



SANERGY

SANERGY GROUP LIMITED

昇能集團有限公司

(incorporated in the Cayman Islands with limited liability)

Stock Code : 2459



Environmental, Social and Governance Report **2024**



Environmental, Social and Governance Report

ABOUT THIS REPORT

Sanergy Group Limited (the “**Company**”), together with its subsidiaries (the “**Group**” or “**We**”) is principally engaged in the manufacturing and sale of graphite electrodes. The Group is a global manufacturer of ultra-high power graphite electrodes (“**UHP graphite electrodes**”) with a worldwide customer base in over 25 countries comprising major global electric arc furnace steel manufacturers in Americas, Europe, the Middle East, Africa, Asia Pacific and the People’s Republic of China (the “**PRC**”) that sell their products to the automotive, infrastructure, construction, appliance, machinery, equipment and transportation industries.

This environmental, social and governance (“**ESG**”) report (the “**ESG Report**”) summarises the Group’s ESG practices, plans, performance and other related information.

Reporting Period

Unless specifically stated otherwise, this ESG Report covers the ESG activities, challenges and measures of the Group for the financial year ended 31 December 2024 (“**FY2024**” or the “**Reporting Period**”).

Reporting Scope

The disclosure of environmental information and data includes the Group’s operations in the factories in Italy and the PRC, while the disclosure of social information and data includes all operating sites in the PRC, Italy, Macau, Hong Kong, Switzerland, the United States and South Africa.

The reporting scope is determined based on the materiality and environmental and social risks of the operations under the Group’s direct operational control. As the environmental impact of the Group’s operations in Hong Kong, Macau, Switzerland, the United States and South Africa is insignificant, the environmental-related data will only cover the Group’s production facilities in Italy and the PRC. The Group has not included the production assets in Shanxi acquired in 2023 in 2024 reporting scope due to vendor’s illegal occupation of the production assets in Shanxi during the Reporting Period.

Reporting Framework

This ESG Report has been prepared in accordance with the “Environmental, Social and Governance Reporting Guide” (the “**ESG Reporting Guide**”) set out in Appendix C2 to the Rules Governing the Listing of Securities (the “**Listing Rules**”) on The Stock Exchange of Hong Kong Limited (the “**Stock Exchange**”).

During the preparation of this ESG Report, the Group has applied the reporting principles in the ESG Reporting Guide. The reporting principles that the Group applied are set out below:

- **Materiality:** Materiality assessment was conducted with key stakeholders to identify material issues during the Reporting Period, thereby adopting the confirmed material issues as the focus for the preparation of this ESG Report. The materiality of issues was reviewed and confirmed by the board (the “**Board**”) of directors (the “**Directors**”) and the Environmental, Social and Governance Committee (the “**ESG Committee**”) of the Company. For further details, please refer to the sections headed “STAKEHOLDER ENGAGEMENT” and “MATERIALITY ASSESSMENT”.
- **Quantitative:** To measure the effectiveness of ESG-related policies, the Group has adopted the ESG Reporting Guide and the relevant guidelines published by the Stock Exchange and other international organisations, in measuring and presenting quantitative environmental and social key performance indicators (“**KPIs**” or individually a “**KPI**”). Details of the standards used are described in the relevant sections of this ESG Report.
- **Balance:** This ESG Report aims to provide a balanced and unbiased representation of the Group’s performance.
- **Consistency:** This is the third ESG Report presented by the Group. Other than the change in the reporting scope mentioned above, the preparation methods of this ESG Report were substantially consistent with the previous year (“**FY2023**”), and explanations were provided regarding data with changes in the scope of disclosure and calculation methodologies. The Group will adopt consistent statistical methods in subsequent years for meaningful comparisons in the future.

Environmental, Social and Governance Report

BOARD STATEMENT

Dear stakeholders,

On behalf of the Board, I am pleased to present the third ESG Report of the Group, which demonstrates our growing commitment to sustainable development.

The dual carbon goals, namely carbon peaking before 2030 and carbon neutrality before 2050 have brought global momentum towards the transformation of our downstream industry of steel manufacturing by shifting from blast furnace steelmaking to electric arc furnace (“**EAF**”) steel manufacturing. In recent years, blast furnace steelmaking predominates steel production with around 70% in worldwide and even around 90% in the PRC. Using EAF is more environmentally friendly in terms of pollutant emissions and energy consumption and is regarded as a core pillar of decarbonisation to complete “super-low-emission” renovations within the steel industry. As a company principally engaged in the manufacturing and sale of graphite electrodes, sustainability is one of the key elements embedded in the Group’s development. With our commitment to offering high-quality UHP graphite electrodes which serves as a key industrial material to EAF steel manufacturers and our continuous efforts to strive for a cleaner production process to reduce emissions and wastes as well as energy consumption, we believe, together with our downstream customers, we would be able to contribute to a green and sustainable economy in the long run.

The Board is committed to driving sustainable development in the Group’s business operations. The Board has overall responsibility for the Group’s ESG strategy and reporting, while both the members of the Board and the ESG Committee supervise the ESG issues of the Group. The Board continuously monitors and reviews the key risks affecting the sustainability of the Group’s business. The risk management and internal control frameworks provide a structured approach for the Board to formulate policies and ensure effective execution. Where appropriate, external advisors would be engaged to provide expertise and professional advice for the ESG management process. More information about the Group’s governance structure is stated in the section headed “GOVERNANCE FOR SUSTAINABILITY”.

The Group continuously communicates with its stakeholders to understand their concerns and fulfil their expectations. To identify and assess the material concerns of the Group’s stakeholders, the Group has conducted materiality assessment surveys through stakeholder engagement. The assessment helped the Group determine the factors that have material impacts on the Group’s sustainable growth, which were incorporated into the development of its ESG strategies and targets. The Group has also set various ESG-related targets on relevant KPIs, including but not limited to the environmental targets that were approved by the Board and the progress is reviewed by the ESG Committee annually. Aiming to achieve the targets, the Group is committed to implementing various measures. The Board believes that the ESG-related targets can raise employees’ awareness of ESG, drive behavioural changes and facilitate the incorporation of ESG initiatives into the Group’s operational strategy.

Environmental, Social and Governance Report

The Group's outstanding performance in development and ESG performances are recognised by various awards received in FY2024. It was awarded the "Aspiring Excellence Award" (《年度最具潛力獎》) at 2024 Greater Bay Area Listed Companies ESG100 Green Advancement Awards organised by The Greater Bay Area Association of Listed Companies. It also received the honour of "Certificate of Appreciation" at Hong Kong's Earth Hour 2024 held by the World Wildlife Fund ("WWF").

On behalf of the Board, I would like to express my gratitude to my fellow Directors, the management team, all employees and stakeholders for their contributions to the Group's sustainable development.

Peter Brendon Wyllie

Executive Director and Chairman of the Board

Hong Kong, 16 April 2025

Environmental, Social and Governance Report

GOVERNANCE FOR SUSTAINABILITY

The Group considers ESG management as part of its fiduciary duty and strives to embed ESG considerations into daily operations and management. The Board holds the overall responsibility for the Group's ESG strategy and reporting, as well as overseeing and managing the Group's ESG-related issues. The Board discusses and reviews the Group's ESG-related risks and opportunities, performance, progress, goals and targets at least once per year with the assistance of the ESG Committee. The Board also ensures the effectiveness of ESG risk management and internal control mechanisms.

The ESG Committee facilitates the Board's oversight of ESG-related issues and has the responsibility for collecting and analysing ESG data, monitoring and evaluating the Group's ESG performance, ensuring compliance with ESG-related laws and regulations and preparing ESG reports. The ESG Committee arranges meetings at least once per year to discuss and review the Group's ESG-related issues including, but not limited to, ESG-related policies and procedures, ESG-related performance and the progress made against ESG-related goals and targets, and reports the results to the Board subsequently.

To ensure that a better implementation system is in place, an ESG working group has been set up at the management level. The ESG working group is composed of representatives from the Group's departments including, but not limited to, the Administrative Department, Production Department, Operation Department and Finance Department and is responsible for discussing the Group's ESG issues. The ESG working group continues to ensure that appropriate and effective ESG risk management is in place. It also assists the Group's risk management, which is designed to meet the Group's specific business needs and to minimise its risk exposure. The ESG working group meets and reviews ESG goals at least once per year and reviews the Group's progress in achieving the goals using timely data reports to check whether there are areas for improvement.

