Delivering Our Strategy

Core Business

More Energy, Less Emissions

Focus Areas

PETRONAS' Core Business is anchored in three integrated business segments spanning Upstream, Gas and Maritime, and Downstream. Together, these form a cohesive value chain that delivers reliable energy and industrial solutions in support of energy security, while generating resilient cash flows to sustain current commitments and fund New Business investments critical to advancing energy transition.

Upstream

As entrusted under the Petroleum Development Act 1974, we oversee the management and development of Malaysia's oil and gas resources, with a focus on shaping and accelerating Malaysia's upstream industry to ensure long-term energy security.

In 2025, Malaysia Petroleum Management (MPM) continued to strengthen Malaysia's upstream foundations and sustained investment interest, reinforcing the country's position as a vibrant exploration, development and production hub. We brought new opportunities to market, advanced our geological understanding and laid the foundations for more complex developments ahead. The focus was not only on today's activity, but on shaping an industry that remains relevant and competitive for decades to come."

Datuk Ir. Bacho Pilong
Senior Vice President, Malaysia Petroleum Management

Malaysia Bid Round 2025 Sustains Upstream Investment Momentum and Activates New Frontiers

Investor interest in Malaysia's upstream sector remained robust in 2025, anchored by the Malaysia Bid Round 2025 (MBR 2025). This round offered five exploration blocks and three Discovered Resource Opportunity (DRO) clusters across key basins, spanning a diverse range of geological settings and opportunity types. This breadth has reinforced sustained investor engagement and confidence in Malaysia's petroleum potential, while supporting the alignment of resource development with evolving demand centres and broader industrial growth.

In parallel, MPM advanced subsurface and seismic activities in frontier and under-explored areas to enhance geological understanding and improve data availability to further de-risk exploration.

This technical groundwork matters because much of Malaysia's remaining hydrocarbon potential lies within increasingly complex plays. While 40 billion barrels of oil equivalent (boe) have been discovered to date, an estimated 21 billion boe remain classified as 'yet-to-find', predominantly in deepwater areas that demand higher capital intensity and advanced technological capabilities. In response, our focus remains on sustaining investor confidence while strengthening technical readiness to unlock these complex, capital-intensive upstream opportunities.

PETRONAS Senior Vice President of MPM, Datuk Ir. Bacho Pilong, delivering a keynote at Malaysia Bid Round 2025.

We delivered a year of strategic transformation and disciplined execution, strengthening Upstream's ability to generate value across domestic and international basins. We progressed from forming new global collaborations and unlocking potential frontiers to advancing high-impact drilling results and deploying differentiated technologies at scale. In Malaysia, these efforts strengthened our position in the energy sector, while responsibly expanding the resource base."

Mohd Jukris Abdul Wahab
Chief Operating Officer, Executive Vice President and Chief Executive Officer, Upstream

Multiplying Upstream Value through PETRONAS' First Satellite Business Model

We continue to deliver advantaged hydrocarbons with lower costs and emissions while strengthening differentiated business and partnership models. As part of this, we have embarked on our first satellite business model with Eni, establishing a dedicated growth platform that strengthens capital efficiency, enables risk-sharing and accelerates upstream development across Southeast Asia. The proposed entity will consolidate 19 upstream assets in Malaysia and Indonesia, pooling approximately 3 billion boe of reserves and unlocking up to 10 billion boe of exploration potential, with a targeted medium-term production rate of around 500 thousand boe per day. Supported by planned CAPEX exceeding USD15.0 billion over five years, the model enhances value transparency and enables PETRONAS to scale selected assets through partnerships and differentiated funding structures.

Point of Interest

The satellite structure separates selected upstream assets into a dedicated platform, allowing PETRONAS to unlock value from mature and growth assets while retaining strategic oversight. This model enables faster development, shared investment and portfolio optimisation without diluting the strength of the Group's core upstream business.

PETRONAS' partnership with Eni will create a dedicated growth platform that strengthens capital efficiency, enables risk-sharing and accelerates upstream development across Southeast Asia.

Core Business

More Energy, Less Emissions

Unlocking New Gas Growth

We achieved a significant milestone in Suriname with the Declaration of Commerciality for the Sloanea offshore gas discovery. This development represents the basin's first commercial gas project and marks an important step in establishing a scalable, LNG-aligned gas growth platform. A subsequent offshore oil discovery further enhances the potential for an integrated oil and gas development, strengthening the long-term value proposition of the basin.

Building on this momentum, we secured three new Production Sharing Contracts (PSCs) in Suriname and marked our inaugural entry into Guyana through the award of Block S4. These strategic additions expanded our exploration portfolio in proven hydrocarbon basins, underpinned by encouraging well results from offshore Suriname, strengthening regional synergies and reinforcing our position in one of the world's most prolific petroleum provinces.

In Brunei, the Kelidang Cluster Development reached Final Investment Decision, marking the country's first ultra-deepwater gas project. The development incorporates advanced subsea and floating production technologies and is expected to play a key role in securing long-term gas supply to Brunei LNG.

Representatives from PETRONAS, Government of Guyana, TotalEnergies and QatarEnergy celebrating the momentous milestone together.

Advancing Portfolio High-Grading through Strategic Partnerships

Strategic partnerships support our upstream portfolio high-grading by unlocking value from mature assets, sharing development risks and enabling regional expansion. In Malaysia, collaboration with TotalEnergies expanded through a Strategic Cooperation Framework Agreement and two Farm-Out Agreements, improving capital efficiency and execution across Malaysian acreage. Portfolio optimisation also progressed through targeted operatorship transfers that strengthened operational focus and development efficiency.

Internationally, growth continued through selective partnerships and PSCs that balance risk and returns. Strategic Memoranda of Understanding were signed with Oman's OQ Exploration and Production New Ventures and Dragon Oil to extend our presence in the Middle East and Central Asia. In Indonesia, the Serpang and Binaiya PSCs strengthened the oil portfolio with short- to medium-term development upside. We also initiated a technical joint study with Petrovietnam to evaluate hydrocarbon potential in open oil and gas blocks, while an extension of a PSC in Turkmenistan, supported by a long-term gas sales agreement, strengthened the integrated gas position.

Vestigo, a wholly-owned subsidiary of PETRONAS focused on managing and optimising mature upstream assets, advanced this partnership-led approach through its first international collaboration with Pertamina.


Memorandum of Understanding (MoU) Signing Ceremony between Dragon Oil and PETRONAS Carigali International Ventures.

Accelerating Upstream Value through AI, Digital and Technology

Digital and technology innovation accelerate time to value and maximise performance across our Upstream portfolio. AI, advanced analytics and digital platforms enhance decision speed, strengthen operational reliability and unlock greater resource value across our global assets. We are scaling digital and AI solutions to enhance exploration insight, improve operational reliability and optimise field performance.

- ### Powering Exploring through AI
  We advanced the adoption of AI across our Upstream value chain through TriCiptaAI, our flagship AI venture with Beicip Franlab Asia and AFED Digital. In November 2025, two initial applications, AI.SEEK and Global Exploration Basin, delivered their first minimum viable products, using AI-driven basin benchmarking that integrates geoscience datasets to support faster and more informed exploration decisions. A Joint Development Agreement formalised at the Abu Dhabi International Petroleum Exhibition and Conference 2025 expands the collaboration into Exploration AI and Production AI, strengthening operational efficiency, improving investment decisions and unlocking additional value across our Upstream portfolio.

- ### Predicting Failures Before They Happen
  Our award-winning Predictive Rotating Equipment Analytics (PROTEAN™) uses machine learning to predict equipment failures before they occur, improving production reliability. Deployed across Malaysia and international assets, PROTEAN™ monitors over 350 critical rotating equipment items, helping to avoid unplanned downtime and production losses, reducing maintenance costs and improving asset reliability in 2025.

- ### Saving Time, Optimising Resources
  Enhanced Resource Monetisation Artificial Intelligence (ERMAI), our in-house AI solution, analyses subsurface data to identify opportunities faster, reducing analysis time from approximately six days to a mere six seconds. The platform enhances reserve recovery by identifying bypassed hydrocarbons through the Behind Casing Opportunity and enabling smarter drilling through the Real-Time Petrophysics. By minimising non-productive time and avoiding costly interventions, ERMAI delivered significant value uplift from improved reserve recovery in 2025.

- ### Turning Data into Production Upside
  Integrated Asset Management (IAM) transforms how fields are monitored and optimised by combining physics-based models with near real-time data. IAM enables faster identification of production optimisation opportunities and sharper surveillance practices. IAM has been deployed across eight fields, contributing measurable improvements in production efficiency and value realisation in 2025.

Point of Interest

TriCiptaAI enables global basin screening and prospect ranking on demand, significantly shortening early exploration cycles and accelerating exploration decision-making.

The flagship TriCiptaAI venture was commemorated at an Exchange of Documents ceremony in Abu Dhabi, United Arab Emirates, in November 2025.

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- ## Driving Innovation in Subsurface Imaging

  Exploration Platform for Integrated Computing (EPIC) 2.0, our next-generation high-performance computing platform, went live in September 2025 to enable faster, more accurate subsurface imaging. Building on EPIC 1.0, the platform uses parallel processing and advanced seismic techniques to handle more complex datasets and shorten processing time. By supporting priority projects in Suriname, Turkmenistan and Malaysia, EPIC 2.0 is helping teams reduce subsurface uncertainty and make better-informed exploration and development decisions as demand for seismic imaging continues to grow.

- ## Making Underwater Inspections Safer and Faster

  The Hovering Autonomous Underwater Vehicle (HAUV) offers a safer and more efficient way to inspect underwater structures by replacing diver-led inspections with high-precision, remotely operated technology. Using autonomous General Visual Inspection with intelligent station-keeping, HAUV maintains stability in currents and waves, captures accurate measurements and collects inspection data without human intervention. Pilot deployment at a platform in Sarawak, Malaysia in October 2025 demonstrated faster inspections, improved safety and lowered inspection costs by up to 50 per cent compared with traditional methods.

- ## Improving Decision-Making through Better Reservoir Modelling

  The Upstream Exploration and Development Modelling Programme improves how reservoirs are modelled and decisions are made by replacing fragmented workflows with integrated, data-driven approaches. By combining scalable earth modelling with uncertainty-focused ensemble modelling, Upstream Exploration and Development Modelling enables more consistent subsurface models, earlier risk assessment and faster project maturation across exploration, development and improved oil recovery opportunities. Rolled out across Malaysia and Suriname in 2025, the programme enables more confident decision-making and higher productivity through better use of seismic, well and production data.

- ## Well Intervention Fluid-Friction Modifier

  Water-based well intervention fluid-friction modifier (WIF-FM) is a specialty additive developed to address recurring field challenges where friction, drag and equipment stress limit tool reach, increase wear and complicate interventions in horizontal and deviated wells. WIF-FM has unlocked incremental production value by reactivating previously idle wells through more efficient and reliable interventions. It reduced intervention costs and equipment wear, improving safety, extending asset life and enabling sustainable well performance.

- ## Integrated Smart Desander System

  PETRONAS addressed sand management challenges by installing an Integrated Smart Desander System with online sand monitoring. Commissioned in October 2025, this dual-barrier system uses cyclonic separation and real-time monitoring to remove sand monthly from a previously idle well.

