



中科三环

ZHONG KE SAN HUAN

碳达峰碳中和宣言

PATHWAY TO CARBON NEUTRALITY

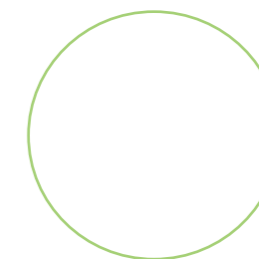
2022 - 2050



北京中科三环高技术股份有限公司
BEIJING ZHONG KE SAN HUAN HI



目录 CONTENT



01 董事长致辞 / 03 LETTER FROM THE CHAIRMAN

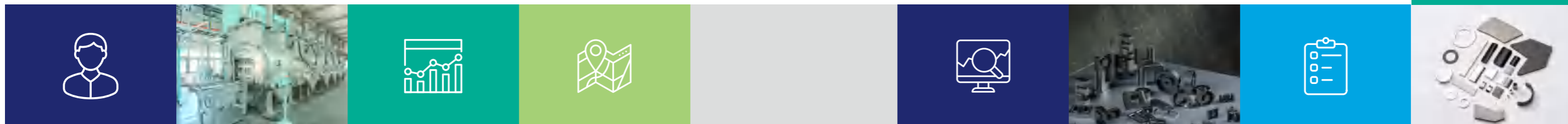
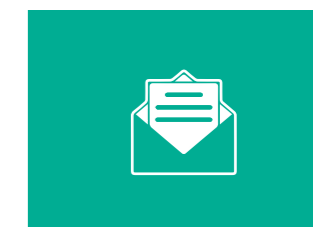
03 双碳承诺 / 07 OUR COMMITMENT

- 企业使命 / 07
OUR MISSION
- 可持续发展愿景 / 07
OUR VISION
- 可持续发展理念 / 07
OUR VALUES
- 双碳目标 / 09
OUR TARGETS

05 双碳行动 / 13 OUR ACTION

- 全生产运营过程节能降碳 / 13
COMPREHENSIVE EMISSION
REDUCTION IN OPERATIONS
- 全生命周期温室气体管理 / 18
COMPREHENSIVE LIFECYCLE
GHG EMISSION MANAGEMENT
- 全价值链协同绿色转型 / 22
COMPREHENSIVE GREEN
VALUE CHAIN TRANSFORMATION

07 结语 / 31 CONCLUSION



02 关于我们 / 05 ABOUT US

04 实施路径 / 11 OUR PATHWAY

06 实施保障 / 27 IMPLEMENTATION AND SUPPORT

- 组织领导 / 27
ORGANIZATIONAL LEADERSHIP
- 责任落实 / 28
RESPONSIBILITY IMPLEMENTATION
- 要素保障 / 28
ELEMENT GUARANTEE
- 交流合作 / 29
COMMUNICATION & COOPERATION
- 宣传教育 / 30
PUBLICITY & EDUCATION





董事长致辞

LETTER FROM THE CHAIRMAN



中国工程院院士、中科三环董事长：王震西

气候变化已经成为 21 世纪人类生存和发展面临的严峻挑战。立足当下，我们需要脚踏实地，务实笃行；面向未来，我们需要变革创新，永续发展。绿色低碳发展不仅是经济社会发展全面转型的复杂工程和长期任务，更是时代向企业发展提出的新要求，落实“双碳”战略亦是企业可持续发展的核心议题。

Climate change has become a serious challenge for human survival and development in the 21st century. Today, we achieve business growth through practical and pragmatic actions, while in the future, we need innovation and achieve sustainable development. Low-carbon transition is not only a complex and long-term task for socio-economic development, but also a new requirement for enterprise development in this era. The "Double Carbon" strategy is also a core issue for companies to meet sustainable development goals.