Additionally, through analysing the situation of the Group, the ESG working group will suggest new ideas and bring attention to issues, as well as offer solutions that can be applied in the Group to the ESG Committee.

ALIGNMENT WITH THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS ("UN SDGs")

The 17 UN SDGs address global challenges related to health, inequality, climate change, environmental degradation, peace and justice, and are aimed at establishing a sustainable society. As a global corporate citizen, the Group has echoed and incorporated the UN SDGs into the Group's business.



Goal 3 Ensure healthy lives and promote well-being for all at all ages

Sulphur dioxide and nitrogen oxides are deleterious pollution gases in the atmosphere. Using EAF steelmaking is more environmentally friendly in terms of pollutant emissions and energy consumption and is regarded as a core pillar of decarbonisation to complete "super-low-emission" renovations within the steel industry. We supply UHP graphite electrodes to EAF plants in the steelmaking industry which is expected to reduce up to 99% of sulphur dioxide and 97% of nitrogen oxides compared to traditional blast furnace steelmaking. The Group believes, together with its downstream customers, it would be able to contribute to a green and sustainable economy while reducing the impact of air pollution in the long run.

The Group also strives to promote occupational health and safety. We have policies and procedures for workplace safety and healthy work environment, particularly the procedures for the safe operation of machinery and equipment in our production facilities. Furthermore, through participating in occupational health and safety training sessions, we ensure that our employees learn about potential occupational hazards in their positions and take precautionary measures with a view to promoting productivity, skills, safety and health of our employees. In addition, occupational hazard signs are also posted to raise employees' safety awareness.

Please refer to the sections headed "Emissions" and "Workforce Health, Safety and Well-being" for further details.

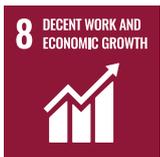


Goal 7 Ensure access to affordable, reliable, sustainable and modern energy for all

The global commitment by governments and the original equipment manufacturers towards the development of green industries and electrification of transportation is driving the demand for lithium-ion batteries due to their wide applications, particularly in the new energy vehicle and energy storage industries. Graphite anode material (“**GAM**”) is a key component of lithium-ion batteries and graphite is the key raw material in the battery anode with over 95% of EV battery anodes comprising graphite.

With the vision of entering into the GAM market due to the rapid development of electrical vehicles and energy storage industries, the Group has been exploring research and development of synthetic GAM and has produced trial lot of synthetic GAM for customer qualification in the PRC and European markets. After a long qualification process including laboratory tests and customer trials, the Group received purchase order from one of the leading European lithium-ion battery manufacturers and established a certain sales network in the European lithium-ion battery supply chain. In addition, the Group had invested its own fund in a PRC-based GAM company with a well-established customer portfolio and strong research and development capabilities.

Please refer to the section headed “Product Responsibility” for further details.



Goal 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

The global steel industry has maintained stable output and EAF steelmaking is one of the major modes of production in the crude steel manufacturing industry. In response to the growing requirements for improving the production efficiency of steel enterprises, the Group strives to further promote technological innovation and product upgrading to provide downstream applications with graphite electrodes of higher performance. The Group is committed to offering good prospect, decent working environment and competitive remuneration to retain talents and contribute to the growth of the graphite electrode industry and the economy.

In addition, the Group is committed to eliminating all forms of discrimination and prejudice against its employees and workers in the supply chain, operational communities and other stakeholders and protecting their legitimate rights and interests. In respect of the PRC Factory and the Italian Factory, we are required under the relevant laws and regulations to, among others, (i) have weekly rest days; (ii) ensure occupational safety and health; and (iii) adopt measures to prohibit the use of child labour.

Please refer to the sections headed “Employment”, “Labour Standards” and “Supply Chain Management” for further details.



Goal 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

The Group strives to promote environmentally sound technologies in its industrial processes and resource use efficiency. The Group's UHP graphite electrode technology for EAF plant has a significant environmental benefit given that there is a considerable portion of steelmaking plants in the world still using traditional blast furnaces, especially in the PRC.

There are common process technologies (such as graphitisation and baking) and common raw materials between graphite electrode production and graphite anode materials production. The Group had invested its own fund into a PRC-based GAM company with a well-established customer portfolio and strong research and development capabilities. Driven by the Group's prior continuous effort in research and development of GAM and decades of experience and technical know-how in the synthetic graphite industry within the course of the Group's business operation, the Group has also developed a well-positioned GAM product portfolio for EV and ESS applications tailored to customers' requirements.

Upholding the mission of driving the transformation of our downstream industries to be part of the sustainable value chain under the backdrop of dual carbon goals in the global market, we will continue to strive to realise and monetise our business strategies for the long-term interests of our stakeholders.

Please refer to the sections headed "Emissions", "Use of Resources" and "Product Responsibility" for further details.



Goal 11 Make cities and human settlements inclusive, safe, resilient and sustainable

The Group pays attention to the potential environmental impacts including, but not limited to, air pollutants emissions and waste management, brought by the Group's operations. The UHP graphite electrode that the Group produces can facilitate the EAF plant to recycle iron scrap. The Group's potential lithium-ion anode technology can speed up the utilisation of electric vehicles, which can greatly reduce carbon emissions and create a sustainable community.

With the Group's GAM project, the increasing global lithium-ion battery demand and the supporting policies from the locations it operates, along with the research and development efforts of the Group, we are committed to contributing to a green and sustainable economy in the long run.

Please refer to the sections headed "Emissions" and "Product Responsibility" for further details.



Goal 12 Ensure sustainable consumption and production patterns

The Group and its downstream customers are in business to build a green and low-carbon world. With our commitments to offer high quality UHP graphite electrode which serves as a key industrial material to EAF steel manufacturers and our continuous efforts to strive for a cleaner production process to reduce emissions and wastes as well as energy consumption, we believe, together with our downstream customers, we would be able to contribute to a green and sustainable economy in the long run.

Sustainable consumption and production are promoted within the Group's value chain. With the philosophy of reducing wastage, the Group is pioneering responsible production and facilitating the recycling of iron scrap with its main products.

Please refer to the sections headed "Emissions", "Use of Resources", "Supply Chain Management" and "Product Responsibility" for further details.



Goal 13 Take urgent action to combat climate change and its impacts

The global momentum towards achieving dual carbon goals, specifically carbon peaking before 2030 and carbon neutrality before 2050, has sparked transformation in the downstream steel manufacturing industry. This transformation involves a shift from blast furnace steelmaking to EAF steel manufacturing. The Group supplies UHP graphite electrodes to EAF plants in the steelmaking industry which can reduce carbon emissions compared to traditional blast furnace technology.

Considering the potential challenges posed by climate change, the Group strives to strengthen its resilience and adaptive capacity, as well as to capture the opportunities upon the transition to a low-carbon economy. The Group has set relevant decarbonization and carbon neutrality targets and implemented various initiatives to reach its commitments. Also, climate-related risks and opportunities are considered in the Group's operations.

Please refer to the sections headed "Emissions", "Use of Resources" and "Climate Change" for further details.

Environmental, Social and Governance Report

STAKEHOLDER ENGAGEMENT

Effective and ongoing stakeholder engagement is an integral part of the Group's business development and commitment to the environment and society. By understanding the Group's stakeholders' views, the Group can better align its business practices with their needs and expectations. This approach enables the Group to build trust and mutual beneficial relationships with its stakeholders and promote sustainability.