  The solution restored stable operations, enabled 2 to 4 million standard cubic feet per day gas production and created a scalable model for high-sand wells across the Duyong field.

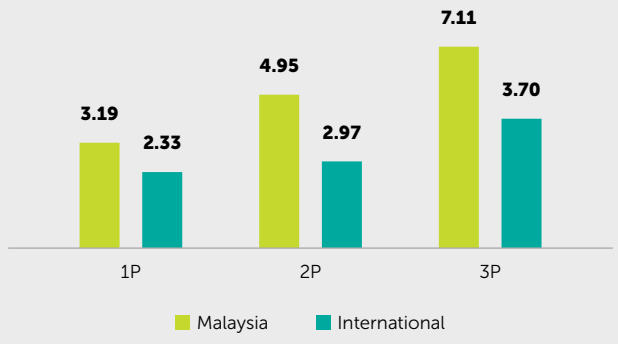
- ## Functionalised Graphene Oxide Rust Converter

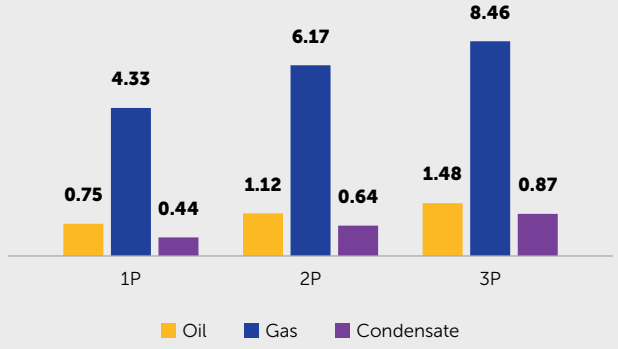
  Functionalised Graphene Oxide (F-GO) Rust Converter, is a corrosion control technology designed for situations where traditional surface preparation is impractical due to cost, access or safety constraints. It converts existing rust into a stable layer for coating, reducing the need for abrasive blasting or complete rust removal. F-GO streamlines maintenance, cuts complexity, shortens execution time and can reduce costs by up to 60 per cent. It also enhanced asset integrity and safety through a scalable corrosion management solution that extends asset life and lowers life cycle costs.

2025 Performance Metrics

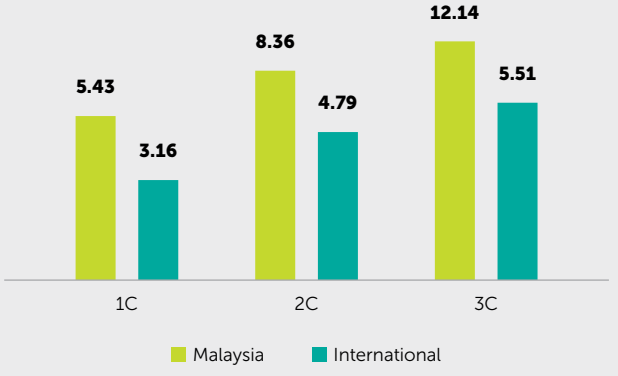
(i) Annual Review of Petroleum Resources 1 January 2026 Reserves and Contingent Resources

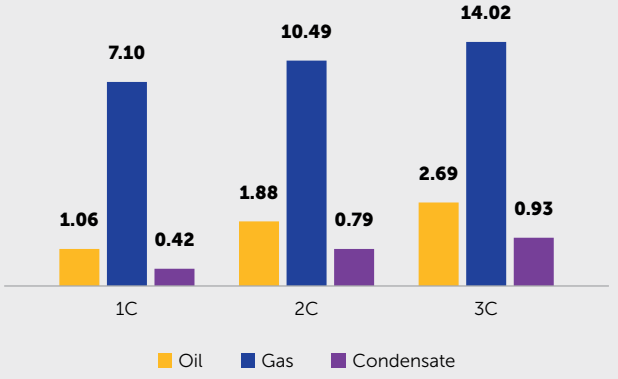
Reserves
(billion barrels of oil equivalent)





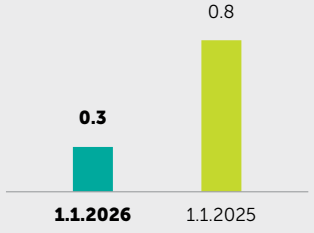
Contingent Resources
(billion barrels of oil equivalent)



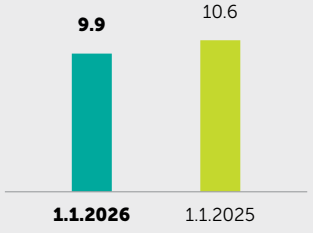


(ii) Reserves and Resources Performance Indicators

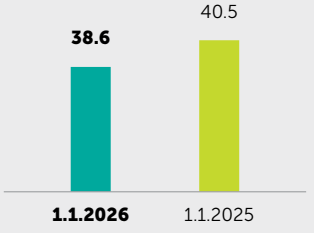
3-Year Average Reserves Replacement Ratio (1P), Ratio



3-Year Average Reserves Life Index (1P), Years



3-Year Average Overall Resource Life Index (2P+2C), Years



As at 1 January 2026, PETRONAS' total petroleum 2P Net Entitlement Reserves stood at 7.92 billion barrels of oil equivalent (boe), representing an 8 per cent decrease compared with 2024. Total Net Entitlement 2C Contingent Resources amounted to 13.16 billion boe, reflecting a 13 per cent reduction over the same period.

These movements reflect portfolio rationalisation efforts during the period, alongside continued project maturation activities. Looking ahead, we are pursuing a combination of organic and inorganic initiatives to reinforce the resilience and sustainability of our Reserves and Resources base.

Core Business

More Energy, Less Emissions

Our Challenges and Opportunities

Market Context

Portfolio high-grading, resource replenishment and decarbonisation imperatives call for stronger capital discipline, higher operational efficiency and lower-carbon production.

Strategic Response

- Accelerated portfolio high-grading with disciplined capital allocation towards value-accretive, low-cost and lower-carbon assets.
- Strengthened delivery of advantaged barrels through differentiated technical and commercial capabilities and faster time-to-value.
- Progressed physical decarbonisation by reducing flaring and venting, improving hydrocarbon and contaminant management, enhancing energy efficiency and adopting renewable energy solutions, while advancing carbon capture and storage (CCS) enablement.

Impact

- Strengthened portfolio resilience and cost competitiveness across the Upstream value chain.
- Lowered emissions intensity while sustaining long-term value creation and energy security.

Our Outlook

Short-term

We prioritise portfolio high-grading, directing capital towards value-accretive, low-cost and lower-carbon assets. Exploration continues to sustain the long-term viability of our resource base, supported by disciplined execution in Malaysia and selective expansion across international portfolios. Strategic partnerships and differentiated technical and commercial capabilities accelerate time-to-value and strengthen portfolio value. We continue to advance decarbonisation through targeted energy efficiency initiatives, methane management, flaring reduction and CCS solutions.

Medium- to Long-term

We focus on building a competitive and resilient portfolio that supports energy security and sustainable shareholder value in a lower-carbon environment. This will result in a more focused, resilient and value-dense portfolio, supported by the delivery of advantaged oil and gas products, at a lower cost, lower-carbon and higher margin production and an increasingly digital and AI-enabled operating model strengthening operational excellence. We also embed Net Zero Carbon Emission Facilities (NZCEF) principles in new field developments through upfront design solutions that integrate energy efficiency, methane management, zero routine flaring and CCS solutions.

Gas and Maritime

PETRONAS' LNG business is anchored on a strong, asset-backed supply base across Malaysia and our international positions, providing the scale, reliability and flexibility our customers depend on. Supported by our integrated shipping and maritime capabilities, we are able to deliver LNG safely and efficiently to markets worldwide, reinforcing our role in strengthening energy security through a diversified LNG portfolio."

Datuk Adif Zulkifli
Executive Vice President and Chief Executive Officer, Gas and Maritime

Strengthening our Position as a Global LNG Supplier

PETRONAS continues to diversify our supply nodes to better serve our customers. Through the newly operational LNG Canada, the first large-scale LNG export facility in Canada, we strengthened our LNG supply reliability as capacity of the plant was ramped up with Train 1 entering service in June and Train 2 in November 2025. Our first LNG cargo sailed in July 2025 to Japan, establishing another supply source that has a direct and efficient shipping route to North Asian markets.

Meanwhile, we continue to mature the progress of our third floating LNG. The hull was launched in February 2025, followed by completion of topside installation in November 2025. These milestones strengthen our readiness and reinforce our capabilities as a leading operator of floating LNG facilities and further strengthen our position as a global LNG supplier.

LNG cargo departure from the LNG Canada facility in Kitimat, Canada.

Hull launch at Samsung Heavy Industries (SHI) Shipyard, South Korea.

Point of Interest

LNG Canada is positioned as a leading source of lower-carbon LNG, underpinned by one of the world's lowest emissions intensities at approximately 0.15 tonnes of CO_2 equivalent per tonne of LNG production. As Canada's first LNG export facility, it plays a pivotal role in diversifying global LNG supply and strengthening energy security for Pacific markets. With Phase 2 development underway to potentially double production capacity, the project represents a long-term, scalable platform that supports the global energy transition while delivering reliable supply amid evolving market and decarbonisation demands.

Scan the QR code to know more about PETRONAS' first LNG cargo from the LNG Canada facility.

Expanding LNG Supply, Delivery Capability and Partnerships

Beyond investment in LNG facilities, our supply diversification also includes an asset-light approach. Through third-party offtakes, we added approximately 4 million tonnes per annum (MTPA) from new sale and purchase agreements with Commonwealth LNG, Woodside Energy Trading Singapore, Venture Global and Pembina. We employed a novel commercial structure that allows us to secure liquefaction capacity with zero capital investment.

In order to ensure seamless deliveries to our customers, we added eight new LNG carriers - Puteri Mayang, Puteri Sabah, Puteri Sarawak, Puteri Pahang, Puteri Selangor, Puteri Terengganu, Puteri Perlis and Puteri Perak. These new ships will support higher volumes and trading activities, while enhancing operational flexibility across the LNG value chain.

As part of our portfolio high-grading strategy, PETRONAS entered into a long-term strategic partnership with MidOcean Energy, introducing MidOcean as a 20 per cent equity partner in both the North Montney Upstream Joint Venture and the North Montney LNG Limited Partnership. The partnership enhances PETRONAS' gas position by bringing in a strategic partner across both upstream resource development and LNG production.

Core Business

More Energy, Less Emissions

Advancing Power and Infrastructure Business

We strengthened our presence in the power and infrastructure business during the year. This included receiving the Letter of Nomination for the development of a 120-megawatt gas-fired power plant in Labuan, Malaysia. The development will support power system stability and contribute to future economic growth in the region.

PETRONAS Gas Berhad (PGB) also progressed a new fibre optic infrastructure initiative that leverages our existing gas pipeline network to deploy fibre connectivity infrastructure. The project is expected to strengthen connectivity, enhance real-time monitoring capabilities and support greater operational reliability.

The Rancha power plant will help deliver reliable supply to meet residential, commercial and industrial energy needs.

