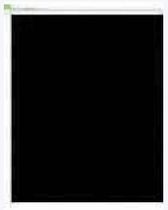
AUTHOR: No author available SECTION: ESG PAGE: E18 PRINTED SIZE: 906.00cmï¿½ REGION: KL
MARKET: Malaysia PHOTO: Full Color ASR: MYR 16,939.00 ITEM ID: MY0065765464



29 SEP, 2025

Green opportunities throughout the value chain

The Edge, Malaysia

Green opportunities throughout the value chain

AS an infrastructure group with a significant footprint in Malaysia, UEM Group Bhd's commitment to environmental best practices extends beyond the oft-highlighted energy sector into hard-to-abate areas such as building materials and transport.

Backed by Khazanah Nasional Bhd, the group sees it as essential to lead by example — demonstrating that it is indeed possible to achieve both socioeconomic impact and financial returns on the sustainability journey, while encouraging others in the industry to follow suit.

UEM Group is a shareholder of Cement Industries of Malaysia Bhd (CIMA), the country's second-largest cement producer.

CIMA is experiencing a strong earnings rebound, driven by the revival of the construction industry — at a time when scrutiny over energy use and product-related emissions is intensifying.

What few may realise, however, is that CIMA's emissions reduction journey began more than two decades ago — first through changes in its manufacturing processes, and later via product innovation.

"Recognising early on the significant environmental impact of building material production, CIMA took bold steps — adopting paddy husk as fuel in 2007 and pioneering an alternative combustion system in 2014, reducing reliance on coal," the company said.

CIMA's emissions reduction efforts have continued, with the company significantly increasing its use of biomass and industrial waste. Alternative fuels such as palm kernel shells, pellets, briquettes and shredded tyres have been adopted to reduce reliance on conventional sources.

Beyond fuel type, CIMA is also investing in energy efficiency, including a RM120 million waste heat recovery system at its Negeri Sembilan plant. The system captures excess heat from limestone-to-clinker conversion and converts it into electricity, improving energy management and cutting Scope 2 emissions at the plant by 30%.

Further down the value chain, CIMA has strengthened its capability in producing a wide range of eco-friendly products, said managing director Hairol Azizi Tajudin. "Enhancements are constantly being integrated into our product offerings," he added.

The company's latest eco-friendly product is the NS OptimoCrete 52.5N, Malaysia's first green cement comparable to Ordinary Portland Cement (OPC) — a breakthrough that combines performance with sustainability.

"What's important is that these products cannot compromise on quality while integrating sustainability, and must remain price competitive to meet customers' needs," Hairol said.

CIMA's innovations have positioned it as a leader in eco-friendly construction materials, particularly through the introduction of blended cement that upcycles waste materials such as pulverised fly ash (PFA). This reduces the heat of hydration and enhances water impermeability, lowering the risk of thermal cracking and improving durability.

In addition to PFA, CIMA uses industrial by-products such as ground granulated blast furnace slag (GGBS) to develop high-performance, low-carbon concrete solutions.

The company is also collaborating with NanoMalaysia Bhd, under the Ministry of Science, Technology and Innovation (Mosti), to explore the use of graphene in building materials — aimed at improving strength, durability and environmental performance. At the same time, CIMA is working with the Centre for Marine and Coastal Studies (CEMACS) at Universiti Sains Malaysia (USM) to develop eco-friendly marine concrete solutions.

These products cannot compromise on quality while integrating sustainability, and must remain price competitive to meet customers' needs."

— Hairol

"We are doubling down on R&D, continuously innovating to diversify our eco-friendly product portfolio and embed sustainability into every aspect of our operations," said Hairol. "True leadership in green industry growth comes from relentless innovation and a shared vision to build a resilient, low-carbon future for Malaysia and beyond."

A step further in energy, EV, transport infrastructure

At UEM Group's energy arm, UEM Lestra Bhd, work continues on developing its 1GW solar photovoltaic facility to support the country's 70% renewable energy (RE) capacity target. CEO Harman Faiz Habib Muhamad said the broader aim is to cultivate a robust local green industry that fosters innovative companies capable of competing regionally and globally.