The Group has formulated its engagement approach based on the engagement objectives and stakeholders' level of interest and influence. As part of its business strategy, the Group engages with its stakeholders via different channels. The Group's stakeholders, their expectations and concerns and the communication channels are set out below:

Stakeholders	Expectations and concerns	Communication channels
Investors and shareholders	<ul style="list-style-type: none"> • Corporate governance and business ethics • Economic performance • Environmental governance and protection • Production management and product responsibility • Compliant operations 	<ul style="list-style-type: none"> • Annual general meetings • Financial reports • Announcements and circulars • Press releases • Company website • Phone/email inquiries
Customers	<ul style="list-style-type: none"> • Product and service quality • Environmental governance and protection • Corporate governance and business ethics • Compliant operations 	<ul style="list-style-type: none"> • Phone/email inquiries • Press releases • Company website • Financial reports
Employees	<ul style="list-style-type: none"> • Employees' health and safety • Development and training • Remuneration and benefits • Equal opportunities • Compliant operations 	<ul style="list-style-type: none"> • Training and employee activities • Performance reviews • Interviews/employee opinion boxes • Emails and meetings
Suppliers and business partners	<ul style="list-style-type: none"> • Fair and open procurement • Business ethics and reputation • Supplier management • Compliant operations 	<ul style="list-style-type: none"> • Procurement process • Site visits • Regular reviews on suppliers • Supplier management meetings • Phone/email inquiries
Regulatory bodies and government authorities	<ul style="list-style-type: none"> • Payment of tax • Compliant operations • Environmental governance and protection • Corporate governance and business ethics 	<ul style="list-style-type: none"> • Phone/email inquiries • Compliance reports • On-site inspections • Legal advisor
Media, community, non-governmental organisations	<ul style="list-style-type: none"> • Transparent information disclosure • Community involvement • Environmental governance and protection • Production management and product responsibility • Compliant operations 	<ul style="list-style-type: none"> • Press releases • Financial reports • Community activities • Media channels

MATERIALITY ASSESSMENT

In the hope of understanding the views and expectations of stakeholders on the Group's ESG performance effectively, the Group has adopted a systematic approach in conducting the annual materiality assessment. With reference to the Group's business development strategy and industry practices, the Group identified and determined a list of material ESG issues. The Group prepared a questionnaire based on the list and invited relevant stakeholder representatives to rate the potential material issues according to the level of importance to the stakeholders and to the Group. The results of the survey were analysed and a materiality matrix was developed. The materiality matrix and the identified material topics were reviewed and confirmed by the Board and the ESG Committee and disclosed in this ESG Report. The Group's materiality matrix is set out below:



Environmental, Social and Governance Report

Label	Material ESG topics
1	Greenhouse Gas (“GHG”) Emissions
2	Air Pollutants Emissions
3	Energy Management
4	Water Management
5	Waste Management
6	The Environment and Natural Resources
7	Responding Actions to Climate Change
8	Employment Practices
9	Workforce Health, Safety and Well-being
10	Development and Training
11	Prevention of Child and Forced Labour
12	Supply Chain Management
13	Product Responsibility
14	Anti-corruption
15	Community Investment

CONTACT THE GROUP

The Group welcomes stakeholders’ opinions and suggestions. You can provide valuable advice in respect of this ESG Report or the Group’s performance in sustainable development through the following means.

Post address: Room 2602, 26/F, China Resources Building, 26 Harbour Road, Wan Chai, Hong Kong.

A. ENVIRONMENTAL

Emissions

The Group recognises the importance of environmental protection as the starting point for sustainability. The Group is committed to reducing the environmental impact of its operations and promoting environmental protection within the Group and the supply chain. The Group has developed the Environmental, Social and Governance Policy (the “**ESG Policy**”) to strive to meet its environmental objectives in carbon footprint reduction, waste reduction and minimisation of emissions.

Both the PRC Factory and Italian Factory of the Group have ISO 14001 certified Environmental management systems. The Group has also implemented a Life Cycle Analysis compliant to type III Environmental Labelling — ISO 14025 and has also obtained the Environmental Product Declaration (the “**EPD**”) certification for Graphite Electrodes (according to the PCR Product Category Classification for Graphite Products) (stage 1).

The Group recognises that its operations have an impact on the environment and acknowledges that addressing environmental issues is a collective responsibility shared by every member of the community. The Group is committed to minimising the adverse impact that its operations may have on the environment. The Group continually improves its environmental management practices and measures to strive to reduce energy and other resource consumption, minimise waste and promote a recycling culture within the Group.

In FY2024, the Group was not aware of any material non-compliance with relevant laws and regulations relating to air and GHG emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. The relevant laws and regulations include, but are not limited to, the Legislative Decree No. 152/2006 of Italy for all environmental sectors, the Environmental Integrated Permission of Italy, the Environmental Protection Law of the People’s Republic of China, the Law of the People’s Republic of China on the Prevention and Control of Water Pollution, the Integrated Emission Standard of Air Pollutants, the Law of the People’s Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste.

Air Pollutants Emissions

The Group is a global manufacturer of UHP graphite electrodes with production facilities in Italy and the PRC. The Group’s air pollutants emissions are mainly generated from Group’s production process and other daily operations.

During the Reporting Period, the Group’s air pollutants emissions are set out below:

Indicators	Unit	FY2024	FY2023
Sulphur dioxides (SO _x)	metric tonnes (“ MT ”)	17.26	18.66
Nitrogen oxides (NO _x)	MT	22.85	25.67
Particulate matter (PM)	MT	3.55	4.72

The Group has installed a set of pollution control systems which includes a selective non-catalytic reduction system to control nitrogen oxides emissions, a dual-alkali flue gas desulphurisation system to control sulphur dioxide emissions and a wet electrostatic precipitator system to remove particulates from flue gases. In addition, the Group has installed a distributed control system and an online continuous environmental pollution monitoring system that would help the Group monitor the level of pollutant discharge.

Environmental, Social and Governance Report

GHG Emissions

The Group's GHG emissions are mainly attributable to direct (Scope 1) GHG emissions and energy indirect (Scope 2) GHG emissions. Direct (Scope 1) GHG emissions are from the Group's consumption of refrigerants, as well as diesel and natural gas for the use of vehicles and other machinery. Energy indirect (Scope 2) GHG emissions are from the Group's consumption of electricity and renewables purchased from external sources, and on-site renewables generated. During the Reporting Period, the Group's total GHG emissions were approximately 27,404.32 MT of carbon dioxide equivalent ("tCO₂e") (FY2023: approximately 46,391.08 MT). The decrease in GHG emissions was due to the decrease in production volume and the change in reporting scope, leading to a reduction in both direct (Scope 1) and energy indirect (Scope 2) GHG emissions.

The Group's GHG emissions are set out below:

Indicators ¹	Unit	FY2024	FY2023
Direct (Scope 1) GHG emissions	tCO ₂ e	9,230.82	13,838.46
Energy indirect (Scope 2) GHG emissions	tCO ₂ e	18,173.50	32,552.62
Total GHG emissions	tCO₂e	27,404.32	46,391.08
Total GHG emissions intensity from existing facilities²	tCO₂e/MT	2.06	3.01

Note(s):

1. GHG emissions data is presented in terms of tCO₂e and are based on, including but not limited to, "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standards" issued by the World Resources Institute and the World Business Council for Sustainable Development, the "Global Warming Potential Values" from the IPCC Sixth Assessment Report, 2021 (AR6), the "2023 National Electricity Carbon Footprint Factor" issued by the Ministry of Ecological Environment of the PRC and the "2024 National Inventory Document" issued by the United Nations.
2. During the Reporting Period, the Group's graphite electrode production volume (taking into account the production volume of connecting pins) was approximately 13,288 MT (FY2023: approximately 15,432 MT). This data is also used for calculating other intensity data.

Environmental, Social and Governance Report

The Group has set targets of reducing 10% of its total GHG emissions intensity from existing facilities from the financial year ended 31 December 2022 (“**FY2022**”) to the financial year ended 31 December 2027 (“**FY2027**”), and another 10% from FY2027 to the financial year ended 31 December 2032 (“**FY2032**”). In addition, the Group has set a target of achieving carbon neutral in the financial year ended 31 December 2050 (“**FY2050**”). During FY2024, the Group’s total GHG emissions intensity was decreased by approximately 32% mainly due to the decrease in production volume and the change in reporting scope. The Group strives to make progress towards the above targets in the future. In addition, the Group may consider and assess the feasibility for reporting other indirect GHG emissions (Scope 3) in its operation in the future.