Progressing Liquefied Carbon Dioxide Shipping and Vessel Capabilities

In the maritime segment, we continue to expand our capabilities while supporting our Energy Transition Strategy. The incorporation of Jules Nautica, a joint venture between PETRONAS CCS Ventures (PCCSV), MISC and Mitsui O.S.K Lines, marks a major step toward designing, building and operating Liquefied Carbon Dioxide (LCO_2) carriers to enable the safe and efficient transport of captured CO_2 to offshore storage sites. The design, developed with Shanghai Merchant Ship Design & Research Institute has received Det Norske Veritas (DNV) General Approval for Ship Application (GASA) certification, positioning PETRONAS at the forefront of regional CO_2 shipping solutions and unlocking cross-border CCS opportunities.

MISC also supported maritime capabilities for the wider industry. We expanded our fleet capability through the delivery of seven consortium-owned next-generation LNG carriers, including two that are fully operated by MISC, namely Mihzem and Idd Al Shargi, delivered as part of QatarEnergy's LNG expansion programme. Time charter party agreements with PTT for two new-build Very Large Ethane Carriers further expanded our shipping portfolio.

Offshore, the Floating Production, Storage and Offloading (FPSO) Marechal Duque de Caxias reached its nameplate oil production capacity within its first year of operations, achieving stable post-start-up performance while maintaining a Lost Time Injury-free safety record.

The Jules Nautica joint venture underscores the importance of cross-border collaboration in the region's lower-carbon transition.

Integrated Emergency Response and Recovery

PETRONAS activated its emergency response framework following the April 2025 fire incident involving PGB's Peninsular Gas Utilisation (PGU) pipeline near Putra Heights, Subang Jaya, Malaysia, containing the situation while the relevant authorities evacuated the surrounding communities. Following the incident, we prioritised transparent engagement with affected communities, working closely with state and federal agencies. Relief efforts and volunteer supports were mobilised at temporary centres to assist displaced families and ensure their safety.

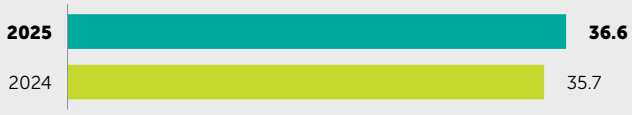
We worked closely with government agencies and relevant authorities to restore and maintain gas supply as quickly as possible in a safe manner towards ensuring uninterrupted energy access.

We also strengthened community engagement and expanded outreach along pipeline corridors to improve dialogue with residents and authorities. PETRONAS continues to collaborate with stakeholders where development intersects with pipeline infrastructure to support safe, long-term coexistence.

2025 Performance Metrics

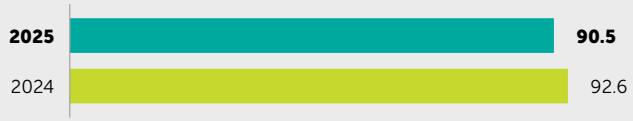
Gross LNG Sales

(million metric tonnes)



Overall Equipment Effectiveness

(%)



Our Challenges and Opportunities

Market Context

LNG is increasingly recognised as a destination fuel in the energy transition. Meanwhile, domestic energy demand is projected to grow in line with the expansion of data centres. There is expected to be an increasing reliance on gas as the retirement of coal-fired power plants commences from 2029 onwards. In terms of challenges, plant reliability, ageing infrastructure and supply disruptions have highlighted the need to improve system reliability and operational agility.

Strategic Response

- Accelerated reliability investments, pipeline integrity programmes and supply rebalancing.
- Strengthened monitoring and analytics to improve responsiveness.

Impact

- Enhanced supply reliability and reduced operational risk.

Our Outlook

Short-term

We are expanding our LNG supply portfolio with a focus on identified growth projects in Canada and Malaysia, while maximising value from existing assets by driving operational excellence and delivery performance. Under our Maritime segment, efforts will centre on strengthening core operations, expanding into new energy solutions and enhancing our emissions reduction efforts. These will help strengthen energy security, sustain our leadership in the LNG market and realise the synergistic value of Maritime as part of our Core Business.

Medium- to Long-term

As global demand continues to grow, we remain focused on maintaining LNG market leadership while offering a suite of energy solutions tailored to customer needs. In the Maritime business, our strategic priorities include identifying new opportunities to expand our business and asset portfolio and capitalising on the global energy transition as the world evolves towards a circular economy.

Core Business
More Energy, Less Emissions

Downstream

In the face of industry-wide margin compression and price volatility, Downstream delivered steady and reliable performance through disciplined operations, prudent cost management and focused execution. Strategic enhancements to our capabilities within the core spaces of petrochemicals, lubricants, refining, marketing and trading further sharpened our customer offerings and fortified our competitiveness. These outcomes reflect our commitment to operational and commercial excellence, delivering safe, competitive and customer-centric solutions across the Downstream value chain."

Datuk Sazali Hamzah
Executive Vice President and Chief Executive Officer, Downstream

Executing BUDI95 with Excellence for Our Customers and Nation

The BUDI MADANI RON95 (BUDI95) fuel subsidy programme, rolled out in September 2025 nationwide, was implemented across PETRONAS Dagangan Berhad (PDB)'s retail and digital platforms. The programme was operationalised at scale while strengthening customer engagement through digital-led execution. We coordinated across our retail operations, digital capabilities and payment platforms to maintain transaction continuity and deliver a consistent forecourt experience. The Setel™ app anchored the rollout as the first fully integrated platform, supporting customer onboarding and usage. The positive response reflected strong digital adoption, with the Setel™ user base expanding from 8 million to over 11 million by year-end. Customer traction increased by 31 per cent, while digital transactions adoption grew across PETRONAS stations.

Strengthening customer engagement through digital-led execution via BUDI95.

Expanding Our Brand Presence

We continue to advance our international retail participation through a structured brand-licensing model, enabling market entry with zero CAPEX. By leveraging partner capabilities and in-market infrastructure, this approach supports scalable expansion while creating long-term enterprise value.

Through PETRONAS' brand licensing initiative, our collaboration with SIM Distribuidora in Brazil has accelerated market entry, expanding the retail network from three PETRONAS-branded stations in 2024 to 102 stations by the end of 2025. The branded forecourt network establishes a scalable channel for us to extend access to our full suite of fluid technologies, spanning fuels, lubricants and beyond.

The model has also enabled broader enterprise participation across the Group by design, reflecting the deliberate embedding of alternative profit opportunities. Phase One of the TipTop Enterprise App (TEA App) was rolled out in October 2025 to support retail coordination, alongside PETRONAS Trading Corporation (PETCO), the Group's trading arm, pursuing product supply opportunities into Brazil.

We continue to integrate digital capabilities and trading activities to enhance connectivity across the value chain, supporting a more coordinated and scalable approach to enterprise participation.

Point of Interest

PETRONAS has introduced a structured retail brand-licensing model to scale our international presence through partnerships with established local operators. This model enables us to extend our PETRONAS brand, technology and digital solutions through shared frameworks and systems, while partners invest in and operate the stations in compliance with local regulations. This zero-CAPEX model enables faster market entry and scalable growth.

Elevating Fleet Performance

Commercial fleets continue to operate amid changing transport demands and tightening emissions requirements, placing greater emphasis on efficiency, reliability and engine performance. PETRONAS Lubricants International (PLI) introduced the enhanced PETRONAS Urania range, strengthening its flagship lubricant offering for commercial vehicles. The upgraded range harnesses PLI's proprietary StrongTech™ technology to deliver longer oil life, improved fuel economy, enhanced engine protection and maximised uptime, helping fleets run efficiently even as emission standards tighten and usage patterns evolve. Simplified product navigation and value-added support services that complement the product offering make it easier for fleet operators and mechanics to select and apply the right solution.

Operational Resilience Underpins Strong Plant Utilisation

PETRONAS Chemicals Group (PCG) demonstrated resilience in the face of operational disruptions during the year, notably the utilities interruption at the Kertih Integrated Petrochemical Complex. Temporary feedstock constraints were also experienced following the April 2025 fire incident at the PETRONAS Gas Berhad (PGB) main pipeline near Putra Heights, Subang Jaya, Malaysia, in a separate incident. These events posed short-term challenges to production continuity across selected operations.

Despite these headwinds, the Group maintained an overall plant utilisation rate of 88 per cent, reflecting the resilience of PCG's asset base, supported by effective cross-plant coordination and operational planning.

While operations were stabilised and available capacity optimised across the network, these challenges underscore the importance of sustaining operational excellence through enhanced reliability, strengthened feedstock security and disciplined execution.

Streamlining Inspection Workflows

The Machine Vision and Inspection Workflow Management System (MAVIS) contributes to cost optimisation by streamlining end-to-end inspection workflows through a single, integrated digital platform. It replaces fragmented and manual processes previously used for inspection reporting, PETRONAS Risk-Based Inspection updates and recommendation action management.

Pilot deployments across selected operating units have demonstrated improvements in Process Cycle Efficiency, resulting in reduced manhours and optimisation of external inspection and clerical resources. Improved data quality and faster turnaround also reduce rework, reporting delays and value leakage, supporting sustainable cost efficiency while maintaining regulatory compliance and asset integrity performance.

Early Detection of Operational Risks

The Dynamic Risk Analyser (DRA) is an advanced risk analytics and early-warning platform that continuously monitors real-time process and equipment data. It detects hidden anomalies and near-miss events, enabling proactive identification of emerging operational risks before they escalate into incidents or unplanned shutdowns.

Its implementation enhances operational reliability and on-stream efficiency by providing early warnings for abnormal behaviour, allowing timely intervention and reducing unexpected trips and downtime. DRA also strengthens process safety management through improved risk visibility, structured anomaly prioritisation and continuous monitoring, while fostering better collaboration between operations and technical teams.

Core Business

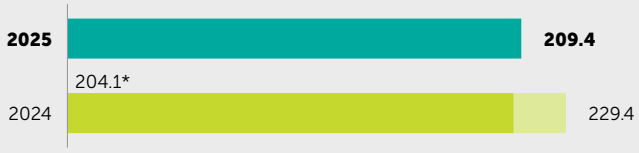
More Energy, Less Emissions

2025 Performance Metrics

Petroleum Products Sales

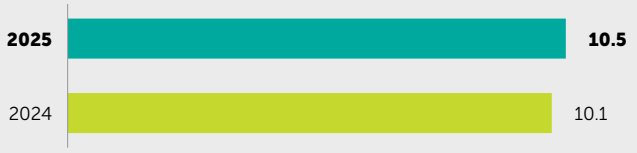
(million barrels)

** Excluding volume from the divested Engen Group in 2024*



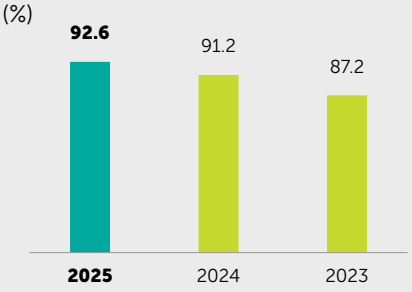
Chemical Products Sales

(million metric tonnes)



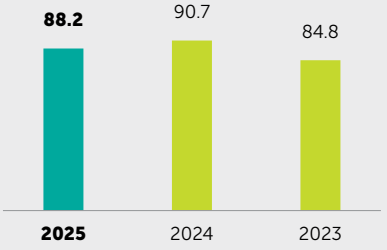
Downstream Overall Equipment Effectiveness

(%)



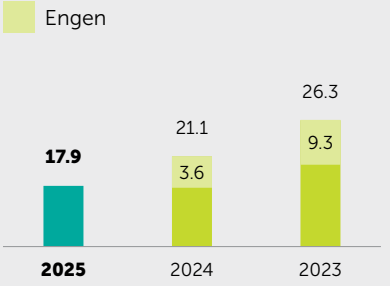
Petrochemical Plant Utilisation (Nexant)

(%)



Overall Marketing Sales Volume

(billion litres)



Our Challenges and Opportunities

Market Context

Changing market conditions and evolving customer expectations highlighted the need for more resilient operations and higher-value, solutions-based offerings.

