average tariff at ฿4.15/unit (ex. VAT)**nationthailand.com by keeping the Ft charge at 0.3672 baht (36.72 satang) – the same as the prior period. This consisted of a base tariff ~฿3.78 plus Ft ~฿0.37nationthailand.com. The freeze was a policy move to shield consumers from soaring gas/coal costs. EGAT has been carrying massive losses as a result. By early 2025, EGAT had accumulated roughly **฿70 billion** (≈US$2 billion) in unrecovered fuel costs that it "absorbed" on behalf of consumersnationthailand.comnationthailand.com. Government policy delayed EGAT's cost recovery (it only began recouping a portion once tariffs were capped around ฿4.15nationthailand.com). Thus, Thai tariffs are **semi-subsidized**: there is no direct government payment to bills, but state-owned EGAT bears cost variances to keep tariffs stable. (*Note:* A further cut to ~฿3.99 was discussed in 2025, but the mid-year rate remained ฿4.15nationthailand.com.)

Philippines (Meralco, Metro Manila)

- **Effective Rate (Standard Case): ~PHP 6.70 per kWh ≈ US$0.121/kWh** (excl. VAT); about **US$0.134/kWh** with 12% VAT.
- **Effective Rate (Optimized Case): ~PHP 5.95 per kWh ≈ US$0.110/kWh** (excl. VAT); about **US$0.1215/kWh** with VAT. *(This "optimized" case assumes a lower generation charge of ₱5.00 vs the standard ~₱5.63.)*
- **Subsidy / Market Structure: No direct government subsidies** are applied. Instead, the Philippine market is **fully cost-reflective and liberalized**, ensuring pricing transparency and long-term predictability. Unlike other ASEAN markets where tariffs are subject to fiscal strain or abrupt subsidy withdrawals, the Philippines offers investors **stable, rules-based pricing under a competitive market framework**.

Key Enablers for Hyperscale and Large Users:

- **Retail Competition and Open Access (RCOA) / Contestable Market (CREM):** Under the **Electric Power Industry Reform Act (EPIRA, RA 9136)** and DOE Circulars (latest DOE DC 2012-05-0005, amended in 2016), large consumers with a demand of at least **500 kW** may directly contract power through the **Contestable Retail Electricity Market (CREM)**【DOE Philippines, 2024】. This allows data centers and large industries to source from **licensed Retail Electricity Suppliers (RES)** rather than being captive to a single utility.
    - **Benefit:** Freedom to **negotiate tailored supply contracts**, including renewable energy portfolios, blended pricing, and risk-mitigation structures.
    - **Impact:** Enhances competitiveness by enabling hyperscale players to lock in **optimized rates (≈$0.1098/kWh)** and green energy compliance.
- **CREATE MORE Incentives (Corporate Recovery and Tax Incentives for Enterprises – Maximizing Opportunities for Reinvigorating the Economy Act, 2024):** Building on the original **CREATE Act (RA 11534, 2021)**, the **CREATE MORE bill** was passed in mid-2024【Philippine Congress, 2024】【DOF, 2024】 to expand incentives for strategic and export-oriented industries, including **hyperscale data centers**.
    - **Benefit:** Locators in economic zones and IT parks can enjoy **zero-rated VAT** on qualified power purchases, **Income Tax Holidays (ITH)**, and up to **27 years of fiscal incentives** under FIRB-approved projects.
    - **Impact:** Provides long-term cost stability and significant savings for hyperscale investors, complementing Meralco's optimized energy sourcing options.

The absence of subsidies, combined with **RCOA-driven competition** and **CREATE MORE fiscal incentives**, positions the Philippines as a **transparent, market-based environment** where large investors enjoy both **energy cost flexibility** and **policy-backed certainty**. This framework ensures that data centers in the Meralco franchise can align with global hyperscale requirements for **scale, resilience, and sustainability** without exposure to subsidy volatility seen in other ASEAN markets.

Malaysia

- **Effective Rate: ~RM 0.57 per kWh** (Malaysian Ringgit, incl. 6% SST) ≈ **US$0.14/kWh**; about **RM 0.54/kWh** (≈**US$0.13**/kWh) before tax.
- **Subsidy: Partial** – Malaysia uses an Imbalance Cost Pass-Through (**ICPT**) system, but the government frequently intervenes to subsidize fuel cost spikes for certain consumers. The **base tariff** for large commercial/industrial users in Peninsular Malaysia was **RM 0.3995/kWh** throughout H1 2025carplus.my, which reflects the long-run cost of supply. However, depending on fuel prices, an ICPT **surcharge** or **rebate** is applied every 6 months. In 2022–2023 the government spent billions to buffer these costs: for example, without subsidies, a steep **27 sen/kWh** surcharge would have been needed in early 2023, but heavy industry was charged only 20 sen and many smaller users had 0–2 sen rebatestheedgemalaysia.comtheedgemalaysia.com. The government paid **RM 10.76 billion** in H2 2022 alone to cover generation coststheedgemalaysia.com. This targeted approach means **large industries now pay "at cost"** (they faced surcharges when fuel costs rosetheedgemalaysia.com), while **households and small businesses received rebates** funded by the statetheedgemalaysia.com. As of mid-2025, ICPT