The Group proactively implements environmentally friendly measures to strive to achieve its emissions reduction targets. The Group has taken the following steps:

- Continue to improve and upgrade the Group’s equipment to be more energy efficient and reduce the Group’s total energy consumption;
- Continue to use renewable energy source, such as installation of photovoltaic (“**PV**”) panels in the Group’s production plants. The Group has installed on the PV project for installing PV solar panels on the baking department roof of the Italian Factory, which will generate an estimated amount of electricity of over 1,500,000 kWh per year;
- Try to purchase electricity from renewable sources in the PRC by FY2050; and
- Consider buying carbon certificates in the open market to offset the Group’s emissions by FY2050.

Environmental, Social and Governance Report

Sewage Discharge

The Group acknowledges that facilities for the prevention and control of water pollution shall be designed, constructed and put to use simultaneously with the commencement of a construction project if there are any. The Group is also aware that enterprises that directly or indirectly discharge industrial wastewater into water bodies shall discharge wastewater or sewage only after obtaining a pollutant discharge permit according to the relevant provisions. The Group is committed to ensuring that the discharged water pollutants do not exceed the national or local standards for the discharge of water pollutants and the indices for control of the total discharge of major water pollutants. The sewage discharged by the Group will be discharged into the municipal sewage pipe network.

Waste Management

The Group has formulated the ESG Policy to ensure that all hazardous and non-hazardous wastes are properly and safely managed.

Hazardous Waste

The Group's hazardous waste mainly includes oil products and contaminated substances generated in the production process and other daily operations. During the Reporting Period, the Group's generation of hazardous waste was approximately 236.31 MT (FY2023: approximately 369.85 MT). The decrease in hazardous waste was due to the drop in production volume.

The Group's generation of hazardous waste is set out below:

Indicators	Unit	FY2024	FY2023
Total hazardous waste	MT	236.31	369.85
Total hazardous waste intensity from existing facilities	MT/MT	0.02	0.02

The Group has set a target of having zero non-compliance with laws and regulations relating to the generation and handling of hazardous waste. The Group has achieved its target in FY2024 and decided to continue to strive for zero non-compliance with laws and regulations relating to the generation and handling of hazardous waste in the next reporting period.

Environmental, Social and Governance Report

The Group has established guidelines in governing the management and disposal of hazardous waste. For any hazardous waste generated, it is stored in a temporary storage site which meets the requirements of anti-seepage, windproof and rainproof. In addition, an obvious sign of hazardous waste is set up to indicate the presence of hazardous waste. The Group has also engaged third party qualified chemical waste collectors to collect its chemical waste to comply with the relevant environmental laws and regulations.

Non-hazardous Waste

The Group's non-hazardous waste mainly includes steel waste, scrap materials, paper, waste from packaging of raw materials and miscellaneous solid waste generated in the production process and other daily operations. During the Reporting Period, the Group's generation of non-hazardous waste was approximately 1,967.10 MT (FY2023: approximately 2,003.24 MT). The decrease in non-hazardous waste contributed to the decreased production volume.

The Group's generation of non-hazardous waste is set out below:

Indicators	Unit	FY2024	FY2023
Total non-hazardous waste	MT	1,967.10	2,003.24
Total non-hazardous waste intensity from existing facilities	MT/MT	0.15	0.13

The Group has set a target of maintaining the FY2022 total non-hazardous waste intensity from existing facilities from FY2022 to FY2027. Despite the decrease in production volume, there is a slight increase in the Group's total non-hazardous waste intensity, and the Group strives to make progress towards its target in the future.

The Group proactively implements environmentally friendly measures to strive to achieve its waste reduction target. The Group has adopted the following waste reduction measures:

- Adopt good practices of inventory management to avoid overstocking and unnecessary use of materials;
- Uphold the principles of reducing, reusing, replacing and recycling; and re-use and recycle as much as possible the Group's materials;
- Deploy the technical team to closely monitor scrap rates at the Group's production facilities and strive to continuously enhance the Group's manufacturing process to improve production efficiency;
- Purchase high-quality materials that meet the requirements of the production facilities to improve material utilisation rate; and
- Replace and upgrade production equipment as needed to minimise waste generation.

Environmental, Social and Governance Report

Use of Resources

The Group has established the ESG Policy to manage the use of resources to uphold its commitment to achieve energy efficiency and optimise the use of other resources during its business operations.

Energy Management

While the Group consumes energy for its daily business operations, it is committed to reducing its energy consumption. Fossil fuels to power vehicles and other machinery, as well as electricity are the major sources of the Group's energy consumption. During FY2024, the Group's total energy consumption was approximately 97,236.01 MWh (FY2023: approximately 140,244.24 MWh). The decrease in energy consumption contributed to the decline in production volume and the change in reporting scope.

The Group's energy consumption is set out below:

Indicators	Unit	FY2024	FY2023
Direct energy consumption ^{1, 2}	MWh	43,773.25	68,291.23
Indirect energy consumption ³	MWh	53,462.76	71,953.01
Total energy consumption	MWh	97,236.01	140,244.24
Total energy consumption intensity from existing facilities	MWh/MT	7.32	9.09

Note(s):

- 1 Direct energy consumption represents diesel and natural gas consumed by the Group for the use of vehicles and other machinery.
- 2 The unit conversion calculation is based on the conversion factors in "Energy Statistics Manual" issued by the International Energy Agency (the "IEA").
- 3 Indirect energy consumption represents electricity purchased from external sources and consumed by the Group.

The Group has set a target of maintaining the FY2022 total energy consumption intensity from existing facilities from FY2022 to FY2027. During FY2024, the decrease in production volume led to a reduction in both direct energy consumption and total energy consumption. The Group's total energy consumption intensity decreased by approximately 19% mainly due to the decrease in production volume. The Group strives to make progress towards the above targets in the future.

The Group proactively implements energy-saving measures to strive to achieve its energy use efficiency target. The Group has previously adopted the following energy-saving measures:

- Streamline the Group's workflow to reduce unnecessary energy waste;
- Continue to improve and upgrade the Group's equipment to be more energy efficient;
- Identify and apply feasible clean technologies and high energy efficiency equipment in the Group's production operations;
- Modify the baking furnace at the Group's production facilities, as needed, to increase capacity and enhance production efficiency;

Environmental, Social and Governance Report

- Install larger rectifier system to increase the Group's graphitizing capacity and efficiency as more pieces could be fired per run; and
- Always schedule production in a way that optimises the utilisation of equipment.

Moreover, the Group participated in Hong Kong's Earth Hour 2024 organised by WWF and received the honour of "Certificate of Appreciation" for our efforts in raising awareness about energy consumption.

Water Management

The Group mainly consumes water for its manufacturing operations and domestic use in offices and dormitory areas. During the Reporting Period, the Group's total water consumption was approximately 802,864.00 m³ (FY2023: approximately 1,463,437.00 m³). The decrease in water consumption was due to a decline in production volume and the increase in the amount of water recycling as optimised by the modified water management system at the production plant in Italy.

The Group's water consumption is set out below:

Indicators	Unit	FY2024	FY2023
Total water consumption	m³	802,864.00	1,463,437.00
Total water consumption intensity from existing facilities	m³/MT	60.42	94.83

The Group has set a target of maintaining the FY2022 total water consumption intensity from existing facilities from FY2022 to FY2027. During FY2024, the Group's total water consumption intensity was decreased by approximately 36% due to the decrease in production volume and the increase in the amount of water recycling as optimised by the modified water management system at the production plant in Italy. The Group strives to make progress towards its target in the future.

The Group proactively implements water-saving measures to strive to achieve its water efficiency target. For example, the Group has reminded employees of the importance of water conservation. Also, all employees are required to turn off water faucets when they are not in use. At the Group's production facilities, the Group strives to purchase or upgrade equipment which improves water-efficiency, reduces water usage and complies with the applicable standards according to the national and local laws and regulations. All water facilities and equipment are well-maintained and regular inspections are conducted to prevent water leakage. The Group encourages all employees to develop the habit of conserving water consciously.

The Group attaches great importance to water resource conservation. With the water supply from municipal governments, the Group has no difficulty in obtaining water resources.

Use of Packaging Materials

The packaging materials mainly include wooden packaging, metal clamps and plastic caps. During the Reporting Period, the Group's total packaging materials consumption was approximately 161.45 MT (FY2023: 197.40 MT). The decrease in packaging material consumption contributed to reduction in production volume.

