

Sabah To Develop Battery-Free Lighting System Under RM76,000 Research Project

By *Business Today Editorial* July 30, 2026



A RM76,000 research project to develop a battery-free lighting system powered by thermal energy will be carried out in Sabah under the Industrial Collaboration Programme (ICP), with the initiative also set to strengthen STEM education in the state.

The project brings together Universiti Malaysia Sabah (UMS) and Seni Gemilang Sdn Bhd to develop a sustainable lighting prototype while producing a Science, Technology, Engineering and Mathematics (STEM) learning module for schools across Sabah.

The research is part of the ICP linked to the 132/11kV Karamunsing Main Intake Substation Transmission Project implemented by the Ministry of Energy Transition and Water Transformation (PETRA). The ICP is a Ministry of Finance initiative monitored by Technology Depository Agency Bhd (TDA) that leverages selected government procurement projects to promote technology adoption, research collaboration, innovation and talent development.

Besides developing the battery-free lighting system, the project aims to introduce hands-on STEM learning materials to encourage students’ interest in sustainable energy technologies.

TDA chairman Tan Sri Liew Yun Fah said the programme creates long-term value beyond government procurement by strengthening technology transfer, research capabilities and local talent development.

“The Industrial Collaboration Programme ensures that every strategic Government procurement delivers sustainable value to the nation.”

“By fostering collaboration between government, industry and academia, the ICP accelerates technology transfer, strengthens research capabilities and develops highly skilled local talent to support Malaysia’s transition towards a high value, technology driven economy,” he said.

The initiative is expected to contribute to Malaysia’s research, development, commercialisation and innovation ecosystem while encouraging greater collaboration between the public sector, industry and higher education institutions in advancing sustainable energy solutions.