今天，我们发布《中科三环碳达峰碳中和宣言》，旨在通过创新驱动技术变革和管理变革，落实生态环境和气候保护责任，通过节能减排、绿色生产等模式，坚持走绿色低碳的高质量发展道路。

Today, we are pleased to announce our "Pathway to Carbon Neutrality" to fulfill the responsibility of environmental protection and climate change mitigation through innovation-driven technological and management transformations, and to pursue high-quality growth by adopting energy-saving and green production measures.

我们长期秉持“服务社会、锐意创新、绿色低碳、和谐发展”的可持续发展理念，制定中科三环“2028 年碳达峰，2050 年碳中和”的战略目标，不断实现自身减排降碳，持续提供高性能绿色永磁材料，积极推动供应商全面参与，共同赋能全球产业链零碳转型。

By committing to the sustainable values of "service to society, continuous innovation, low-carbon development, and harmonious coexistence", we have set the strategic targets of peaking carbon emissions by 2028 and achieving carbon neutrality by 2050. We are committed to continuously reducing emissions and providing high-performance green magnets, promoting supplier engagement, and driving the net-zero transformation of the global industrial chain.

路虽远，行则将至；事虽难，做则必成。我们积极探索实现目标的方式方法，制定了“两个目标、三个全面，十五项关键行动，五大保障措施”的绿色发展模式，我们坚信在全体三环人和合作伙伴的共同努力下，三环的双碳目标终将实现。我们定会坚守稀土永磁主业，承担绿色使命，坚持科技创新，笃行高质量发展之路，为构建人类命运共同体的永续未来努力奋进！

Though the road ahead is long and difficult, we are confident to reach our destination. With the active exploration of ways to achieve our goals, we have formulated a green development model with "two goals, three comprehensive approaches, fifteen key actions, and five security measures". We firmly believe that our goals will ultimately be realized through the collective efforts of our employees and partners. We will adhere to our core business in the rare earth magnet industry, take on the green mission, persist in technological innovation, pursue high-quality development, and strive to make every effort to build a sustainable community with a shared future for humankind.



关于我们

ABOUT US



北京中科三环高技术股份有限公司(简称中科三环)由北京三环新材料高技术公司(现已更名为“北京三环控股有限公司”)作为主发起人于1999年7月23日设立,并于2000年4月20日在中国深交所上市,股票代码000970。公司主要从事磁性材料及其应用产品的研发、生产和销售。

Beijing Zhong Ke San Huan Hi-Tech Co., Ltd. ("Zhong Ke San Huan") was founded by Beijing San Huan New Materials High-tech Inc. ("San Huan") of the Chinese Academy of Sciences on July 23rd, 1999. It became public on April 20th, 2000 with the list number 000970. Zhong Ke San Huan is engaged in the research, development, production, and marketing of magnets and their application equipment.

中科三环的主要产品钕铁硼永磁产品广泛应用于能源、交通、机械、信息、家电、消费电子等领域,尤其是近年来全球节能环保产业的快速发展,推动了其在混合动力汽车、电动汽车、节能家电、机器人、风力发电等新兴领域的应用。中科三环是中国稀土永磁产业的代表企业,全球最大的钕铁硼永磁体制造商之一。

Our main products Nd-Fe-B magnets have been widely applied in the fields of energy, transportation, machinery, IT, household appliances, consumer electronics, etc. The rapid development of global energy conservation, environmental protection industries and intellectualization has greatly promoted the application of Nd-Fe-B magnets in new fields, including hybrid vehicles, electric vehicles, energy-saving household appliances, robots, and wind power generation. Zhong Ke San Huan is the leading enterprise of rare earth magnet manufacturing in China and one of the largest Nd-Fe-B magnet producers in the world.

丰富的稀土资源、雄厚的研发力量、坚实的产业基础、务实的工作作风、顽强的开拓精神、独特的创新理念,中科三环正在成为世界一流的磁性材料和器件供应商。

With rich rare earth resources, strong R&D ability, substantial industrial base, trustworthy work style, indomitable exploration spirit and distinctive innovation concept, Zhong Ke San Huan is becoming one of the leading suppliers of magnets and magnetic devices in the world.