Environmental, Social and Governance Report

The Group's use of packaging materials for finished products is set out below:

Indicators	Unit	FY2024	FY2023
Wooden packaging	MT	105.70	173.60
Metal clamps	MT	52.04	18.85
Plastic caps	MT	3.71	4.95
Total packaging materials used	MT	161.45	197.40
Total packaging materials intensity from existing facilities	MT/MT	0.01	0.01

The Group strives to improve its sustainability practice, plan the use of packaging materials properly and avoid overpackaging, so as to optimise the use of resources, while effectively cutting down the cost of production and packaging materials.

The Environment and Natural Resources

The Group has attached great importance to the potential destructive influence of its operations on the environment and aims to conduct activities in an environmentally responsible and sustainable manner. The Group has established the ESG Policy to improve management in environmental and resource aspects continuously, so as to lower the environmental impacts of its activities. For instances, there are industrial mufflers to assure noise generated during the Group's manufacturing process does not exceed the approved level in order to protect wildlife; the dust collectors and electrostatic precipitators have been used to filter small particles in the dust and treat pitch fumes before discharge respectively, which can lessen air pollution. In the future, the Group will continue its commitment to becoming more environmentally friendly and make effort to accomplish its duties as a member of the community through innovation.

Environmental Awareness

Apart from strictly requiring employees to put the environmental protection measures formulated by the Group into practice, the Group needs to proactively raise environmental awareness among its employees. They are frequently reminded to recycle waste, conserve water and energy to save natural resources in a long-term basis. There are also environmental protection campaigns for employees to participate, as well as internal communication channels for them to exchange their ideas regarding environmental issues. Furthermore, both the PRC Factory and Italian Factory have ISO 14001 certified Environmental management systems and the Group adopts green practices when purchasing and using materials in its production, which is required to fulfil all applicable environmental protection and social responsibility requirement. The Group will continue to review and reduce the impact of its daily operations on the environment.

Climate Change

Responding Actions to Climate Change

Climate change creates extensive risks and challenges to the global economy, and such hazards may adversely impact the Group's business. With the expanding threat of climate change and the related physical change, the alteration in market perception and the public's preference for more environmentally friendly products and services are becoming increasingly prominent.

Governance

The ESG Committee facilitates the Board's oversight of ESG-related issues, including but not limited to climate-related risk and opportunities and has the responsibility for collecting and analysing ESG data, monitoring and evaluating the Group's ESG performance. The ESG Committee arranges meetings at least once per year to discuss and review the Group's ESG-related issues and reports the results to the Board subsequently. An ESG working group has been set up at the management level to ensure that appropriate and effective ESG risk management is in place. It also assists the Group's risk management, which is designed to meet the Group's specific business needs and to minimise its risk exposure. It has taken climate-related risk and opportunities into consideration during the Group's daily operation. The ESG working group meets and reviews ESG goals at least once per year and reviews the Group's progress in achieving the goals using timely data reports to check whether there are areas for improvement.

Strategy

Physical Risks

For physical risks, extreme weather has become more frequent and severe due to climate change. This might lead to flooding and damage the Group's properties. In addition, extreme weather events may directly or indirectly affect entities within the supply chain network such as physical infrastructure and assets, natural resources and workforce. Climate change may impact various entities and functional levels in the Group's supply chain, and its ripple effect can lead to risk propagation along the supply chain network. In addition, the Group considers that there may be possibility of blackouts if there is any heavy load on the electricity grid caused by climate change, which may lead to unpredictable disturbances to the Group's operations. Therefore, climate change can cause a reduction in the Group's production and thus hamper the Group's operations.

The Group has taken different actions to manage the abovementioned acute physical risks. For example, the Group has developed a set of arrangements for extreme weather and relevant extreme weather contingency plans, including but not limited to personnel allocation, emergency responses arrangements, so that loss can be reduced or avoided when extreme weather affects the Group's operating sites. Also, the Group will diversify its suppliers to mitigate the impact of climate change on its supply chain network. The Group has set up its production facilities in locations that are considered to be relatively less vulnerable to hurricanes and flooding. When carrying out future new plant establishments or mergers and acquisitions, the ESG Committee will factor in climate risks and locations chosen. It is believed that the potential financial impacts can be minimised with adequate preparations for extreme weather events.

Transition Risks

For transition risks, the Group may bear higher operating costs due to the potential regulatory change related to carbon reduction requirements, such as the new climate-related disclosure requirements by the Stock Exchange, and the pledge to achieve carbon neutrality before 2050 by the Hong Kong government. To manage the legal risks that may be brought along by the climate crisis, the Group has taken an array of actions. First, the Group constantly monitors any changes in laws or regulations. Second, the Group will seek compliance consulting services where appropriate to reduce legal risks. Third, the Group has taken comprehensive measures to protect the environment, including measures aimed at reducing GHG emissions, to strive to raise its adaptability to regulatory changes.

Environmental, Social and Governance Report

Under the threat of climate change, the public is having higher environmental awareness over time. As a result, customers are shifting their preference towards environmentally friendly products. In the future, with the implementation of policies regarding carbon neutrality, the proportion of EAF steel in the total crude steel is expected to rise, stimulating the demand for graphite electrodes. Therefore, the positioning of the Group's product may be a positive factor for the Group to withstand market risks associated with climate change. The Group will continue to assess the effectiveness of its actions on climate change and enhance its resilience against climate-related issues.

Risk Management

In response to the community's gradual concern on climate changes and associated issues, the Group has formulated the Climate Change Policy to make their impact less severe. The policy indicates the Group's management approach on climate-related issues and commitment to the mitigation, adaptation and resilience towards climate change across its operations and along the value chain.

Metrics and Targets

In order to keep track of the Group's performance, we have kept track of our GHG emissions, implementing related initiatives to minimise our emissions. Relevant decarbonisation and carbon neutrality targets have been stated in the section "Emissions".

B. SOCIAL

Employment

Employment Practices

The Group considers its employees to be its most valuable asset and takes effort to recruit and retain the best talent for its sustainable growth. The Group has established the Global Employee Handbook to ensure that employees are treated fairly and equally in the long-term basis regarding recruitment, training and development, appraisal, promotions, remuneration and benefits. Regular discussion with employees on how they meet their targets and refresher training are also provided. In FY2024, the Group did not experience any work suspension or interruptions towards its operations as a result of labour strikes or disputes, nor did the Group face any challenges in the recruitment process or retention of skilled employees.

In FY2024, the Group was not aware of any material non-compliance with the relevant laws and regulations relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, antidiscrimination, and other benefits and welfare. The relevant laws and regulations include, but are not limited to, the Employment Ordinance of Hong Kong, the Law No. 300/1970 of Italy, the Labour Relations Law (Law No. 7/2008) of Macau, the Labour Law of the People's Republic of China, the Labour Relation Act of South Africa, the Swiss Labour Act of Switzerland and the Equal Employment Opportunity Laws of the United States.

Environmental, Social and Governance Report

As at 31 December 2024, the Group had a total of 188 employees (FY2023: 211 employees). The employees' composition by gender, employment type, age group and geographical region is set out below:

Indicators	Unit	As at	
		31 December 2024	31 December 2023
Total number of employees	number	188	211
By gender			
Female	number	35	49
Male	number	153	162
By employment type			
Full-time	number	187	207
Part-time	number	1	4
By age group			
Under 30 years old	number	9	13
30–50 years old	number	121	145
Over 50 years old	number	58	53
By geographical region			
Italy	number	79	80
The PRC	number	77	92
The United States	number	9	16
Hong Kong, China	number	17	17
Macau, China	number	4	4
South Africa and Switzerland	number	2	2

Recruitment, Compensation, Promotion and Dismissal

The Group holds that each employee has a right to receive fair, respectful and dignified treatment. The Group's key recruitment criteria comprise educational backgrounds, technical qualifications, characters, corresponding work experiences, and adoption to the Group's corporate values. The Group recruits employees who possess the potential to become long-term management members in addition to senior managers with rich experience in different aspects, including but not limited to sales and marketing, production and technical skills, to optimise its products by fulfilling its customers' requirements. Regular discussions with employees on how they are meeting their goals and refresher training in technical knowledge are held after recruitment.

