



PRESS RELEASE

S.A. 2025/07/12_14 (HQ)

TNB, PETRONAS AND TERENGGANU INC ADVANCE MALAYSIA'S NATIONAL ENERGY TRANSITION ROADMAP WITH HYBRID HYDRO FLOATING SOLAR AND GREEN HYDROGEN HUB DEVELOPMENT IN TERENGGANU

Malaysia reached a major milestone in its energy transition roadmap with the launch of the Hybrid Hydro Floating Solar (HHFS) and Green Hydrogen Hub in Terengganu on 12 July 2025. These initiatives aim to position Malaysia as a regional leader in the green hydrogen value chain while supporting the National Energy Transition Roadmap (NETR) and the Hydrogen Economy and Technology Roadmap (HETR).

The Green Hydrogen Hub is a strategic collaboration between **Petroleum Nasional Berhad (PETRONAS)** and **Tenaga Nasional Berhad (TNB)**, with both parties advancing hydrogen production and its derivatives, while TNB also enhances grid infrastructure to support Malaysia's energy transition and regional clean energy ambitions.

The HHFS is a partnership between TNB's power generation subsidiary, TNB Genco Sdn Bhd, and **Terengganu Inc**, in line with the state investment arm's aspiration to spur socio-economic growth in Terengganu. The collaborations were formalised through document exchanges during the launch.

The launch was officiated by Prime Minister Dato' Seri Anwar Ibrahim at the Sultan Mahmud Hydro Electric Power Station in Kenyir.

Also present were Terengganu Menteri Besar Dato' Seri Ir Dr Ahmad Samsuri Mokhtar; Energy Transition and Water Transformation (PETRA) Deputy Minister Akmal Nasrullah Mohd Nasir; TNB Chairman Tan Sri Abdul Razak Abdul Majid; PETRONAS Chairman Tan Sri Mohd Bakke Salleh; TNB President/CEO Datuk Ir. Megat Jalaluddin Megat Hassan; PETRONAS President and Group CEO Tan Sri Tengku Muhammad Taufik; and Terengganu Inc President and Group CEO Dato' Burhanuddin Hilmi Mohamed @ Harun.

Dato' Burhanuddin Hilmi Mohamed @ Harun highlighted Terengganu Inc's strong commitment to growing the state's green economy. He said, "These projects show that Terengganu has the potential to lead in green energy and create new economic opportunities for the people. With support from TNB and PETRONAS, we believe Terengganu can become a top choice for green energy investment in the region."

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He added, "As the state's investment arm, Terengganu Inc will ensure these projects meet their goals and also help build local talent and transfer technology. This is a great chance to place Terengganu on the global stage as a green energy hub."

Datuk Megat Jalaluddin emphasised the importance of the strategic alliance in accelerating TNB's decarbonisation journey through proven technologies. "Our partnership in the Terengganu Green Hydrogen Hub is a cornerstone of our commitment to driving clean energy innovation. This project is crucial to Malaysia's green hydrogen ambitions and reflects our dedication to advancing the NETR and HETR goals."

"The Kenyir HHFS project, part of our broader 2.5 GW hybrid solar-hydro initiative, exemplifies how TNB is leveraging its existing assets to maximise renewable output. The hydro plant serves as a flexible energy storage system—conserving water during peak hours and discharging it during off-peak—to stabilise the grid and respond rapidly to fluctuations in demand."

Tan Sri Tengku Taufik highlighted the transformative impact of the initiative, stating, "This strategic alliance converges the power and utilities capabilities of TNB with the oil, gas and energy expertise that PETRONAS has refined over 50 years to establish a robust and dynamic energy ecosystem in Malaysia."

"By tapping into the promising potential for green hydrogen and renewables to complement the baseload in the national grid that is still predominantly being served by conventional sources of energy, this landmark collaboration will pave the way for greater energy security and diversity for Malaysia. As partners, we are committed to provide the energy required to power national and regional growth by building a strong foundation to support the NETR."

The Green Hydrogen Hub in Terengganu is part of an integrated end-to-end value chain that encompasses round-the-clock RE generation from resources such as the Kenyir HHFS facility, green hydrogen production, and derivatives including green methanol and green ammonia.