双碳承诺

OUR COMMITMENT



企业使命

OUR MISSION

共享磁石魅力、推动绿色科技

Sharing Magnet Charm, Promoting Green Technology



可持续发展愿景

OUR VISION

为全球可持续发展提供绿色动力，为节约能源和环境保护贡献一份力量

Powering the Development of Global Sustainability with Green Energy,
Contributing to Energy Conservation and Environmental Protection



可持续发展理念

OUR VALUES

服务社会、锐意创新、绿色低碳、和谐发展

Service to society, Continuous innovation, Low-carbon development,
and Harmonious coexistence





双碳目标 OUR TARGETS

为贯彻落实我国“碳达峰碳中和”重大战略决策，接轨国际社会落实《巴黎协定》1.5°C控温目标的应对气候变化行动，立足中科三环自身愿景、使命和可持续发展理念，公司制定并向全社会宣布中科三环的“双碳”目标：

To meet China's national climate commitments and the 1.5 °C temperature goal under the Paris Agreement, and in line with our vision, mission, and sustainable development values, we have set and announced our climate targets:



2028 年公司运营边界温室气体排放达到峰值，2050 年实现自身运营碳中和

Peak carbon emissions by 2028 and achieve carbon neutrality in our facilities and operations by 2050.

短期目标 (2028 年) SHORT-TERM TARGETS (2028)

单位产值碳排放强度较基准年下降 CARBON INTENSITY REDUCTION PER UNIT OF OUTPUT COMPARED TO BASE YEAR	25%
供应商气候行动的参与率达到 SUPPLIERS PARTICIPATING IN CLIMATE ACTION	60%
产品碳足迹较基准年下降 PRODUCT CARBON FOOTPRINT REDUCTION COMPARED TO BASE YEAR	18%

可再生能源消费量占比达 RENEWABLE ENERGY CONSUMPTION	60%
使用回收稀土原料占比达 USE OF RECYCLED RARE EARTH MATERIALS IN PRODUCTION	30%
新能源和节能环保产业销售占比达到 SALES OF RENEWABLES AND ENVIRONMENT INDUSTRY	60%

长期目标 (2050 年) LONG-TERM TARGETS (2050)

实现可再生能源消费 RENEWABLE ENERGY CONSUMPTION	100%
实现可持续包装 SUSTAINABLE PACKAGING	100%

实现供应商参与气候行动 SUPPLIERS PARTICIPATING IN CLIMATE ACTION	100%
实现回收稀土原料使用比例 USE OF RECYCLED RARE EARTH MATERIALS IN PRODUCTION	50%