In order to attract and retain talent, the Group regularly refers to the social security systems and related laws and regulations of different countries and regions to ensure that it can provide welfare packages that meet the needs of its employees. All employees are entitled to paid vacation such as statutory holidays, annual leave, sick leave, maternal leave and bereavement leave.

Environmental, Social and Governance Report

Moreover, the Group is dedicated to offering a competitive remuneration package to all eligible full-time and part-time employees. The Group's remuneration package generally comprises basic salaries, bonuses, and if applicable, allowances. The Group will review and evaluate its employees' performance including achievement, qualifications, abilities and suitability once a year and thus make any further salary and bonus adjustments and promotions correspondingly. To boost the performance of the Group's employees, especially in the department of production and sales and marketing, there are annual performance goals set for them and those accomplishing the targets are awarded with monetary rewards.

Either employees or the Group can propose to terminate the labour contract in accordance with the provisions of the labour contract and the specific notice period. The Human Resources Department conducts voluntary exit interviews with resigning employees to understand their reasons for resigning.

In FY2024, the Group recorded a turnover rate of employees of approximately 13.83% (FY2023: approximately 10.43%). The turnover rate of employees by gender, age group and geographical region is set out below:

Indicators	Unit	FY2024	FY2023
Turnover rate of employees¹	%	13.83	10.43
By gender²			
Female	%	14.29	10.20
Male	%	13.73	10.49
By age group²			
Under 30 years old	%	44.44	15.38
30–50 years old	%	11.57	10.34
Over 50 years old	%	13.79	9.43
By geographical region²			
Italy	%	7.59	8.75
The PRC	%	10.39	6.52
The United States	%	88.89	–
Hong Kong, China	%	23.53	41.18
Macau, China	%	–	50.00
South Africa and Switzerland	%	–	–

Note(s):

1. The calculation method of the overall turnover rate: (the total number of departures in the year ÷ the total number of employees at the end of the year) × 100%.
2. The calculation method of the employee turnover rate by category: (the number of departures in the category in the year ÷ the total number of employees in the category at the end of the year) × 100%.

Equal Opportunity, Diversity and Anti-discrimination

Creating a working environment without discrimination and harassment is the responsibility of every employee and one of the major objectives of the Group. The Group recognises the value of diversity. The Group strives to provide equal opportunities in all aspects of employment for all employees and candidates, including recruitment, hiring, job assignments, promotions, working conditions, scheduling, benefits, salary, discipline, termination, and social, educational and recreational programmes. All employees are assessed based on their ability, job performance and contribution. The Group does not tolerate any forms of discrimination within its operations with regard to gender, race, nationality, marital status, disability, religious belief, sexual orientation or any other characteristics as recognised by relevant anti-discriminatory regulations. The Group also forbids discrimination or harassment in the workplace, whether committed by or against employees and workers in the supply chain, operational communities and other stakeholders, in order to protect their legitimate rights and interests. The Group will examine any claims of discrimination or harassment promptly and strive to eliminate improper behaviour.

The Group is committed to complying with all applicable laws providing equal employment opportunities. This commitment applies to all individuals involved in the Group's operations. The Group will make reasonable accommodations for the known physical or mental limitations of an otherwise qualified individual with a disability who is an applicant or an employee, unless undue hardship will result.

Workforce Health, Safety and Well-being

The Group is committed to achieving excellence in occupational health and safety management in a dynamic process and continually strives to improve its performance. It is the foundation for continuous improvement in the Group's facilities, products and services. The Group has developed and adopted policies including the Regulations on Safe Operations, the Safe Production Responsibility System and the Safety and Health Policy to provide a safe and healthy working environment for all employees with zero tolerance for unsafe acts or conditions.

In FY2024, the Group was not aware of any material non-compliance with the relevant laws and regulations relating to providing a safe working environment and protecting employees from occupational hazards. The relevant laws and regulations include, but are not limited to, the Employment Ordinance of Hong Kong, the Legislative Decree No. 81/2008 of Italy, the General Regulation on Health and Safety in a Non-industrial Work Environment (Decree-Law 37/89/M) of Macau, the Production Safety Law of the People's Republic of China, the Occupational Health and Safety Act of South Africa, the Swiss Labor Act of Switzerland and the Occupational Health and Safety Act of the United States.

The Group follows the directives of ISO 45001, and both the PRC Factory and the Italian Factory have ISO 45001 certified occupational health and safety management systems that impose a full compliance towards laws and regulations, with an aim to provide and maintain a safe and healthy working environment and work systems for its staff.

Environmental, Social and Governance Report

The Group complies with all health and safety laws as mandated by federal and state agencies applicable to its business. Employees have the duty to comply with the health and safety standards that are established by the Group for the protection of employees and to work as safely as possible. Workers are provided with work safety training where appropriate. There was 0 work-related fatality (rate of work-related fatalities: 0%) that occurred in FY2024, while one work-related fatality (rate of work-related fatalities: 0.47%) occurred in FY2023 and there was no work-related fatality (rate of work-related fatalities: 0%) in FY2022. During FY2024, the lost days due to work injury was 90 days (FY2023: 1 day). Employees are required to report to their supervisors for any condition an employee observes to be dangerous or potentially dangerous.

Measures on Occupational Health and Safety

The Group provides its employees with safe working environment, and strives to protect them from potential health hazards and injuries. Employees are required to familiarise themselves with local safety requirements including wearing adequate personal protective equipment when required and reporting unsafe acts, conditions and safety risks. To raise employees' awareness of safety, mandatory training and observation programmes such as safety training, fire drills, first-aid certificate courses are provided for them to take part in. The management is responsible for facilitating risk assessments and developing protective measures in cooperations with employees. The Group also provides industrial accident insurance for its employees as a protection measure.

The Human Resources Department is responsible for monitoring the effectiveness of the measures relating to occupational safety and health matters of the Group. All employees of the Group may, from time to time, raise any occupational health and safety related issues through various channels.

Development and Training

The Group adopts a philosophy of continuous improvement and endeavours to keep its technical professionals abreast of the latest technological developments. To always stay at the technological forefront in an ever-changing market, the Group encourages employees to continuously improve and further develop their skill sets.

Training Programmes

To ensure that the Group's employees are updated on the latest developments in the industry where the Group operates, training programmes on technical knowledge are provided as and when required.

The Group has established the Training Policy that encourages employees to constantly improve their skills and abilities and develop competencies through the taking up of both internal and external training programmes. Training needs for improvement in existing skills will be regularly identified through performance appraisals, and the Group will provide appropriate training and development opportunities to assist employees in meeting their training objectives and achieving business goals. The Group also applies the Global Employee Handbook, which has been set up as guideline to ensure that all employees are treated equally in various opportunities, including training and development.

Environmental, Social and Governance Report

The percentage of employees trained in Italy and the PRC by gender and employee category is set out below:

Indicators	Unit	FY2024	FY2023
By gender¹			
Percentage of female employees trained	%	13.07	18.24
Percentage of male employees trained	%	86.93	81.76
By employee category¹			
Percentage of senior management trained	%	3.27	1.89
Percentage of middle management trained	%	13.73	18.24
Percentage of general employees trained	%	83.01	79.87

Note(s):

1. The calculation method of the percentage of employees trained (in Italy and the PRC) by category: (the number of employees trained (in Italy and the PRC) in the category in the year ÷ the number of employees (in Italy and the PRC) being trained in the year) × 100%.

The average training hours per employee in Italy and the PRC by gender and employee category are set out below:

Indicators	Unit	FY2024	FY2023
By gender¹			
Average training hours per female employee	hours	18.12	14.00
Average training hours per male employee	hours	17.17	15.44
By employee category¹			
Average training hours per senior management	hours	7.33	3.14
Average training hours per middle management	hours	15.07	13.42
Average training hours per general employee	hours	18.12	16.22

Note(s):

1. The calculation method of the average training hours of employees (in Italy and the PRC) by category in the year: the training hours of employees (in Italy and the PRC) in the category in the year ÷ the number of employees (in Italy and the PRC) in the category at the end of the year.

