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Message From the Chairman of Executive Committee

[GRI 2-22]

Powering a Sustainable Future for Macao

The year 2025 marks an important milestone in CEM's sustainability journey. Since CEM first issued an internal sustainability report in 2002, and adopting the third-generation Sustainability Reporting Guidelines of the GRI in 2010 for the preparation of our sustainability reports, in 2025 we have begun publishing a standalone Environmental, Social and Governance (ESG) report in a systematic and structured manner, comprehensively setting out how we integrate sustainability into our corporate governance and operations while fulfilling our responsibilities as a concessionaire public electricity utility.

During the year, we completed our first double materiality assessment[1], systematically identifying key environmental and social issues relevant to CEM's operations and value chain. At the same time, we further strengthened our ESG governance framework and incorporated relevant risks into the Company's enterprise risk management system. The Board of Directors continues to oversee the formulation and implementation of our sustainability strategy, ensuring that CEM fulfils its statutory responsibilities while also supporting long-term resilience and value creation.

Globally, the transition towards a low-carbon and climate-resilient future is accelerating. For CEM, the energy transition represents both a responsibility and an opportunity. In alignment with national and regional climate goals, Macao has set a clear policy direction to reach peak carbon emissions before 2030, and to move the electricity and land transport sectors towards near-zero emissions before 2050. This direction provides a clear policy foundation for CEM's long-term sustainable development.

As the concessionaire responsible for electricity transmission, distribution and supply in Macao, CEM plays a pivotal role in this transition. Electricity not only supports Macao's economy, which is largely driven by tourism and services, but also serves as a critical enabler for the decarbonisation of transport, buildings and urban systems. Accordingly, our responsibility extends beyond ensuring a safe and reliable electricity supply to supporting the low-carbon transition of Macao's energy structure, enhancing infrastructure resilience, and contributing to the sustainable development of Macao's economy and society through reliable power services.

Strategic Position in the Energy Transition

Macao's energy structure presents distinct characteristics. Due to limited land and natural resources, nearly 90% of its energy supply is imported from Mainland China, making cross-border cooperation and energy security a constant priority. At the same time, electricity accounts for a relatively high share of final energy consumption, making the decarbonisation of the power system a key driver for achieving overall emission reduction targets.

To support urban development and the energy transition, CEM invested MOP 586 million in 2025 to upgrade and expand the transmission and distribution network. We also launched the "Macao's Smart Grid Development Roadmap in the context of Carbon Neutrality" study, aimed at advancing the power grid towards greater safety, efficiency, intelligence and low-carbon performance.

We have developed a phased low-carbon transition pathway extending to 2050, guided by three core strategic principles:

- Decarbonisation – continuously optimising the local generation mix, increasing the share of non-fossil energy, and preparing for the deployment of emerging low-carbon technologies
- System resilience – strengthening grid infrastructure, climate adaptation capabilities and operational reliability to address increasingly complex physical and transition risks
- Stability and affordability – ensuring that the energy transition progresses steadily while maintaining economic stability and social affordability

By aligning operational planning with the national "dual carbon" goals and the Long-term Decarbonisation Strategy of Macao, CEM aims to develop a transition pathway that is both practical and forward-looking, supporting policy implementation while safeguarding energy security.

1 Double materiality refers to the requirement for companies, when disclosing ESG information, to explain not only how external environmental and social issues affect the company's financial performance (financial materiality), but also how the company's operations impact the environment and society (impact materiality).

Building a Smart and Resilient Power System

A smart, flexible and resilient electricity system forms the foundation of the energy transition. CEM continues to advance long-term grid planning and infrastructure upgrades, strengthening cross-border interconnections and enhancing overall system reliability.

Smart meters have been deployed across Macao, enabling real-time data collection and two-way communication, and laying a solid foundation for building a comprehensive and transparent advanced grid. Through data analytics and intelligent monitoring technologies, we enhance load forecasting, asset management and technical loss control, providing data and technical support for the future integration of distributed energy and the development of electric mobility.

In addition, several infrastructure projects are progressing steadily, including the Tai On Substation and the new dispatch centre, the expansion of the medium-voltage network and cable replacement works, as well as the utility tunnel ancillary systems in the New Urban Zone A. These projects will provide stronger electricity infrastructure to support the city's future development.

Promoting Responsible Energy Use and Electrification

Electrification is a key component of Macao's decarbonisation strategy. CEM is actively expanding electric vehicle (EV) charging infrastructure to support the development of low-carbon mobility. Through digital energy services and energy efficiency programmes, we also assist customers in improving energy efficiency, reducing energy costs and lowering emissions.

By leveraging smart meter data and energy management tools, we help customers better understand their electricity consumption patterns, fostering the gradual adoption of lower-carbon behaviours and lifestyles across society.

At the same time, CEM procured 2,250,000 kWh of Green Electricity Certificates (GECs) to offset the carbon emissions from electricity consumption at the CEM Headquarters Building, and continues to promote sustainable procurement and supply chain management. CEM will continue to explore diversified decarbonisation pathways, including renewable energy integration, GECs mechanisms and nature-based solutions, to support society-wide emissions reduction efforts.

Creating Long-term Value through Governance and Collaboration

Sustainable development requires robust governance and transparent management. During the year, CEM established an ESG management framework and published its first standalone ESG Report in 2026, enhancing the transparency and consistency of our disclosures. ESG principles have been embedded into corporate strategy, risk management and decision-making processes. Through climate scenario analysis, strengthened disclosure mechanisms and continuous stakeholder engagement, we aim to further enhance accountability and management maturity.