Strategic Response

- Strengthened cost discipline, asset reliability and customer-centric products across lubricants, commercial fuels and retail.
- Expanded partnerships and service-led solutions.
- Innovated and diversified the existing core portfolio to better serve customer needs.

Impact

- Strengthened the Downstream portfolio domestically and internationally.
- Sustained customer retention reinforces strategic positioning to continue delivering long-term value to shareholders and stakeholders.

Our Outlook

Short-term

We enhance operational efficiency and asset reliability by optimising production and strengthening safe, reliable operations across our refineries and chemical plants to sustain competitiveness and strengthen resilience. Despite volatile markets, we are strengthening supply chain robustness and expanding our product offerings to meet evolving customer and market needs.

Medium- to Long-term

We continue to drive operational and commercial excellence across our Downstream assets through sustained investments to deliver safe, reliable and efficient operations, while building a more diversified and resilient energy resource to support global demands for future energy solutions. This helps PETRONAS adapt to changing market dynamics and supports a stronger position in the downstream sector.

New Business

Capturing New Growth Opportunities

Focus Areas

PETRONAS' New Business strategy focuses on developing and scaling ventures beyond its traditional core activities to future-proof our business portfolio, enhance resilience and respond to evolving customer and energy-transition needs. These ventures progress through a combination of organic growth and selective inorganic opportunities, supported by partnerships, technology deployment and the development of new capabilities across the Group.

Renewable Energy

> *Regional integration is progressing across our businesses, supported by collaborations that enable clean energy solutions to extend beyond individual markets."*
>
> **Sushil Purohit**
> *Group Chief Executive Officer, Gentari*

Scaling Global Renewable Capacity to 9.1 GW

We continued to expand our renewable energy footprint through our clean energy subsidiary, Gentari, reaching a cumulative installed and under construction capacity of 9.1 gigawatts (GW) across solar, wind and battery energy storage projects. Growth was driven by disciplined execution across priority Asia Pacific markets, supporting PETRONAS' Energy Transition Strategy through the delivery of commercially viable clean electricity solutions. Gentari's portfolio spans utility-scale and commercial and industrial renewable energy projects, integrated renewable-plus-storage facilities, and enabling infrastructure. These assets are designed to operate with existing power systems, contributing to grid flexibility and energy security while supporting customers' decarbonisation objectives.

India's first on-site hybrid (comprising solar, wind and battery), round-the-clock renewable energy project for UltraTech Cement Limited in Gujarat.

New Business

Capturing New Growth Opportunities

Driving Tangible Steps towards Regional Power Interconnectivity

We participated in a Joint Development Agreement to explore renewable electricity exports from Vietnam to Malaysia and Singapore, advancing regional power integration across ASEAN. Through the MY Energy Consortium, established with Tenaga Nasional, the initiative evaluates Vietnam's renewable energy potential, with an initial focus on offshore wind, and explores cross-border transmission frameworks to enable clean electricity trade.

This collaboration with PetroVietnam Technical Services Corporation and Sembcorp Utilities supports the development of regional power connectivity while expanding access to larger renewable electricity markets and strengthening energy diversification across Southeast Asia.

Advancing cross-border renewable electricity trade to accelerate ASEAN's transition to a lower-carbon energy system.

Reaching Production Phase in Wind Energy

The Hai Long Offshore Wind Project achieved first power delivery to Taipower's grid, marking a key milestone in Gentari's offshore wind portfolio. The project progressed through construction and commissioning activities, including offshore and onshore substations and phased turbine connections, advancing towards full commercial operations.

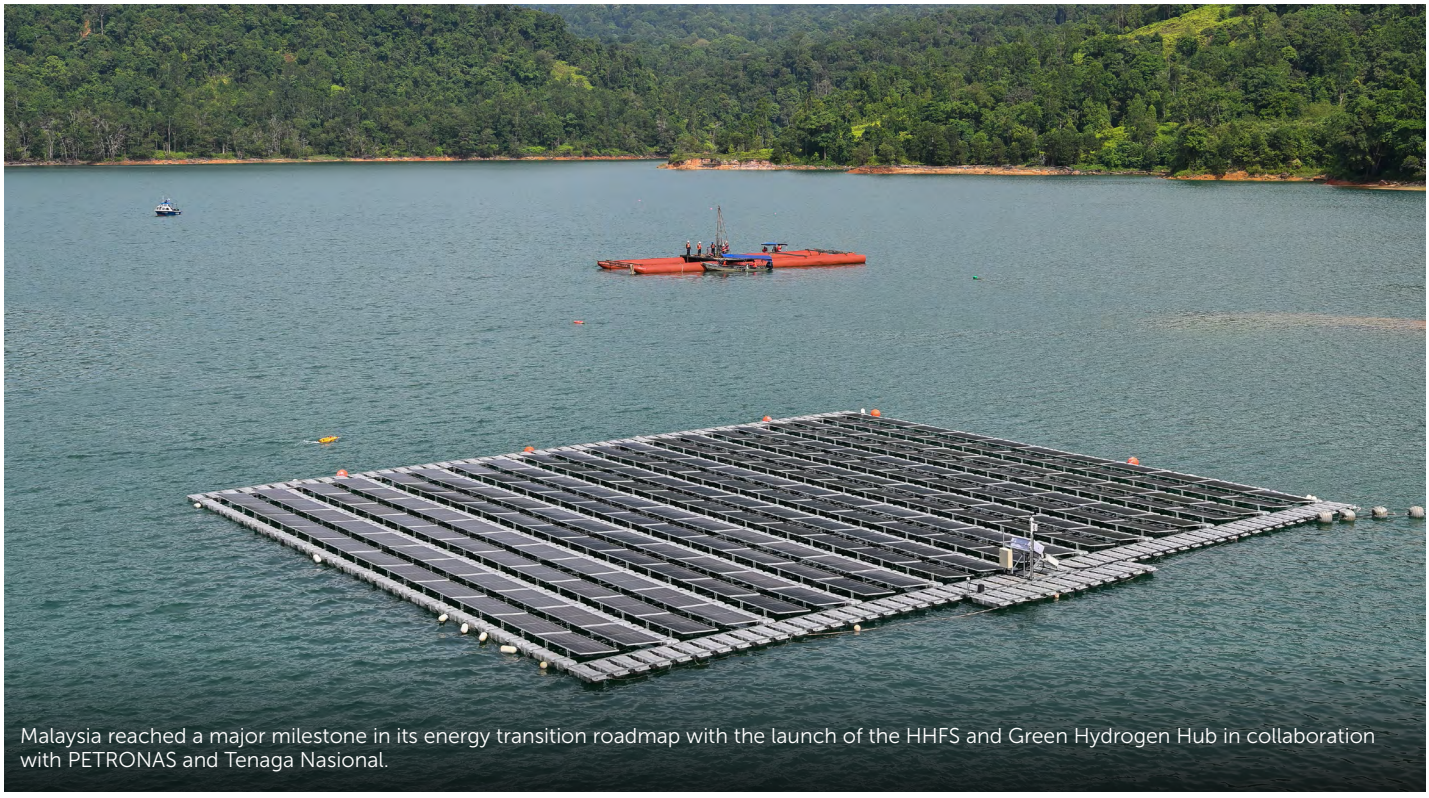
Our participation in one of Asia Pacific's largest offshore wind developments strengthens Gentari's execution capability in complex marine construction, grid integration and partnership delivery, supporting disciplined expansion into utility-scale offshore renewables.

Installation of an offshore wind turbine at the Hai Long Offshore Wind Project, off the Changhua coast.

Hybrid Renewable Power

We supported the launch of Malaysia's first Hybrid Hydro Floating Solar (HHFS) and Green Hydrogen Hub at Kenyir, Terengganu, Malaysia, integrating floating solar with existing hydropower infrastructure at the Sultan Mahmud Hydro Electric Power Station. Delivered in collaboration with Tenaga Nasional and Terengganu Inc., the HHFS initiative represents Malaysia's first deployment of hybrid hydro-floating solar at this scale. The project explores hybrid generation by optimising the use of water surfaces while leveraging hydropower operations to support grid stability.

This pilot aligns with Malaysia's National Energy Transition Roadmap (NETR) and Hydrogen Economy and Technology Roadmap (HETR) by advancing integrated clean energy pathways within a single site. It provides an operational reference for assessing the technical and system-level considerations of hybrid renewable solutions for potential future applications.



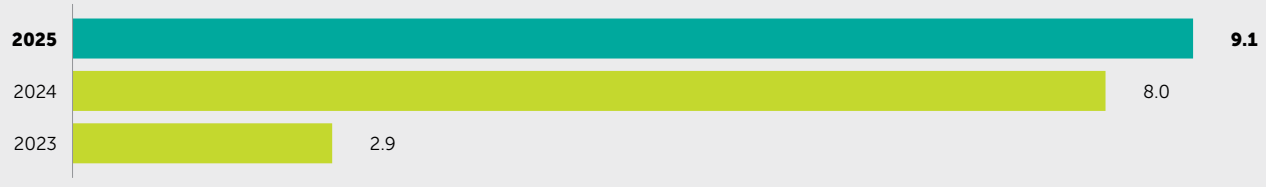
Malaysia reached a major milestone in its energy transition roadmap with the launch of the HHFS and Green Hydrogen Hub in collaboration with PETRONAS and Tenaga Nasional.

2025 Performance Metrics

Renewable Energy Total Capacity

(gigawatt)

Installed and under construction



Notes:

1. *For 2024 and prior, the measurement is renewable energy capacity only.*
2. *For 2025, the measurement is renewable energy and storage capacity.*

New Business

Capturing New Growth Opportunities

Our Challenges and Opportunities

Market Context

Grid constraints, pricing volatility and growing demand for firm and dispatchable renewable power highlighted the need for scalable solutions that improve cost competitiveness, system flexibility and operational reliability.

Strategic Response

- Prioritised utility-scale renewable projects to improve cost competitiveness and reduce the levelised cost of electricity.
- Increased focus on hybrid configurations, including renewable-plus-storage solutions, to enhance dispatchability and time-shift value.
- Strengthened project delivery discipline to manage cost, schedule and supply chain pressures.
- Enhanced asset management practices to sustain operational performance and long-term value.

Impact

- Improved portfolio resilience against grid constraints and pricing volatility.
- Strengthened revenue stability through longer-duration and dispatchable renewable solutions.
- Maintained competitiveness amid supply chain pressures and cost inflation.
- Strengthened long-term asset performance and portfolio value.