surcharges on industry have been reduced thanks to easing fuel prices and continued government support. In July 2025, Malaysia restructured tariffs (increasing the base rate to 45.4 sen) and introduced an Automatic Fuel Adjustment, but capped monthly changes at ±3 sen, indicating ongoing partial subsidies or controlscarplus.mycarplus.my. **Bottom line:** Malaysian industrial tariffs around ~RM 0.54 (13 ¢) per kWh before tax are partially subsidized via government-funded ICPT rebates for select sectors, while big users generally pay near the actual cost of supply (with any extreme fuel cost overrun partly borne by the government).

Myanmar

- **Effective Rate:** ~**MMK 300 per kWh** for large industry (Myanmar Kyat) ≈ **US$0.14/kWh** (using official rate); ~**US$0.154/kWh** with tax (if any).
- **Subsidy: Yes (historically)** – Myanmar long had some of the cheapest, most-subsidized electricity in ASEAN, which led to chronic under-recovery of costs. Until 2019, residential tariffs were as low as **35–125 kyat/kWh** and industrial at **125–180 kyat** (mere fractions of a US cent)nationthailand.com. In recent years, the government (under the State Administration Council) enacted steep rate hikes to reduce subsidies. Notably, effective **September 1, 2024**, tariffs more than doubled: the top household rate jumped from **125 to 300 MMK** per kWh, and the highest commercial/industrial rate soared from **180 to 500 MMK** per kWhnationthailand.comnationthailand.com. For a large factory using >20,000 kWh/month, the tariff is now **500 MMK/kWh**, about US$0.24 at the official exchange (1000 MMK ≈ $0.48)nationthailand.comnationthailand.com. These increases drastically cut the subsidy, yet electricity prices **remain below full cost**, given Myanmar's reliance on costly diesel generation during outages and limited grid power. Even after paying 300–500 kyat, businesses still suffer frequent blackouts and must spend on generators – indicating that the tariff, though higher, does not fully fund a stable supplyscm-legal.comscm-legal.com. In summary, Myanmar **has begun phasing out subsidies** via tariff hikes in 2023–2024, but power rates (≈14–15 ¢/kWh for big users at official FX) are still not fully cost-reflective and the government historically subsidized the sector heavily.

Cambodia

- **Effective Rate:** ~**US$0.14/kWh** (excl. VAT); ~**US$0.154/kWh** (incl. VAT).
- **Subsidy: Yes** – The Cambodian government subsidizes Electricité du Cambodge (EDC) through cheap imports and budget support, and it has selectively reduced tariffs for certain sectors in recent years. Cambodia's industrial electricity costs have been high regionally (about **$0.137/kWh in 2022** on averagekhmertimeskh.com), but the government has implemented programs to lower them. In late 2023, under the new administration of PM Hun Manet, the Ministry of Mines and Energy announced **tariff discounts for industrial and agricultural consumers**. From Oct–Dec 2023, factories received **10% off** incremental energy used in daytime, and **20% off** incremental usage at night (9 pm–7 am), on Sundays and holidaysadmin.taftac-cambodia.org. This was a stimulus to expand production. The government indicated these *"tariff preferences"* might be extended depending on EDC's capabilityadmin.taftac-cambodia.org. Crucially, the press release noted that other user groups (residential, commercial, public sector) **"have already received subsidies from EDC and the Royal Government"**, hence were not eligible for the new discountsadmin.taftac-cambodia.org. In practice, Cambodia keeps urban household rates

relatively low and often subsidizes the fuel costs for power generation and imports (from Vietnam, Thailand) to stabilize prices. Industrial users typically pay the highest rates, but even those are sometimes subsidized or capped by state directives. By mid-2025, large industries pay on the order of **$0.14–0.15 per kWh**, and Cambodia's strategy is to gradually lower these tariffs as regional power trade and new generation come online. The **state's role remains pivotal**, either via direct subsidies to EDC or policy-driven tariff cuts for priority sectorsadmin.taftac-cambodia.org.

Sources: The information above is drawn from official regulatory announcements, government press releases, and reputable news outlets for each country. Key references include tariff notices from utilities/regulatorsnationthailand.comen.evn.com.vn, government statements on subsidiesmagzter.comtheedgemalaysia.com, and news analyses of tariff adjustmentsjakartadaily.idnationthailand.com. All cited sources are listed online for verification. Each country's situation has been verified as of mid-2025.

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