Environmental, Social and Governance Report

Labour Standards

The Group strictly prohibits human rights abuses over the entire business operations. In FY2024, the Group was not aware of any material non-compliance with the relevant laws and regulations relating to the prevention of child and forced labour. The relevant laws and regulations include, but are not limited to, the Employment Ordinance of Hong Kong, the Law No. 300/1970 of Italy, the List of Jobs Restrained to Minors (Chief Executive Order No. 343/2008) of Macau, the Provisions on the Prohibition of the Use of Child Labour of the PRC, the Basic Condition of Employment Act of South Africa, the Swiss Labor Act of Switzerland and the Fair Labor Standards Act of the United States.

Prevention of Child and Forced Labour

The Group has detailed all recruitment procedures and requirements in the Global Employee Handbook for preventing the recruitment of child labour and forced labour. To avoid child labour, the Human Resources Department is responsible for checking the applicants' identification documents and other supporting documents such as academic certificates and reference letters from previous employers. All of the Group's employees must have reached the statutory age and possess identification documents before the commencement of work. To avoid forced labour, the Group encourages employees to complete their work duties within the working hours and discourages overtime work unless it is necessary. The Group also prohibits any punitive measures, management methods, and behaviours including, but not limited to, verbal abuse, physical punishment, violence, mental oppression, or sexual harassment against its employees for any reason.

In case child labour or forced labour is discovered as a result of a breach of the recruitment procedures and requirements, the Group will immediately stop the work of the child labour or forced labour and provide the necessary assistance for the affected individuals.

Supply Chain Management

Building trust in the relationship between the Group and its suppliers helps the Group manage its potential environmental and social risk while enhancing the efficiency of its operations. The Group mainly sources its graphite electrodes and raw materials, such as needle coke and binder pitch, from suppliers located in the Czech Republic, Germany, Japan, the PRC, Italy, Spain, and the United Kingdom. In FY2024, the Group implemented its procedures to evaluate suppliers' qualifications on 173 key suppliers (FY2023: 178). In FY2024, the Group had a total of 277 suppliers (FY2022: 283 suppliers). The Group's suppliers by geographical region are set out below:

Indicators	Unit	FY2024	FY2023
Total number of suppliers	number	277	283
By geographical region			
Italy	number	142	143
The PRC	number	126	126
Germany	number	4	6
Others (including the Czech Republic, Japan, the United Kingdom and Spain)	number	5	8

Procurement Mechanism

To ensure the quality of the Group's raw materials, the Group only engages suppliers which are on its qualified suppliers list. Selection of qualified suppliers, especially needle coke suppliers, is a lengthy process. The Group will first conduct in-house tests of the chemical and physical properties of the raw materials. Upon passing such test, the Group will manufacture graphite electrodes with these materials and proceed with the qualification tests where the Group will test the chemical and physical properties of these graphite electrodes and assess their performance when they are installed and utilised in the customers' furnaces. The suppliers whose needle coke and binder pitch pass all the above tests and procedures will be included in the Group's list of qualified suppliers.

The Group reviews the qualified suppliers list on an annual basis with a view to getting the best commercial terms on its future orders. When the Group purchases raw materials, it selects the most suitable suppliers only from its list of qualified suppliers based on factors including the grade and quality of needle coke and binder pitch required, the price of needle coke and binder pitch offered, their logistic arrangements and payment terms offered.

Environmental and Social Risk Management

The Group strives to minimise the environmental and social risks along its supply chain. The Group performs close monitoring on the suppliers' or subcontractors' business practices. The Group reviews its supply chain periodically with regard to the suppliers' performance and environmental and social standards. While the Group continuously evaluates the environmental and social performance of its suppliers, it may terminate contracts if the suppliers refuse to comply with the relevant environmental and social laws and regulations.

Promoting Environmentally Preferable Products and Services

The Group gives priority to suppliers who have established a sound environmental management system such as suppliers who have obtained environmental certificates such as the ISO 14000 certification. While the Group continuously evaluates the environmental performance of its suppliers, it may terminate contracts if the suppliers refuse to address situations that seriously harm the environment.

Product Responsibility

Since the Group is a manufacturer of UHP graphite electrodes for global markets, it believes that the quality, consistency and reliability of its products are essential to maintain customer loyalty and to uphold its reputation which contributes to its success and business expansion.

In FY2024, the Group was not aware of any material non-compliance with relevant laws and regulations relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of rectification. The relevant laws and regulations include, but are not limited to, the General Product Safety Directive of the European Union, the Trade Descriptions Ordinance of Hong Kong, the Personal Data (Privacy) Ordinance of Hong Kong, the Consumer Protection Law (Law No. 12/88/M) of Macau, the Law of the People's Republic of China on the Protection of Consumer Rights and Interests, the Protection of Personal Information Act of South Africa, the Swiss Civil Code of Switzerland and the Consumer Protection Safety Act of the United States.

In 2024, the Group was awarded the "Aspiring Excellence Award" (《年度最具潛力獎》) at 2024 Greater Bay Area Listed Companies ESG100 Green Advancement Awards organised by The Greater Bay Area Association of Listed Companies.

Environmental, Social and Governance Report

Quality Assurance

The Group takes pride in the quality of its products and therefore it puts strong emphasis on it. The Group believes that stringent quality control over its products is crucial to its continued success. The Group has set up Quality Control Policy to govern quality control of incoming material control, production steps and finished product. Both the PRC Factory and the Italian Factory have ISO 9001 certified quality management systems to manage all production steps including acceptance and rejection of work in progress.

The Group's quality control team is responsible for overseeing the quality control of the Group's raw materials, finished products and the manufacturing processes. Besides, stringent quality control systems and procedures are implemented, including the following:

- For the purchase of raw materials, the Group sources its raw materials from qualified suppliers. Incoming raw materials are subject to detailed physical inspection according to the Group's strict specifications on a random sampling basis before they are warehoused or enter the Group's production process. The Group requires its suppliers to issue quality certificates for all raw materials shipped to the Group's manufacturing plants;
- For finished products, quality control on finished products ensures that outgoing products comply with the customers' requirements and the industry standards. Apart from visual checking, the Group's finished products are consistently checked for properties such as density, electrical resistivity, flexural strength, stiffness and coefficient of thermal expansion; and
- For the manufacturing process, the Group has established and maintained a documented quality management system accredited with the ISO 9001:2015 certification. The Group's manufacturing and process control consists of a multi-point check of process variables from the beginning to the end of the Group's manufacturing process. The Group's quality control personnel sample-tests the work-in-progress in the major steps of the manufacturing process using various testing instruments. The whole manufacturing process is closely monitored, and the performance data is properly logged so that the reasons for any defect can be traced. When an issue with the Group's product is reported to the Group, the Group will check the performance data logs to trace the defective products. Where necessary, the defective products will be recalled. The Group strives to consistently provide products that meet customers' specifications and enhance customer satisfaction through effective application of the system, which enables the Group to retain existing customers as well as to attract new customers.

Each of the above processes is clearly governed by detailed internal procedures and guidelines. Regular internal testing is conducted on the Group's products to monitor their scrap rates. In FY2024, there were nil (FY2023: nil) products recalled for safety and health reasons. In FY2024, the Group received 10 complaints (FY2023: 12 complaints) relating to unanticipated abnormalities of the Group's products. All complaints have been resolved by relevant departments and reviewed thoroughly. If there are any issues regarding the quality of the Group's products, the Group's technical team and technical experts will assist customers to resolve the issues, which may include replacing the products.

The Group has implemented maintenance programmes in all its production facilities, including preventive regular maintenance according to pre-determined schedules for early detection of wear and tear, which minimises downtime due to unplanned interruptions of operations.

Privacy and Data Security

Employees are required to follow and comply with the requirements on consumer information protection in the Group's Global Employee Handbook.

Employees are prohibited from copying, transferring and disclosing confidential information, such as clients' information and intellectual property information without prior consent from the management or customers.

Employees are restricted from disclosing sensitive information to external parties. In case of breaching confidentiality, the Group will take corrective actions promptly and the employees involved may be subject to warnings or dismissal.

The Group has separated customer data from other ordinary information to protect their privacy. Meanwhile, the Group regulates that only authorised personnel can access the personal data collected from the Group's customers. The management team regularly reviews the effectiveness of the requirements on consumer information protection stipulated in the Group's Global Employee Handbook to meet the Group's privacy and data protection obligations.