Our Outlook

Short-term

We continue to focus on strengthening delivery excellence in priority markets by progressing renewable energy projects from development into execution across Malaysia, India, Australia and the broader Asia-Pacific region as detailed below.

- Advancing the Large-Scale Solar (LSS) 5 project in Malaysia towards groundbreaking in 2026.
- Progressing the Karur Wind Power Project in India towards operations in 2027 under a long-term power purchase agreement.
- Delivering hybrid solar and battery energy storage system (BESS) solutions through the Maryvale Project in Australia to support grid stability.
- Advancing the Hai Long Offshore Wind Project off the Changhua coast following the achievement of first power delivery.

Efforts will continue to support rising demand for reliable, lower-carbon power, including from hyperscale data centres, through the deployment of LSS and BESS solutions. Key priorities include:

- Progressing the partnership with Gamuda under the Corporate Renewable Energy Supply Scheme (CRESS) framework to deliver up to 1.5 GW of solar and BESS capacity in Malaysia.
- Supplying wind power in India to support long-term clean energy requirements.
- Supporting national energy transition targets together with customers' decarbonisation needs.

Medium- to Long-term

We aim to expand customer-centric hybrid and BESS solutions through the rollout of co-located and standalone BESS between 2026 and 2028. This includes integrating storage capabilities into solar portfolios and capturing longer-duration, dispatchable value to support grid resilience, strengthen energy reliability and support more stable long-term revenue streams.

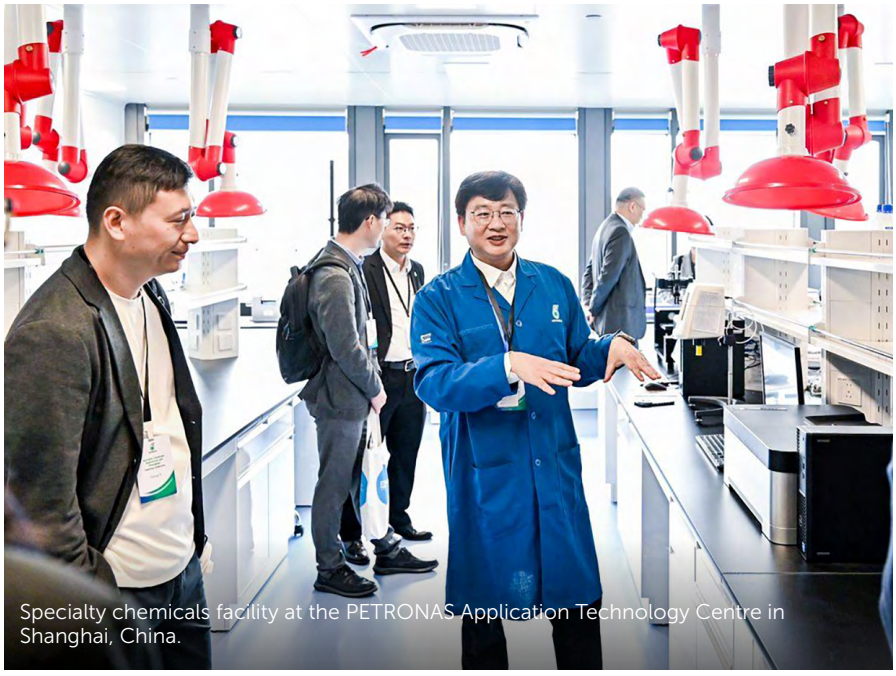
Specialty Chemicals

The continued strengthening of our specialty chemicals portfolio, through new innovations, closer customer collaboration and lower-carbon capacities, positions PCG to deliver safe, reliable and differentiated solutions for long-term resilience."

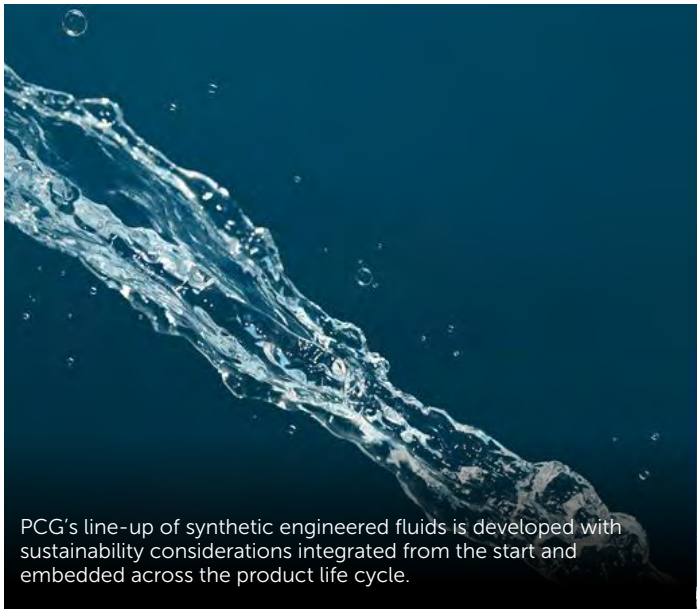
Mazuin Ismail
Senior Vice President and Managing Director/Chief Executive Officer, PETRONAS Chemicals Group

Bringing Innovation Closer to Customers in Asia

PETRONAS Chemicals Group (PCG) further strengthened specialty chemicals capabilities in Asia with the launch of the PETRONAS Application Technology Centre in Shanghai, China. The facility places advanced testing, formulation and customer collaboration closer to key growth markets, enabling faster product development cycles and more responsive technical support. This move enhances PCG's ability to co-create high-performance solutions with customers across industrial lubricants, coatings, engineered fluids and more.



Specialty chemicals facility at the PETRONAS Application Technology Centre in Shanghai, China.



PCG's line-up of synthetic engineered fluids is developed with sustainability considerations integrated from the start and embedded across the product life cycle.

Expanding High-Performance Synthetic Fluids Portfolio

We expanded our synthetic polyol ester portfolio within the Engineered Fluids Solutions segment, strengthening presence in high-performance thermal management applications. This expansion reinforces PCG's shift toward differentiated, technology-driven specialty segments that support more resilient margins while addressing evolving environmental standards.

Point of Interest

Synthetic polyol ester fluids are increasingly used in advanced thermal management systems for high-density electronics, electric vehicles and data centres. Their chemistry can also be engineered for improved biodegradability and low toxicity compared with conventional mineral-oil-based fluids.

New Business

Capturing New Growth Opportunities

Broadening the Emfinity® Bio-Based Portfolio

Building on the introduction of Emfinity® CGSA 200B in 2024, we extended our reach in the bio-based personal care sector through the expansion of our Emfinity® portfolio with two new variants: CGSA 50B for haircare and CGSA 600B for cosmetics. The new products debuted at in-cosmetics Asia 2025 and scaled Emfinity® applications across a broader range of personal care formulations. Produced at PETRONAS Research Sdn Bhd's pilot plant, the new variants are being introduced to selected customers to support early trials and adoption.

2025 Performance Metrics

Specialty Chemicals Sales Volume

(kilometric tonnes)

Our Challenges and Opportunities

Market Context

Volatile market conditions, margin pressure and rising demand for differentiated and sustainable solutions highlighted the need to strengthen portfolio quality and innovation-led growth.

Strategic Response

- Prioritised higher-value specialty segments and maximised value from established capabilities and expertise through BRB and Perstorp.
- Accelerated product innovation and application development through closer customer collaboration.
- Leveraged strategic partnerships to expand market access and strengthen technical capabilities.

Impact

- Improved resilience against market volatility and sustained demand in targeted segments.
- Strengthened competitive positioning through differentiated products.
- Supported more stable earnings and long-term portfolio strength.

Our Outlook

Short-term

We continue to strengthen the portfolio by maximising value from existing capabilities, including through BRB and Perstorp. Our efforts will focus on identifying high-potential growth segments and applications to support more resilient earnings, accelerating product development and innovation to meet evolving customer requirements, and enhancing operational and commercial integration across specialty chemicals operating units to improve execution and time-to-market.

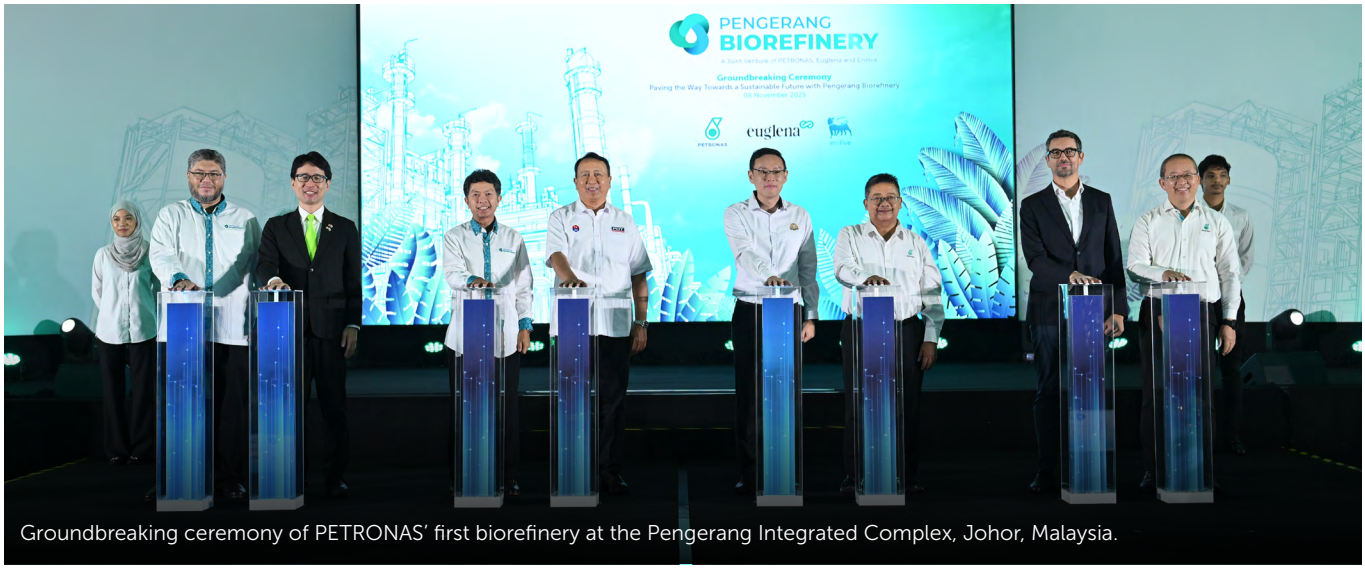
Medium- to Long-term

Our focus remains on expanding the specialty chemicals business beyond its current footprint through selective and strategic acquisitions, advancing priority growth projects to scale capabilities and broaden market presence, and implementing targeted market expansion strategies in selected geographies and end sectors. These efforts support the development of a robust pipeline of differentiated specialty products.

Bio-Based Value Chain

The development of our bio-based value chain reinforces PETRONAS' role as an enabler of Malaysia's net zero commitment while supporting the national energy transition through future fuels. The biorefinery provides a strategic platform to scale capabilities, build partnerships and strengthen market readiness. It also positions us to meet the rising demand for lower-carbon fuels with commercially viable solutions, particularly in the aviation and transport sectors facing increasingly stringent emissions requirements."