This will be the first of its kind and scale, set to be developed within the Kenyir-Kertih Corridor to take advantage of TNB's renewable generation and grid infrastructure upgrade that are progressing in Kenyir, as well as PETRONAS' existing facilities and infrastructure, including the anticipated hydrogen electrolyser, its derivatives plant and carbon capture, utilisation, and storage (CCUS) facilities within the Kertih area.

The initiative strengthens TNB's and PETRONAS' roles as key government-linked companies in driving Malaysia's energy transition by collaborating with ASEAN and global partners. It supports the ASEAN Power Grid, advances sustainable solutions, fosters knowledge transfer, and promotes R&D. These efforts position Malaysia as a regional green energy hub while enabling cross-border energy trade and RE integration.

Released in Hulu Terengganu on 12 July 2025 at 9.30 am
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About Tenaga Nasional Berhad

Tenaga Nasional Berhad (www.tnb.com.my) is a leading Malaysian utility company in Asia with an international presence in the United Kingdom (UK), Ireland, Australia, Turkiye, Saudi Arabia, Kuwait, Pakistan, and Cambodia. Within the renewable energy space, TNB has a total gross portfolio of 3.3 Gigawatts (GW) in Peninsular Malaysia (including 2.5 GW of large hydro) and 1.2 GW across the UK, Ireland, Australia, and Turkiye, comprising mainly solar, wind, and hydro energy generation assets. In addition to being the nation's primary electricity generation enterprise, TNB also transmits and distributes electricity across Peninsular Malaysia, Sabah, and the Federal Territory of Labuan. As of 31 March 2025, TNB supplies electricity to over 11 million customers.

About PETRONAS

As a global energy and solutions partner, PETRONAS is driven by its purpose to enrich lives for a sustainable future. With presence in over 100 countries, the Group continues expanding its portfolios ranging from conventional and cleaner energy solutions to a diverse range of fuel, lubricants, and petrochemical products. While ensuring sustainable practices across its operations, PETRONAS strives to ensure just and equitable outcomes in transitioning towards a lower carbon future.

About Terengganu Incorporated Sdn Bhd (Terengganu Inc)

Established on 1 March 2006, Terengganu Incorporated Sdn Bhd (Terengganu Inc) is the strategic investment holding company for the Terengganu State Government, overseeing business entities and managing commercial and investment assets to drive sustainable growth. With a focus on strengthening its investment portfolio and exploring new opportunities in strategic sectors, Terengganu Inc is committed to building inclusive economies and enriching local communities. Guided by Shariah compliance and ESG principles, Terengganu Inc aims to create long-term economic and societal value, while upholding ethical practices to ensure a prosperous and sustainable future for the people of Terengganu.



Photo 1

Prime Minister Dato' Seri Anwar Ibrahim places a solar panel onto the console to launch the Hybrid Hydro Floating Solar and Green Hydrogen Hub Development in Terengganu at the Sultan Mahmud Power Station, Kenyir, on 12 July 2025.

Also present are Terengganu Menteri Besar Dato' Seri Ir Dr Ahmad Samsuri Mokhtar (second from left); Energy Transition and Water Transformation (PETRA) Deputy Minister Akmal Nasrullah Mohd Nasir (second from right); TNB Chairman Tan Sri Abdul Razak Abdul Majid (extreme left) and PETRONAS Chairman Tan Sri Mohd Bakke Salleh (extreme right).



Photo 2

Prime Minister Dato' Seri Anwar Ibrahim (centre); Terengganu Menteri Besar Dato' Seri Ir Dr Ahmad Samsuri Mokhtar (back row; second from left); Energy Transition and Water Transformation (PETRA) Deputy Minister Akmal Nasrullah Mohd Nasir (back row, second from right); TNB Chairman Tan Sri Abdul Razak Abdul Majid (extreme left); and PETRONAS Chairman Tan Sri Mohd Bakke Salleh (extreme right) witness the exchange of the Cooperation Agreement between TNB Genco and Terengganu Inc for the development of the Hybrid Hydro Floating Solar Project at the Kenyir Dam, held at the Sultan Mahmud Power Station, Kenyir, on 12 July 2025.

The exchange was carried out between TNB President/CEO Datuk Ir. Megat Jalaluddin Megat Hassan and Terengganu Inc President and Group CEO Dato' Burhanuddin Hilmi Mohamed @ Harun.