"We aim to amplify these companies' existing strengths and enhance their operational performance, which will not only open new avenues for their growth but also ensure that we help build a sustainable, resilient industrial ecosystem that aligns with Malaysia's broader economic and environmental objectives," said Harman.

UEM Lestra employs a multi-pronged strategy in sustainable energy solutions. Its subsidiary, Cenergi SEA Bhd, continues to invest in renewable technologies — from biogas and biomass to small hydro — which require private sector support to mature, similar to the growth of rooftop solar installations.

Cenergi currently operates and is constructing more than 160MW of renewable capacity, including nearly 63MW from biogas using diverse feedstocks such as wastewater, animal waste and palm oil mill effluent. The group aims to avoid two million tonnes of carbon emissions annually and reach 200MW of total RE capacity through both RE projects and energy-efficiency solutions.

Meanwhile, UEM Lestra's acquisition of a controlling stake in Kulim Hi-Tech Park's power producer, NUR Power Sdn Bhd, enables it to play a significant role at an industrial scale as demand for green energy grows, driven by stricter environmental standards imposed by clients.

Few realise that Roda Emas Industries Sdn Bhd, a UEM Lestra subsidiary, has installed more than 150 electric vehicle (EV) chargers nationwide, including Sabah and Sarawak. Major clients include Tenaga Nasional Bhd, Sime Darby Motors Sdn Bhd, BMW Malaysia and various government agencies, including Malaysia Green Technology Corp.

Innovative asset management and pioneering climate risk assessments demonstrate our commitment towards strengthening environmental resilience and the well-being of communities."

— Nik Airina

EV charging is also a key focus for PLUS Malaysia Bhd, UEM Group's expressway unit, which had 114 fast-charging points across its highways by end-June — surpassing its original 2025 target. PLUS has accelerated the rollout of EV Direct Current Fast Charge (DCFC) stations along its highways and plans to expand to 350 charging points by 2028.

For PLUS, sustainability goes beyond serving the more than two million drivers who use its highways daily.

"Our sustainability strategy emphasises being environmentally conscious, and we are committed to actively pursuing operational efficiency and integrating technology to provide a safe and seamless travel experience for all travellers. We believe in social responsibility and in caring for the communities that rely on our highways," said PLUS managing director Datuk Nik Airina Nik Jaafar.

We [want to] help build a sustainable, resilient industrial ecosystem that aligns with Malaysia's broader economic and environmental objectives."

— Harman

"We minimise our operational carbon footprint through the adoption of renewable energy and technological innovation. This includes proactive asset management approaches as well as the application of climate-resilient materials to drive optimum life cycle costs and support circular maintenance technologies.

"The synergy and collaboration with companies within UEM Group have catalysed various initiatives, including renewable energy solar facilities and embedding sustainable maintenance practices, which include applying recycled pavement material and deploying environmentally friendly highway barriers. Each is designed to push the boundaries and raise the standards for an enhanced and differentiated travel experience while supporting the nation's aspirations."

PLUS' recent landmark initiative is the transformation of its Seremban Southbound Rest and Service Area (RSA) into Malaysia's first sustainable RSA. It has been awarded a provisional Gold-rated Green Building Index (GBI) certification and incorporates the use of sustainable building materials. Alongside the development of the first EV charging hub, the RSA is equipped with solar panel installations, rainwater harvesting systems, composting machines as well as 3R and recycling bins.

PLUS is the nation's first infrastructure company to conduct a comprehensive climate risk assessment, strengthening its resilience to adapt to climate challenges, gaining international recognition.

PLUS' LED retrofit has reduced emissions equivalent to approximately 11,500 annual energy needs, just from 37,000 LED conversions.

Overall, the pioneering efforts of companies under UEM Group's umbrella set a benchmark for their respective sectors to emulate and improve, benefiting Malaysia's socioeconomic growth.

At the same time, the cross-sector integration of UEM Group's sustainability efforts provides the scale needed to drive significant progress and enhance the nation's capacity to align with global trends — setting a meaningful course for the rapidly growing Asean region.