Jazlinawati Osman
Vice President, Refining, Marketing and Trading



Groundbreaking ceremony of PETRONAS' first biorefinery at the Pengerang Integrated Complex, Johor, Malaysia.

Breaking Ground on PETRONAS' First Biorefinery in Pengerang

We moved into the execution phase of our renewable fuels strategy with the groundbreaking of our first biorefinery at the Pengerang Integrated Complex (PIC), which is targeted to commence operations by the second half of 2028.

The biorefinery will convert renewable feedstock into Sustainable Aviation Fuel (SAF), renewable diesel (also known as Hydrogenated Vegetable Oil, or HVO) and bio-naphtha, expanding our portfolio into lower-carbon fuels.

Strategic partnerships with Enilive and Euglena strengthen technology readiness and support sustainable feedstock development. Enilive contributes bio-refining technology and operational expertise, while Euglena provides innovative feedstock development capabilities.

Point of Interest

With a planned processing capacity of 650,000 tonnes of renewable feedstock annually, the biorefinery is designed to leverage integration within PIC, supporting feedstock flexibility and product optimisation as market demand evolves.

New Business

Capturing New Growth Opportunities

Building Commercial Readiness for Sustainable Aviation Fuel

We advanced commercial readiness for Sustainable Aviation Fuel (SAF) by delivering Malaysia's first locally blended SAF to Kuala Lumpur International Airport (KLIA) for the Malaysia Aviation Group, enabled through its integrated supply chain. The fuel was blended at PETRONAS facilities and supplied through existing logistics and distribution infrastructure via Malaysian Refining Company's multi-product pipeline, demonstrating end-to-end capability from blending to delivery. Certified to international sustainability and aviation standards, the delivery of SAF builds confidence in local supply capability. We undertook structured engagement with regional airlines, logistics providers and policymakers to align certification, offtake and deployment requirements, supporting greater SAF adoption across the aviation value chain.

Malaysia Airlines' aircraft being refuelled with the country's first locally blended SAF at KLIA.

Our Challenges and Opportunities

Market Context

Feedstock availability constraints, cost competitiveness of bio-based fuels and uneven market adoption underscored the need to build value-chain readiness ahead of scale-up.

Strategic Response

- Strengthened strategic partnerships to secure sustainable feedstock and support long-term sourcing reliability.
- Advanced commercial and operational readiness across supply, logistics and customer engagement.
- Focused market development on aviation and transportation segments with clearer regulatory drivers for lower-carbon fuels.

Impact

- Enhanced reliability in feedstock sourcing through strategic supply-chain partnerships and coordination.
- Improved readiness to scale bio-based operations through stronger integrated value chain ecosystem.
- Strengthened early positioning in priority markets and demand security for lower-carbon fuels.

Our Outlook

Short-term

We are building readiness for scale through strategic partnerships that secure sustainable feedstock and enable early market access. Efforts focus on advancing commercial and operational readiness for PETRONAS' first biorefinery, strengthening positioning in priority markets with near-term demand for lower-carbon fuels, particularly across aviation, transportation and adjacent sectors, and developing foundational capabilities across supply, logistics and customer interfaces.

Medium- to Long-term

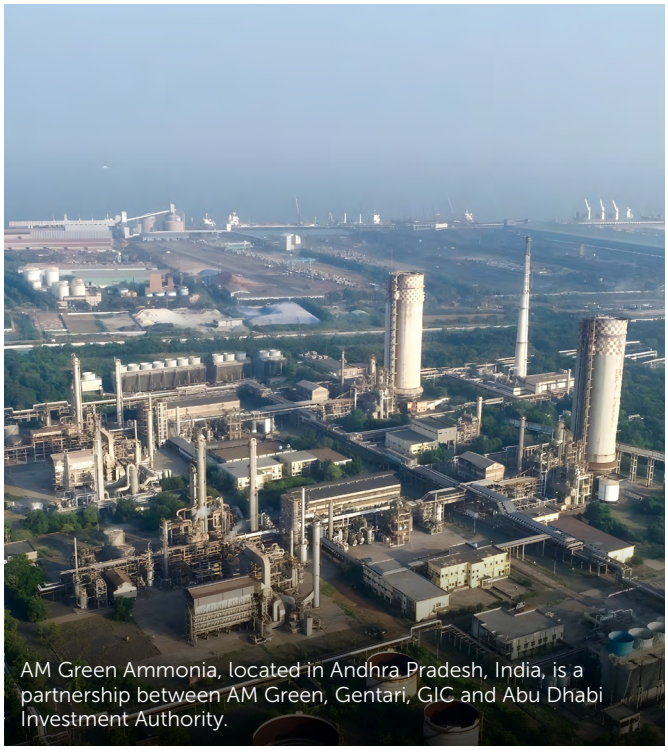
Our focus will remain on scaling the bio-based ecosystem through integrated value chain development. This includes securing long-term access to sustainable feedstock through structured sourcing arrangements and strategic collaborations, expanding market reach across aviation, transportation and adjacent sectors, and integrating bio-based offerings within PETRONAS' broader downstream portfolio to support sustained growth and long-term value creation.

Hydrogen

Building Hydrogen Readiness Across Asia and Europe

In 2025, we advanced hydrogen as a longer-term growth platform, supported by key milestones including the offtake agreement with Uniper SE via our partner AM Green for green ammonia supply, alongside broader project development and collaborations across Asia and Europe. These activities aim to strengthen the technical, commercial and partnership foundations required for hydrogen development. This supports our Energy Transition Strategy and reinforces our long-term decarbonisation objectives.

Hydrogen activities during the year remained primarily at the early development stage across multiple markets. In Malaysia, we collaborated with state and national stakeholders to assess potential pathways for lower-carbon hydrogen production and downstream applications. Across the region, partnerships and project development initiatives strengthened market understanding, ecosystem formation and risk assessment, particularly for applications in industry, power generation and heavy mobility, where direct electrification remains challenging.



AM Green Ammonia, located in Andhra Pradesh, India, is a partnership between AM Green, Gentari, GIC and Abu Dhabi Investment Authority.

Establishing a National Hydrogen Deployment Platform

We successfully delivered the Mobile Hydrogen Refuelling System (MHRS) project for NanoMalaysia, a business entity under the Ministry of Science, Technology and Innovation.

The project advances Malaysia's Hydrogen Economy and Technology Roadmap (HETR) by operationalising a practical hydrogen refuelling solution and contributing to national energy transition priorities.

Beyond its immediate deployment, the MHRS establishes a foundation for future hydrogen programmes by integrating policy alignment, technical assessment and structured implementation planning. This approach helps strengthen ecosystem readiness, reduce execution risks for future hydrogen projects and support broader investment interest in the hydrogen value chain.

The successful delivery positions PETRONAS to support future hydrogen initiatives, policy implementation and potential commercialisation opportunities as Malaysia's hydrogen ecosystem continues to evolve.

Point of Interest

The MHRS project was delivered four months ahead of the contractual schedule, meeting the customer's early launch requirements while maintaining assured delivery quality.

A mobile hydrogen refuelling station, under the MHRS, located at Presint 2, Putrajaya, Malaysia.

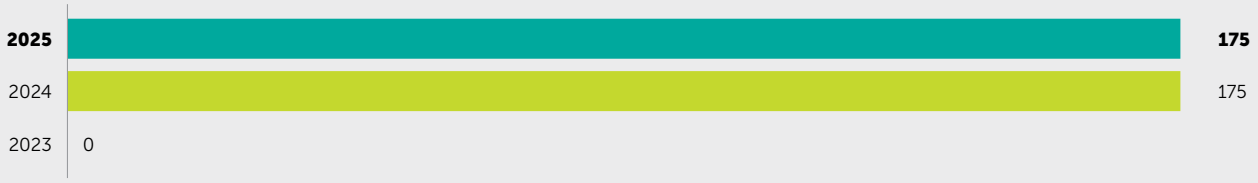
New Business

Capturing New Growth Opportunities

2025 Performance Metrics

Hydrogen - Matured Hydrogen Opportunities Achieved

(kilotonnes per annum)



Our Challenges and Opportunities

Market Context

Early-stage ecosystem development, policy momentum and emerging demand signalled opportunities to shape standards, develop reference projects and position hydrogen for future scale, while regulatory and offtake uncertainty required disciplined progression.

Strategic Response

- Delivered the MHRS foundational pilot project to establish technical and operational readiness in collaboration with government agencies and partners.
- Phased and disciplined capital deployment for large-scale hydrogen projects amid regulatory and offtake uncertainty.
- Advanced bilateral engagements and tender-based opportunities to develop offtake pathways in selected markets.
- Strengthened partnerships across the hydrogen value chain and assessed use cases including refinery integration and bunkering applications.
- Maintained a demand-led, commercially grounded approach while engaging stakeholders to support policy alignment across Asia Pacific.

Impact

- Reduced delivery risk for future hydrogen projects.
- Improved readiness for commercialisation as demand, infrastructure and policy frameworks mature.
- Reduced exposure to regulatory and offtake risks through phased investment and demand-linked development.
- Strengthened positioning to support the development of a viable regional hydrogen ecosystem, leveraging PETRONAS' gas and carbon capture and storage (CCS) strengths alongside emerging green hydrogen opportunities.

Our Outlook

Short-term

We remain focused on maturing and securing hydrogen offtake pathways to strengthen project bankability and support progression towards Final Investment Decision. Our near-term efforts will continue to centre on advancing offtake engagements and completing Front End Engineering Design (FEED) studies for green hydrogen and ammonia projects. We will also leverage strategic partnerships and relevant policy mechanisms to support investment de-risking and execution readiness.

Medium- to Long-term

As infrastructure and regulatory frameworks continue to evolve, we aim to enable accelerated project execution and support the transition from development to scalable deployment.

Green Mobility

Expanding a Regional Electric Vehicle Charging Network

Gentari continued to scale its green mobility platform by expanding its regional electric vehicle (EV) charging network to more than 1,100 charging points across Malaysia, Thailand and India. Deployment focused on selected highways, urban centres and high-utilisation commercial locations, improving charging availability in priority areas and supporting the broader electrification of mobility across markets.

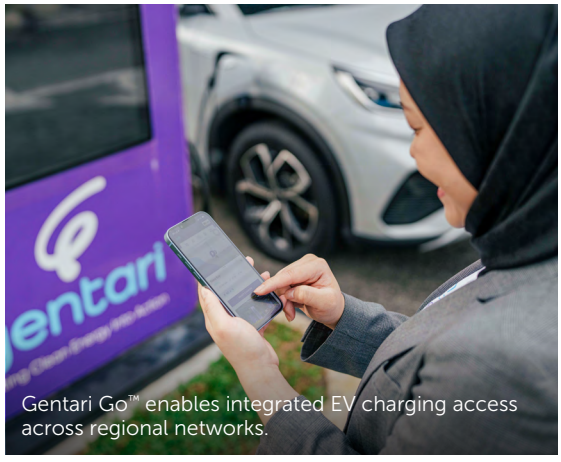
Charging deployment during the year was progressed through partnerships with site owners, fleet operators and mobility stakeholders. These collaborations supported a disciplined approach to network expansion, with emphasis on operational reliability, interoperability and readiness to meet increasing EV demand as adoption evolves.