CEM also actively contributes to the community, organising over 30 community initiatives throughout the year. The "Macao Energy Saving Contest", co-organised with the Environmental Protection Bureau (DSPA, in the Portuguese acronym) for 17 consecutive years, has cumulatively saved approximately 400 million kWh of electricity. In addition, nearly 30 electricity safety seminars were conducted to promote energy conservation and safe electricity use. CEM will continue to maintain close collaboration with the Macao SAR Government, industry partners and the wider community to ensure that its actions remain aligned with public policies and societal expectations.

Looking Ahead

The journey towards carbon neutrality presents both challenges and opportunities. Technological advancements, institutional improvements and regional collaboration will continue to shape the future energy landscape. In response to an evolving external environment, we will steadily advance the low-carbon transition with a prudent and forward-looking approach, while ensuring the security of power supply and price stability.

CEM is committed not only to fulfilling its role as a reliable public utility, but also to becoming a low-carbon energy platform that supports Macao's long-term sustainable development. Through stable and reliable electricity services, we will continue to power Macao's green future.

Bernie Leong
Chairman of Executive Committee
Companhia de Electricidade de Macau – CEM, S.A.
30 June 2026

2025 Highlights and ESG Targets

Economic

We support Macao's economic development through a reliable and sustainable electricity supply and sound operational management, providing the community and businesses with efficient, safe and sustainable energy services.

- Continue investing in transmission and distribution infrastructure and grid upgrades to support the development of Macao's energy system
- Create long-term value for the local economy through capital investment and infrastructure development
- Maintain prudent operations and asset management to support the long-term reliable operation of the power system

ESG Governance

We have established a systematic ESG governance framework, integrating sustainability principles into corporate strategy, risk management and decision-making processes. Through enhanced disclosure mechanisms and stakeholder engagement, we continue to strengthen corporate governance and transparency.

- Establish a structured ESG governance framework and integrate sustainability into corporate decision-making and risk management
- Complete the double materiality assessment to identify key ESG topics and guide management priorities
- Publish our first standalone ESG Report to enhance transparency of information disclosure

Employees

We place strong emphasis on employees' professional development and well-being, striving to create a safe, healthy and supportive working environment, while fostering international collaboration and nurturing talent with professional capabilities.

- Continuously enhance occupational health and safety management systems and strengthen safety culture and risk prevention
- Provide diverse training and professional development opportunities to strengthen employees' skills and competencies
- Promote a diverse, equitable and inclusive workplace while supporting employee well-being and team cohesion

Community

We actively participate in community development and public welfare initiatives, supporting education, environmental protection and social development programmes, and working with citizens to build a safe, caring and sustainable community.

- Organise community programmes and energy education initiatives to promote energy conservation and safe electricity use
- Support environmental protection and sustainability-related activities to enhance public awareness of low-carbon living
- Maintain close engagement with the community to support sustainable social development

Partners

We actively collaborate with governments, customers, businesses and other stakeholders to establish long-term partnerships, jointly promoting energy innovation, urban development and social sustainability.

- Achieve key service quality targets stipulated in the concession contract and maintain a high level of electricity service reliability
- Strengthen collaboration with government authorities, customers and business partners to support energy transition and urban development
- Promote responsible supply chain management and gradually integrate ESG considerations into procurement and partnership decisions

Environment

We continue to advance energy efficiency improvements and environmental protection initiatives, promote clean energy applications, and strengthen climate risk management and climate resilience, contributing to a greener and lower-carbon living environment for Macau.

- Continue implementing energy-saving and energy efficiency improvement initiatives
- Explore renewable energy and green electricity applications to support the low-carbon transition
- Promote resource circularity, reducing the environmental impact of operations
- Strengthen environmental management and resource efficiency to reduce operational impacts on the environment

Company Profile

Number of Customers: Including commercial, residential and industrial contracts		286,043
Number of Employees:		714
Number of Material Suppliers:		274
Number of Service Vendors:		225
Infrastructure	Power Station	1
	Dispatch Centre	1
	Primary Substations	29
	High-Voltage Switching Stations	8
	Customer Substations	1,841
	Electric Vehicle Charging Points	2,105
	Electric Motorcycle Charging Sockets Installed	913
	Warehouses	3
	Customer Service Centers	2
	Call Center	1

Company Operations

Power Generation (GWh)	Power generated by power stations:	583
	Power purchased from China Southern Power Grid (CSG):	5,464
	Power purchased from the Macao Refuse Incineration Plant (CIRS):	213
	Photovoltaic power generation	2.889
Safety Statistics	Number of work injuries (employees):	2
	Number of work injuries (contractors):	1
Overall transmission and distribution network loss rate:		2.11%
Share of electric vehicles in CEM:		36%

Air Emissions

Macao CO_2 Emission Factor (kg CO_2e/kWh):		0.465
CEM Power Generation CO_2 Emission Factor (kg CO_2e/kWh):		0.556
Gaseous emissions (mg/m^3)	**Coloane Power Station A – CCA**	
	Nitrogen Oxides (NOx) Emissions:	344
	Sulphur Dioxide (SO_2) Emissions:	196
	Particulate Matter (PM) Emissions:	36
	Coloane Power Station B – CCB	
	Nitrogen Oxides (NOx) Emissions:	38
	Sulphur Dioxide (SO_2) Emissions:	1
	Particulate Matter (PM) Emissions:	4

Customers

Electricity Supplied to Customers (GWh) :		6,114
Customer Satisfaction Index		84.93%
Green Services	Smart Meter Coverage Rate:	99.99%
	E-Billing Adoption Rate:	32.35%
	Electronic Payment Rate:	88.10%
	E-Enquiry Rate:	92.40%
	E-Application Rate:	43.42%