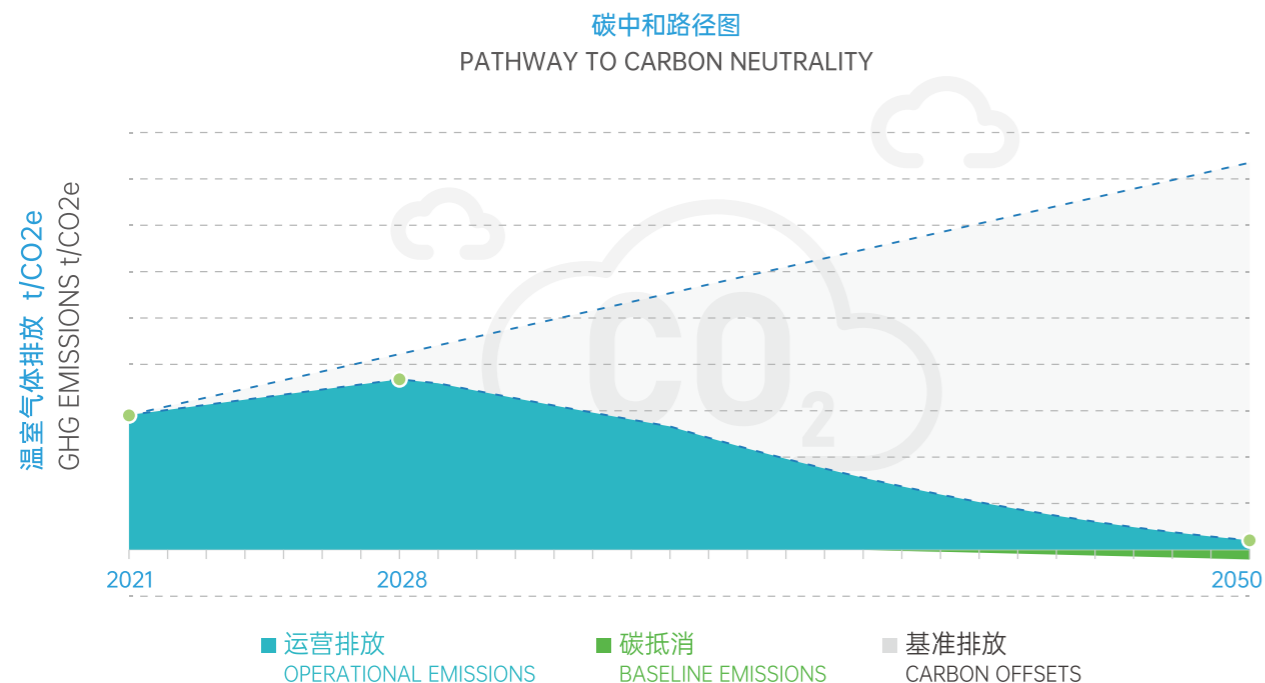


实施路径

OUR PATHWAY

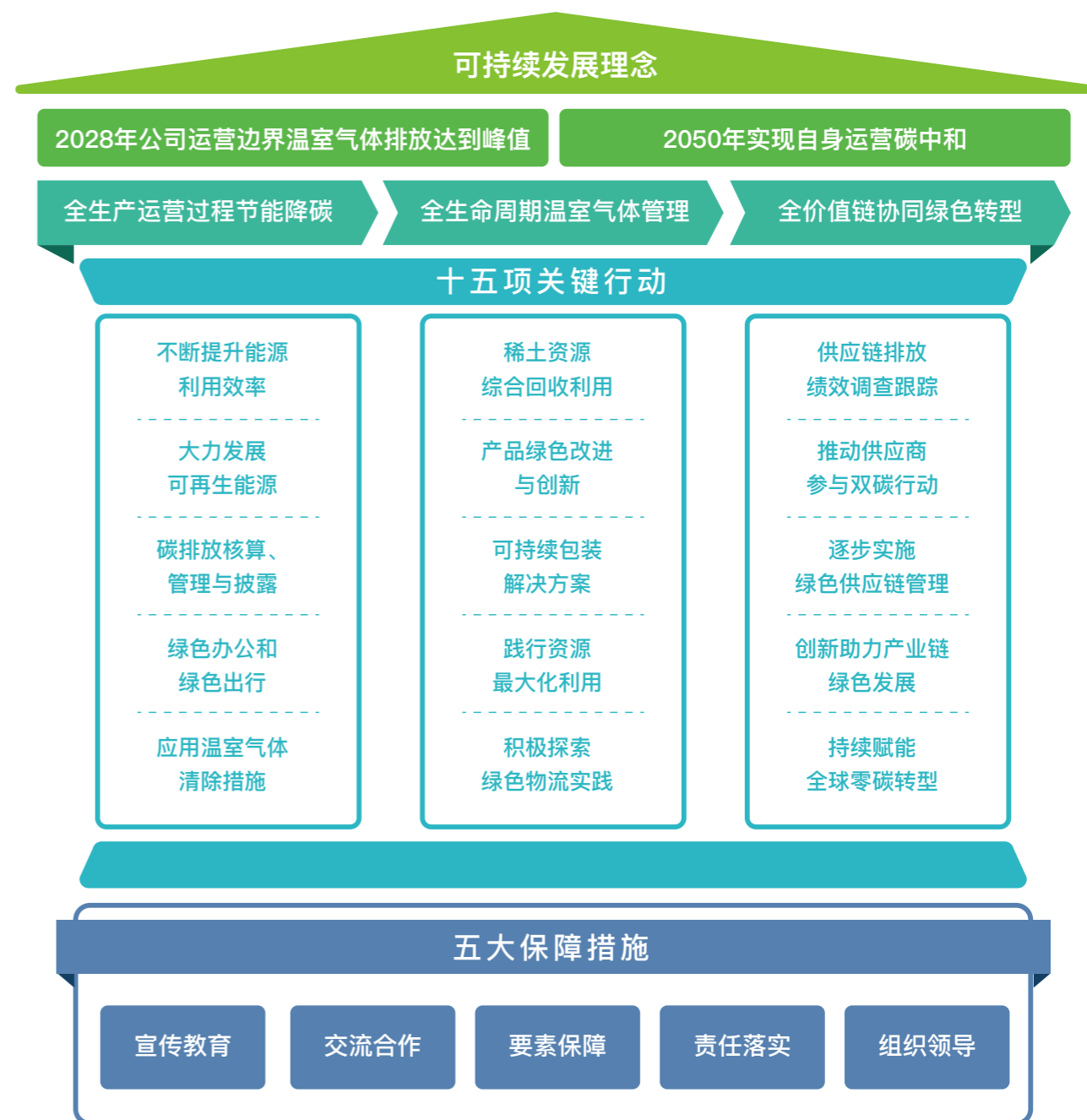
中科三环深耕于稀土永磁材料研发和制造产业，探索一条科研和生产研发、市场应用、国家发展战略相结合的可持续发展之路。为确保承诺能够如期实现，公司将“双碳”目标融入到企业转型与发展的方方面面。中科三环不仅将逐步减少自身的温室气体排放，直至 2050 年实现自身运营的碳中和。同时，中科三环也将不断拓展在产业价值链中的影响力，推动稀土产业自主创新和高质量发展，为全球绿色低碳转型发展努力奋进。