Gentari EV charging point at PETRONAS Bandar Baru Ayer Hitam, Johor, Malaysia.

Enabling Cross-Border Electric Vehicle Roaming through Gentari Go™

Seamless cross-border charging access is an important enabler for EV adoption and regional connectivity. Through Gentari Go™, we enabled cross-border EV roaming across Malaysia, Thailand, Singapore and India, providing users with access to approximately 10,000 charging points via roaming partnerships with multiple charge point operators.

By integrating participating charging networks into a single digital interface, Gentari Go™ improves interoperability across operators and markets, and enhances user experience for EV drivers travelling across borders. The platform complements physical charging infrastructure by simplifying access, supporting cleaner mobility adoption and the practical use of EVs across selected regional markets.



Gentari Go™ enables integrated EV charging access across regional networks.

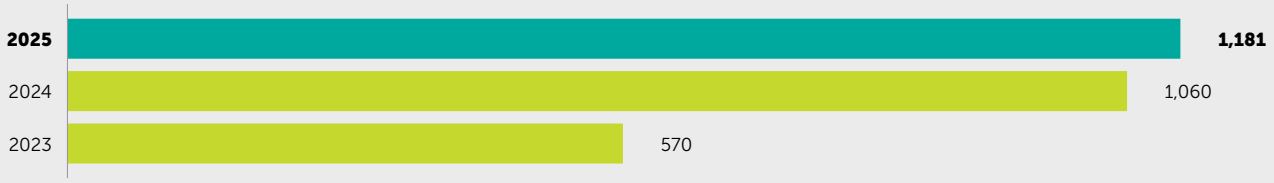
New Business

Capturing New Growth Opportunities

2025 Performance Metrics

Green Mobility

(units of charging points globally*)



Note:
** Gentari's growing global network of charging points is now available in Malaysia, Thailand and India.*

Our Challenges and Opportunities

Market Context

Diverging EV adoption trends, evolving charging technologies and changing customer expectations created opportunities to focus deployment where utilisation, customer experience and interoperability deliver the most value.

Strategic Response

- Prioritised Direct Current (DC) fast-charging deployment in selected Southeast Asian markets, particularly Malaysia and Thailand.
- Enhanced regional interoperability and user experience through Gentari Go™.
- Developed value-added digital services to improve utilisation and revenue per charging point.

Impact

- Strengthened utilisation rates and improved customer retention.
- Diversified revenue streams across the charging network.
- Positioned Gentari's green mobility portfolio for sustainable growth as EV adoption matures across the region.

Our Outlook

Short-term

We continue to adopt disciplined deployment strategies and improve utilisation across selected Southeast Asian markets, with emphasis on expanding DC fast-charging infrastructure and strengthening value-added services through Gentari Go™ to improve revenue. Amid uneven EV adoption, pricing pressures and evolving incentive structures, efforts remain centred on strengthening operational efficiency and ensuring charging infrastructure keeps pace with higher-voltage and fast-charging vehicle requirements.

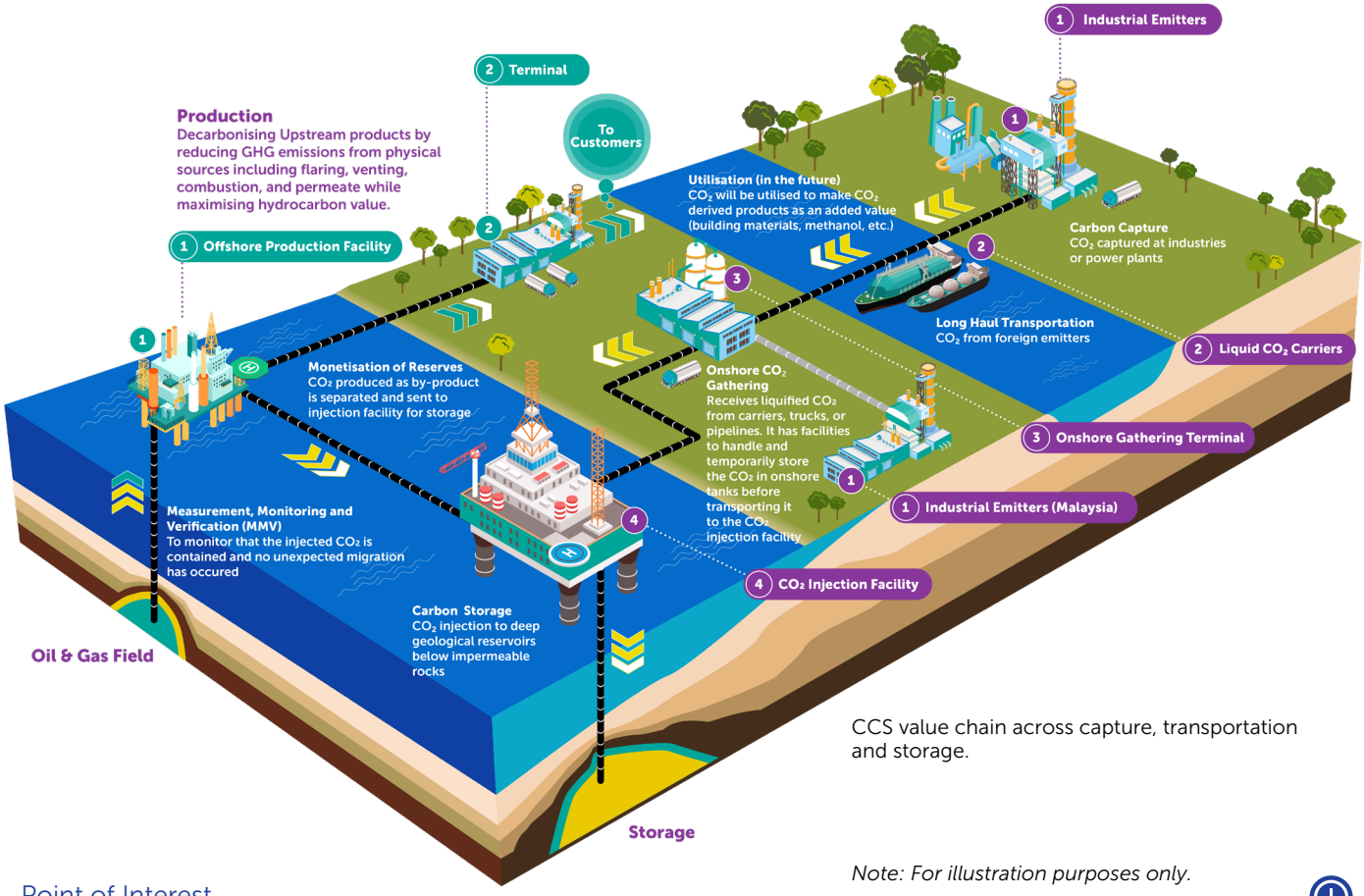
Medium- to Long-term

Focus remains on future-proofing the charging business through progressive technology upgrades and enhancements to business models across the EV ecosystem. This includes expanding fast-charging networks in markets with stronger demand, and strengthening digital and value-added service offerings to support customer experience, operational resilience and long-term revenue growth.

Carbon Capture and Storage

Malaysia's First Offshore Carbon Capture and Storage Permit Advances Duyong Storage Assessment

PETRONAS CCS Ventures (PCCSV) secured Malaysia's first offshore assessment permit for carbon capture and storage (CCS) under the newly enacted Carbon Capture, Utilization and Storage (CCUS) Act 2025, granted by the Malaysia Carbon Capture, Utilisation and Storage (MyCCUS) Agency. The permit gives PCCSV exclusive rights to conduct comprehensive offshore geological assessments in the Duyong storage site off Peninsular Malaysia for detailed studies to evaluate the site's potential as a permanent carbon dioxide (CO_2) storage location as part of the planned Southern CCS Hub. This initiative contributes to Malaysia's carbon management ecosystem and supports PETRONAS' role in enabling national and regional energy transition objectives.



CCS value chain across capture, transportation and storage.

Note: For illustration purposes only.

Point of Interest

The first Offshore Assessment Permit issued under the Carbon Capture, Utilization and Storage (CCUS) Act 2025 enables PETRONAS and our partners to systematically assess offshore geologic storage options, enhancing capabilities for long-term CO_2 storage in Asia Pacific while deepening understanding of CCS value chain coordination and commercial viability.

Key Milestones in Driving Southern CCS Hub Readiness for Regional Decarbonisation

PCCSV entered into a Key Principles Agreement (KPA) with TotalEnergies and Mitsui & Co. to enable coordinated technical studies and Front-End Engineering Design (FEED) for the Duyong offshore carbon storage site. The agreement brings together complementary technical, project development and carbon management expertise to firm up detailed evaluation of Duyong's suitability as a permanent carbon dioxide storage location. It supports progression to the next development phase for the Southern CCS Hub, strengthening its readiness to deliver integrated carbon storage solutions for regional industries.

New Business

Capturing New Growth Opportunities

Scaling Carbon Capture and Storage from Proof to Commercial Deployment

Our CCS initiatives progressed from capture technology readiness toward integrated, deployable and commercially relevant solutions. Collectively, these developments advance CCS from assessment and technical readiness toward structured development, positioning it as a future scalable infrastructure platform capable of supporting industrial decarbonisation while creating monetisation pathways aligned with regional carbon management demand.

Leading Malaysia's National Carbon Capture (NCC) Project	• Collaborated with key industry and technical partners to conduct a feasibility study. • The National Carbon Capture (NCC) Project serves as a testbed to evaluate the technical feasibility and economic viability of carbon capture in the steel sector, supporting Malaysia's decarbonisation pathways under the New Industrial Master Plan 2030 (NIMP 2030). • The project aims to establish an industrial reference case targeting approximately 200 tonnes of carbon dioxide capture per day from steelmaking operations. It establishes reference deployments for Membrane Box Contactor in Malaysia, building confidence for customers, partners, and future investments globally. • The project contributes to advancing carbon capture, utilisation and storage (CCUS) solutions for hard-to-abate industries in Malaysia.
Advancing Integrated Carbon Capture Solutions with Gas Turbine Original Equipment Manufacturer (OEM)	• Technical discussions are ongoing with gas turbine OEMs to explore integrated concept designs combining carbon capture with power generation systems for offshore and onshore applications, including Floating Production, Storage and Offloading (FPSO) facilities, cogeneration, and retrofit configurations. • The collaboration focuses on assessing how modular carbon capture solutions can be integrated into power generation systems to enable emissions reduction across hard-to-abate sectors, including broader industrial power applications.
Strengthened an Integrated CCUS Value Chain Article	• Linked CCUS capabilities across internal divisions and external partners to deliver end-to-end CCUS solutions for industrial customers. • This integrated approach enhances monetisation potential, reduces execution complexity and differentiates PETRONAS as a single-solution provider for decarbonisation needs.
Secured First Revenue-Generating CCS Engagement in North America	• Completed a paid engineering study for Tourmaline Oil together with PETRONAS Energy Canada covering a capture capacity of approximately 160 tonnes of carbon dioxide per day. • This engagement validates technology applicability in an international operating environment and provides a platform for further commercial expansion.