Intellectual Property Rights

To protect the Group's intellectual property rights, the Group has registered or made applications to register its patents, copyrights, trademarks and domain names in different jurisdictions. The Group has registered relevant trademarks, patents and domain names which are material in relation to the Group's business. Despite these, litigation may be necessary to protect the Group's intellectual property rights in certain circumstances. The Group will continue to monitor to ensure that its intellectual property rights are not being infringed upon, and it does not infringe others' intellectual property rights.

Advertising and Labelling

The Group's global sales and marketing department is responsible for the Group's sales and marketing activities and is led by the Group's management. The Group's management is responsible for formulating the overall sales strategies, collecting and analysing market data, negotiating and management of the Group's marketing activities and determining the price of products. In terms of the advertisement for products and services, the Group strictly regulates and monitors the promotion activities of its products and services to ensure that they comply with advertising and labelling related laws and regulations. Such marketing and promotion must accurately reflect the quality of the Group's products and performance of the Group's services.

The Group has also implemented a Life Cycle Analysis compliant to type III Environmental Labelling — ISO 14025 and has also obtained the EPD certification for Graphite Electrodes (according to the PCR Product Category Classification for Graphite Products) (stage 1).

Anti-corruption

In order to earn the trust of customers, authorities, shareholders and society, the Group is dependent upon professionalism, expertise and high ethical standards in all aspects of the Group's work. The Group supports a culture of integrity, ethical conduct, fairness, honesty and openness when doing business, and adopts a zero-tolerance attitude towards any bribery, fraud and money laundering. The Group is committed to ensuring that no bribes, kickbacks or similar gifts, payments or advantages are solicited from or given or offered to any person, for any purposes. Thus, the Group has set up guidelines on anti-corruption for officials, Directors, executives, employees and agents to ensure compliance with anti-corruption laws of the countries in which it operates, as well as with the Group's values and principles.

In FY2024, the Group was not aware of any material non-compliance with the relevant laws and regulations relating to bribery, extortion, fraud and money laundering. The relevant laws and regulations include, but are not limited to, the Additional Protocol to the Criminal Law Convention on Corruption (ETS 191) of the European Union, the Prevention of Bribery Ordinance of Hong Kong, the Anti-Money Laundering and Counter-Terrorist Financing Ordinance of Hong Kong, the Prevention and Suppression of Bribery in the Private Sector (Law No. 19/2009) of Macau, the Anti-Money Laundering Law of the People's Republic of China, the Prevention and Combating of Corrupt Activities Act of South Africa, the Swiss Criminal Code of Switzerland and the Foreign Corrupt Practices Act of the United States. During the Reporting Period, there was no concluded legal cases (FY2023: nil) regarding corrupt practices brought against the Group or its employees.

Preventive Measures

The Group provides anti-corruption training, which covers legal knowledge on anti-corruption and integrity behaviour in the workplace, to the Group's employees and Directors at least once every year. Anti-corruption training can help cultivate employees' awareness of anti-corruption and a high standard of professional conduct to comply with the relevant laws and regulations. During the Reporting Period, reading materials related to anti-corruption and whistleblowing are circulated to the Directors and employees, who received approximately 82 hours of anti-corruption training in total.

Whistle-blowing Procedures

The Group has set up guidelines on whistle-blowing procedures to enable all individuals and stakeholders to voice concerns in a responsible and effective manner in situations they believe showing irregularities, misconduct or malpractice. The Group's management would investigate every single possible misconduct case and carry out follow-up actions if necessary. For individuals being ascertained to be involved in misconduct, depending on the seriousness, they may face termination of employment or be reported to local legal authorities. The use and effectiveness of the whistle-blowing procedures will be monitored and reviewed regularly by the relevant personnel.

Community Investment

The Group is committed to emboldening and supporting the public by various means of social participation and contribution as part of its community investment. Therefore, the Group has established the Corporate Social Responsibility Policy to encourage its employees to engage in community services and voluntary activities. To fulfil the Group's corporate social responsibility, it focuses on areas including volunteerism, poverty alleviation and infrastructure development. In FY2024, the Group donated RMB57,000 to different organizations to support the development of local communities.

Environmental, Social and Governance Report

THE ESG REPORTING GUIDE CONTENT INDEX OF THE STOCK EXCHANGE (1)

Mandatory Disclosure Requirements	Sections
Governance Structure	BOARD STATEMENT; GOVERNANCE FOR SUSTAINABILITY
Reporting Principles	ABOUT THIS REPORT — Reporting Framework
Reporting Boundary	ABOUT THIS REPORT — Reporting Scope

THE ESG REPORTING GUIDE CONTENT INDEX OF THE STOCK EXCHANGE (2)

Subject Areas, Aspects, General Disclosures and KPIs	Description	Sections/Declarations
Aspect A1: Emissions		
General Disclosure	<p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.</p> <p>Note: Air emissions include NOx, SO₂, and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.</p>	Emissions — Air Pollutants Emissions
KPI A1.1	The types of emissions and respective emissions data.	Emissions — Air Pollutants Emissions
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Emissions — GHG Emissions
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Emissions — Waste Management — Hazardous Waste
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Emissions — Waste Management — Nonhazardous Waste
KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	Emissions — GHG Emissions
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Emissions — Waste Management

Environmental, Social and Governance Report

Subject Areas, Aspects, General Disclosures and KPIs	Description	Sections/Declarations
Aspect A2: Use of Resources		
General Disclosure	<p>Policies on the efficient use of resources, including energy, water and other raw materials.</p> <p>Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.</p>	Use of Resources
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Use of Resources — Energy Management
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Use of Resources — Water Management
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Use of Resources — Energy Management
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Use of Resources — Water Management
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Use of Resources — Use of Packaging Materials
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	The Environment and Natural Resources
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	The Environment and Natural Resources — Environmental Awareness
Aspect A4: Climate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Climate Change
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Climate Change — Responding Actions to Climate Change — Physical Risks; Climate Change — Responding Actions to Climate Change — Transition Risks

Environmental, Social and Governance Report

Subject Areas, Aspects, General Disclosures and KPIs	Description	Sections/Declarations
Aspect B1: Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Employment — Employment Practices
KPI B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	Employment — Employment Practices
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Employment — Recruitment, Compensation, Promotion and Dismissal
Aspect B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Workforce Health, Safety and Well-being
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Workforce Health, Safety and Well-being
KPI B2.2	Lost days due to work injury.	Workforce Health, Safety and Well-being
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Workforce Health, Safety and Well-being — Measures on Occupational Health and Safety

Environmental, Social and Governance Report

Subject Areas, Aspects, General Disclosures and KPIs	Description	Sections/Declarations
Aspect B3: Development and Training		
General Disclosure	<p>Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.</p> <p>Note: Training refers to vocational training. It may include internal and external courses paid by the employer.</p>	Development and Training
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Development and Training — Training Programmes
KPI B3.2	The average training hours completed per employee by gender and employee category.	Development and Training — Training Programmes
Aspect B4: Labour Standards		
General Disclosure	<p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.</p>	Labour Standards
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Labour Standards — Prevention of Child and Forced Labour
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Labour Standards — Prevention of Child and Forced Labour

Environmental, Social and Governance Report

Subject Areas, Aspects, General Disclosures and KPIs	Description	Sections/Declarations
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Supply Chain Management
KPI B5.1	Number of suppliers by geographical region.	Supply Chain Management
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Supply Chain Management; Supply Chain Management — Procurement Mechanism
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Supply Chain Management — Environmental and Social Risk Management
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Supply Chain Management — Promoting Environmentally Preferable Products and Services
Aspect B6: Product Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Product Responsibility
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Product Responsibility — Quality Assurance
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Product Responsibility — Quality Assurance
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Product Responsibility — Intellectual Property Rights
KPI B6.4	Description of quality assurance process and recall procedures.	Product Responsibility — Quality Assurance
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Product Responsibility — Privacy and Data Security

Environmental, Social and Governance Report

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Aspect B7: Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Anti-corruption
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Anti-corruption
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Anti-corruption — Preventive Measures; Anti-corruption — Whistle-blowing Procedures
KPI B7.3	Description of anti-corruption training provided to directors and staff.	Anti-corruption — Preventive Measures
Aspect B8: Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Community Investment
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Community Investment
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Community Investment