Photo 3

Prime Minister Dato' Seri Anwar Ibrahim (centre); Terengganu Menteri Besar Dato' Seri Ir Dr Ahmad Samsuri Mokhtar (back row, second from left); Energy Transition and Water Transformation (PETRA) Deputy Minister Akmal Nasrullah Mohd Nasir (back row, second from right); TNB Chairman Tan Sri Abdul Razak Abdul Majid (left); and PETRONAS Chairman Tan Sri Mohd Bakke Salleh (right) witness the document exchange between TNB and PETRONAS for the Integrated Green Hydrogen Value Chain Development in Terengganu.

The exchange of the document, by TNB President/CEO Datuk Ir. Megat Jalaluddin Megat Hassan (front left) and PETRONAS President and Group CEO Tan Sri Tengku Muhammad Taufik (front right) was held at the Sultan Mahmud Power Station, Kenyir, on 12 July 2025.



Photo 4

Prime Minister YAB Dato' Seri Anwar Ibrahim and Terengganu Menteri Besar Dato' Seri Ir Dr Ahmad Samsuri Mokhtar (far left) listening to a briefing by TNB Power Generation Sdn Bhd (TNB Genco) Managing Director Dato' Ir Muhamad Nazri Pazil (third from left) and TNB President/Chief Executive Officer Datuk Ir Megat Jalaluddin Megat Hassan (fourth from left) on the Hybrid Hydro Floating Solar (HHFS) project and Green Hydrogen Hub in Terengganu, at the Sultan Mahmud Hydroelectric Power Station, Kenyir.

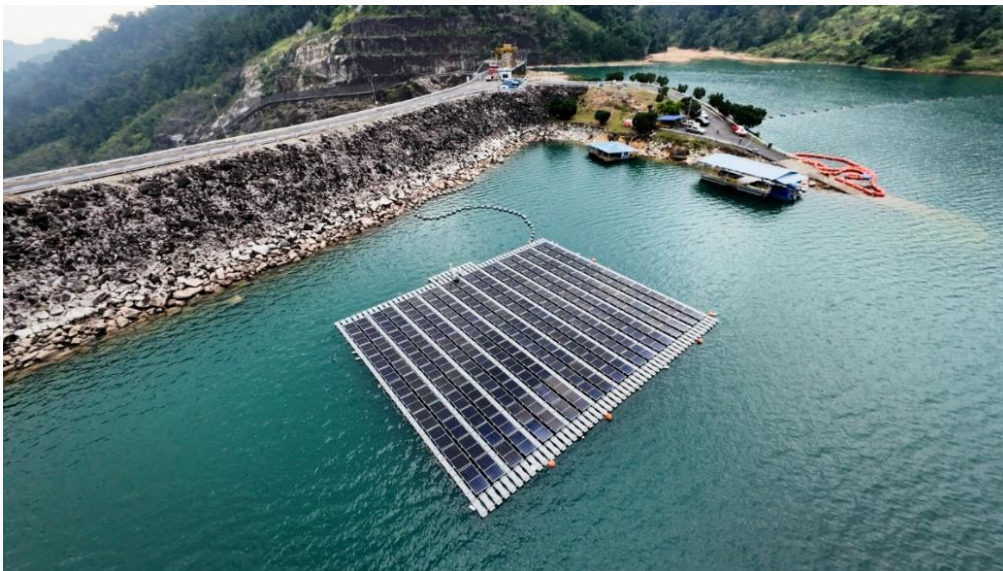


Photo 5 & 6

The Hybrid Hydro Floating Solar (HHFS) pilot project at the Tasik Kenyir Dam has a capacity of 100 kilowatt (kW). It covers an area of 1,085 m² with 220 solar panels. Launched on 12 July 2025, the project demonstrates how Malaysia's largest lake – spanning 36,900 hectares – holds immense potential for floating solar, with up to 10% of its surface deployable to generate an estimated 2,200 MW without affecting the lake's ecology. Kenyir will also supply renewable electricity to Kertih to power the upcoming Green Hydrogen Hub.



Photo 7

The Hybrid Hydro Floating Solar (HHFS) and Green Hydrogen Hub development in Terengganu, launched on 12 July 2025, encompasses round-the-clock RE generation from the Kenyir HHFS facility, green hydrogen production, and hydrogen derivatives including green methanol and green ammonia.