Our Challenges and Opportunities

Market Context

Malaysia's ambition to become a regional CCS hub, backed by the Carbon Capture, Utilization and Storage (CCUS) Act 2025 and progress in Liquefied Carbon Dioxide (LCO_2) shipping, presents a clear opportunity for PETRONAS to develop an integrated CCS value chain and grow its participation in emerging international carbon management markets, including Canada.

Strategic Response

- Conducted independent technical validation through Energex and established structured project governance.
- Maintained active engagement with relevant regulators and industry stakeholders to support regulatory approvals and funding pathways.
- Advanced CCS activities to align with emerging regulatory frameworks in Peninsular Malaysia while maintaining progress on national initiatives.
- Leveraged PETRONAS' convening role to build strategic collaborations and advance cross-border CCS value chains.

Impact

- Validated CCS technology readiness for pilot deployment.
- Strengthened regulatory readiness and project development pathways through sustained stakeholder engagement.
- Secured Malaysia's first CCUS Offshore Assessment Permit for the Duyong storage site, supporting future CCS projects and LCO_2 shipping opportunities.
- Advanced early international positioning through the Canadian engineering study.

Our Outlook

Short-term

Our focus remains on advancing CCS solutions towards Final Investment Decision readiness for the region's first-of-its-kind CCS project. These efforts support Malaysia's ambition to become a regional CCS hub while strengthening the foundations for a global CCS business portfolio.

Medium- to Long-term

We aim to strengthen PETRONAS' position as a leading CCS hub for Malaysia and the region while expanding a global CCS business portfolio through cross-border projects, strategic partnerships and integrated decarbonisation solutions.

New Business

Capturing New Growth Opportunities

"At PETRONAS, advancing a lower-carbon future is integral to how we operate. Driven by our strong commitment in expanding innovation ecosystem, technology remains the primary catalyst in our journey to Net Zero Carbon Emissions by 2050."

Ir. Ts. Mohd Yusri Mohamed Yusof
Senior Vice President, Projects, Engineering and Technology

Research and Development Investment

Research and development (R&D) enables PETRONAS to address operational challenges, improve performance and prepare technologies for future deployment. R&D investments are allocated across Technology Readiness Levels to advance ideas from early research to commercial deployment across key technology clusters.

In 2025, the Group's R&D portfolio reflected a focused and strategic commitment to innovation that supports decarbonisation, unlocks climate-related opportunities, drives business growth and strengthens long-term competitiveness.

The largest allocation was to CCUS, highlighting its role as a key innovation pillar for emissions reduction, regulatory readiness and the development of new lower-carbon value streams.

Continued investment in Advanced Materials & Subsea Technology and Specialty Chemicals Technology further advance technology-driven innovation, enhancing asset performance, improving operational efficiency and creating value across the energy value chain.

Overall, lower-carbon technologies account for around 60 per cent of the Group's total R&D portfolio, which includes CCUS, Fluid Technology Solutions, Hydrogen, Renewable Energy and Renewable Oil. This portfolio positions PETRONAS to capture emerging climate-related opportunities while supporting a resilient and sustainable energy future.

Net Zero Carbon Emissions

Pathway to Net Zero

Focus Areas

The delivery of PETRONAS' Net Zero Carbon Emissions (NZCE) by 2050 Pathway reflects varying national circumstances, including differences in economic development, energy security priorities, infrastructure readiness and social considerations. Progress will depend on a balanced and pragmatic approach, aligned with evolving technical, regulatory and economic conditions.

To advance towards our NZCE by 2050 commitment, we focus on reducing emissions across operations through a combination of improving energy efficiency, minimising flaring and venting, and electrifying assets where viable. Going forward, we intend to complement these efforts with carbon capture and storage (CCS) solutions, as well as investments in nature-based and technology-driven approaches to address residual emissions.

> *We treat sustainability as a core enabler of business execution, guiding how we balance near-term energy demands with disciplined progress on climate, nature and just transition priorities. Guided by our Sustainability Approach, we embed sustainability considerations into investment appraisal, capital allocation, portfolio planning and risk review. This approach allows us to better anticipate long-term risks and opportunities and to make decisions that enhance resilience for the future."*
>
> **Charlotte Wolff-Bye**
> *Vice President and Group Chief Sustainability Officer*

Zero Routine Flaring and Venting

Flaring and venting reduction is driven through targeted operational improvements across upstream assets. Flare gas recovery systems capture and reuse gas that would otherwise be lost, while increased compressor capacity improves gas handling and reduces the need for flaring. Conversion of vented gas into flared and recoverable streams further limits methane emissions. These measures collectively reduce carbon and methane emissions from upstream operations.

Energy Efficiency

Energy efficiency improvements strengthen operational performance across our assets. Initiatives include optimising plant operations, applying digital solutions and enhancing process and equipment efficiency, including heat recovery and performance optimisation, enabling greater output with lower energy consumption.

Electrification

Electrification reduces emissions from on-site combustion by replacing fossil fuel-based energy with lower-carbon electricity where feasible. This involves asset modifications, supporting infrastructure development and the integration of renewable energy sources to power operational activities.

Carbon Capture and Storage

CCS solutions address emissions that cannot be eliminated through operational improvements alone. Carbon dioxide from selected high-emission assets is captured and stored securely in geological formations, supported by subsurface expertise, existing infrastructure and partnerships across the CCS value chain.

For a detailed breakdown of our Net Zero Carbon Emissions by 2050 Pathway and progress, refer to pages 97 to 113.

Net Zero Carbon Emissions

Pathway to Net Zero

Zero Routine Flaring and Venting

Lowering Flare Emissions through Acid Gas Removal Unit Optimisation

PETRONAS implemented an Acid Gas Removal Unit (AGRU) optimisation initiative across selected Upstream fields in Peninsular Malaysia to reduce flaring by optimising existing operating conditions, increasing carbon dioxide (CO_2) export, minimising hydrocarbon losses to permeate flaring while maintaining gas quality and supply reliability. Operational trials confirmed that normal AGRU operations, even during high-CO_2 conditions, delivered optimal emissions and production outcomes. The initiative achieved an estimated annual emissions reduction of approximately 0.16 million tonnes of carbon dioxide equivalent ($MtCO_2e$), alongside lower hydrocarbon losses and incremental gas sales, demonstrating the value of targeted optimisation of existing assets in supporting PETRONAS' NZCE by 2050 commitment.

Electrification

Electrifying Operations to Lower Direct Emissions

PETRONAS Dagangan Berhad (PDB) strengthened its decarbonisation efforts through the continued rollout of solar power across its retail network. During the year, 121 PETRONAS stations were newly solarised, bringing the cumulative total to 303 sites nationwide. This represents a strong uplift in new installations compared to the previous year, underpinned by improved planning and increased execution momentum.

Looking ahead, PDB remains on track to further scale solar adoption, with a target of more than 450 solarised stations by 2030. This initiative supports the reduction of operational emissions while advancing the transition towards cleaner, more energy-efficient retail operations across the network.

Energy Efficiency

Strengthening Energy Efficiency Across Assets

Structured Energy Trending and Performance Assessment for Combustion Engine (SETPACE), an in-house digital tool developed by the Upstream business, enables a structured and data-driven approach to reducing combustion-related emissions. SETPACE was initially piloted by PETRONAS Carigali across three sites in 2022 and subsequently replicated both domestically and internationally following strong results. By 2023, it was integrated into fuel gas forecasting processes across all PETRONAS Carigali-operated sites, resulting in an estimated reduction of approximately 1.21 $MtCO_2e$ in greenhouse gas emissions in 2024.

Additionally, SETPACE achieved a 9 per cent reduction in energy intensity across 38 PETRONAS Carigali-operated facilities from a 2021 baseline, delivering energy savings of approximately 1,680,000 gigajoules (GJ) through identified reduction opportunities. This is equivalent to powering approximately 178,000 Malaysian households for one year, based on an average annual electricity consumption of about 2,620 kilowatt-hours (kWh) per household. These efforts were further expanded, enabling replication of the solution across three additional non-operated fields.

For further information on PETRONAS' efforts to achieve NZCE by 2050 targets, please refer to Delivering Net Zero, Metrics and Targets on page 102.

2025 Performance Metrics

We track emissions performance across operational control and equity share boundaries to support delivery of PETRONAS' NZCE by 2050 Pathway targets. This enables consistent oversight of our long-term climate actions and informs portfolio and capital allocation decisions, ensuring continued alignment with our Energy Transition Strategy and net zero commitment.

Progress is driven through four priority abatement levers that focus on reducing operational emissions while enhancing portfolio resilience. These levers emphasise practical and scalable actions across our assets to lower greenhouse gas emissions and support steady advancement towards NZCE by 2050.

OC *Operational Control* ES *Equity Share* ✓ *Achieved*

		2025 Performance
Short-term Targets (2024-2025)		
GHG emissions from Malaysia operations ✓	**49.50** **million tonnes CO_2e** cap for Malaysia operations	OC **47.46** **million tonnes CO_2e**
Methane emissions – PETRONAS Group-wide natural gas value chain ✓	**50 per cent** reduction by 2025 against 2019 baseline	OC **80 per cent** reduction (target exceeded)
Medium-term Targets (2030)		
GHG emissions from PETRONAS Group-wide	**25 per cent** reduction by 2030 against 2019 baseline	ES **4 per cent**
Methane emissions – Malaysia's natural gas value chain ✓	**50 per cent** reduction by 2030 against 2019 baseline	OC **80 per cent** reduction (target exceeded)
Methane emissions – PETRONAS Group-wide natural gas value chain ✓	**70 per cent** reduction by 2030 against 2019 baseline	OC **80 per cent** reduction (target exceeded)
Long-term Target (2050)		
Net zero carbon emissions by 2050 ES		

The short-term target of capping GHG emissions at 49.5 million tonnes CO_2e by 2024 excludes Maritime, Corporate and Others, as more than 90 per cent of GHG emissions are contributed by activities within Upstream, Gas and Downstream Malaysia operations.

2024 and 2025

Short-term Targets - Achieved

In the short term, we focused on stabilising emissions from our existing portfolio, especially in Malaysia, and establishing a credible starting point for our NZCE by 2050 Pathway. Having met these milestones, we now focus on deepening abatement efforts in the medium-term and aligning long-lived assets with outcomes to meet our NZCE by 2050 target.

2030

Medium-term Targets - Progressing

In the medium term, we will focus on delivering sustained reductions in line with our 2030 GHG targets. This includes improving emissions performance across PETRONAS Group-wide operations, advancing methane emissions reduction across the natural gas value chain and aligning asset and operational decisions with measurable decarbonisation outcomes.

2050

Long-term Target

NET ZERO 2050

Looking towards 2050, our NZCE target guides portfolio shaping, asset management and capital decisions to ensure PETRONAS remains resilient and relevant in a lower-carbon energy system while continuing to deliver reliable and affordable energy.

Advancing Sustainable Value Across Our Operations

In addition to our NZCE by 2050 efforts, we address a broader set of sustainability material topics that shape our long-term resilience and value creation. The Sustainability Performance section of this report presents key highlights of each material topic detailing our approach, key challenges, opportunities, mitigation actions and outlook.