Zhong Ke San Huan specializes in the R&D and production of rare earth permanent magnets, exploring a sustainable pathway that combines R&D, production, market, and national strategies. To fulfill our commitments, we have integrated the climate goal into all aspects of business transformation and development. We aim to gradually reduce our GHG emissions and achieve carbon neutrality in our own operations by 2050. Meanwhile, we will continue to expand our influence in the value chain, promote innovation and high-quality development of the rare earth industry, and contribute to the global low-carbon transformation.



中科三环长期秉持“服务社会、锐意创新、绿色节能、和谐发展”的可持续发展理念，深入研判自身能源消费结构与温室气体排放特点，结合行业关键核心技术与节能减排最佳实践，建立了“两个目标、三个全面，十五项关键行动，五大保障措施”的绿色发展模式，切实保障中科三环的“双碳”目标如期实现。

Zhong Ke San Huan has long adhered to the sustainable development values of "service to society, continuous innovation, low-carbon development, and harmonious coexistence". To achieve our goals, we had thoroughly analyzed the company's energy consumption and GHG emission, and combined with core technologies and best practices for energy conservation and emission reduction, established a green development model of "two goals, three comprehensive approaches, fifteen key actions, and five security measures".





双碳行动

OUR ACTION

1 全生产运营过程节能降碳

COMPREHENSIVE EMISSION
REDUCTION IN OPERATIONS



不断提升能源利用效率

ENERGY EFFICIENCY IMPROVEMENT

中科三环始终不懈追求技术创新，大力推行节能增效技术改造，为此，深入调研生产设备设施使用情况，密切关注行业最新节能技术进展。公司不断探索多种节能改造方案，推进多个节能技改项目的实施，从提高电动机效率到优化 LED 照明系统，在生产运营的每个环节都在减少能源需求，从而全面提升能源使用效率。公司还高度重视能源管理和能效对标，在每个企业中建立完善的能源计量和统计制度，实现精细化和智能化的能源管理，并将节能目标纳入考核评价。公司不断与国际先进水平进行对比，不断优化技术指标，力争实现更好的节能效果。

Zhong Ke San Huan attaches great importance to technological innovation and energy-saving solutions. To achieve this, we conduct in-depth research on the use of facilities and closely follow the latest technology. We continuously explore and promote the implementation of various energy-saving solutions. From motor efficiency improvement to LED lighting system optimization, we are reducing energy demand in every link of production and operation, so as to comprehensively improve energy utilization efficiency. We also attach significance to energy management and energy benchmarking, achieve intelligent energy management in each plant and operations, realize refined and intelligent energy management, and set energy-saving targets in performance evaluation. We continuously compare ourselves with advanced international levels, optimize technical indicators, and strive to achieve better energy-saving performance.



大力发展可再生能源

RENEWABLE ENERGY DEPLOYMENT

中科三环深刻地意识到可再生能源转型是企业迈向碳中和最重要的手段之一。公司制定多样化的可再生能源解决方案，不断向 100% 可再生能源目标迈进。公司秉持“应设尽设”的原则，在具备条件的工厂投建屋顶光伏项目，并不断探索光伏项目扩容，最大限度实现自有可再生能源发电，未来计划部署的屋顶光伏装机容量将较基准年增加 7 倍以上。中科三环不断努力推进绿色能源的使用，通过市场化交易手段增加绿色电力采购，与能源供应商建立紧密的合作关系，以确保稳定的绿色能源供应。同时，中科三环高度重视绿色能源转型，制定全公司的车辆替代计划，加速普及新能源汽车，全面淘汰传统燃油汽车。

We deeply recognize that energy transition is one of the most important pathways for companies to achieve carbon neutrality. We are expanding various renewable energy solutions and continuously moving towards 100% renewable consumption. Adhering to the principle of “do everything possible”, we are installing rooftop PV systems at facilities that meet the conditions, and constantly exploring ways to expand capacity. The planned PV installation capacity will increase more than seven times from the base year. We are making constant efforts to promote the use of green energy, increase green power purchases, and establish cooperation with suppliers to ensure a stable supply. At the same time, we attach great importance to the transformation of green energy, and we are developing a company-wide vehicle replacement strategy to promote electric vehicles instead of gasoline and diesel cars.





碳排放核算、管理与披露

GHG ACCOUNTING, MANAGEMENT & DISCLOSURE

作为温室气体排放管理的必然条件和首要步骤，中科三环高度重视公司温室气体排放的数据收集和核算工作。基于相关国际标准准则，公司已经建立并持续完善温室气体核算体系，制定了数据收集与数据质量控制计划，并与专业的第三方机构合作，不断提升数据的准确性和有效性。公司建立并实施中科三环碳排放数据管理制度，积极探索搭建碳排放管理体系，努力实现碳排放源的管理全覆盖。不仅如此，公司还建立了完善的环境信息披露制度，定期披露可持续发展绩效成果并接受投资者和利益相关方的监督。

As an essential requirement and primary step in GHG management, we attach great importance to data collection and GHG accounting. Based on relevant international standards and guidelines, we have established and continuously improved our GHG accounting system, formulated data quality planning and implementation checklist and cooperated with professional third-party organizations to improve the accuracy and reliability of the data. We have established and implemented an emission management system, actively explored the establishment of a carbon emission management system, and made efforts to achieve full coverage of GHG emission source management. Furthermore, we have also established environmental information disclosure system, regularly disclose sustainable performance, and accept supervision from investors and stakeholders.



绿色办公和绿色出行

GREEN OFFICE & GREEN TRAVEL

中科三环致力于为员工创造绿色低碳的工作环境，引导每个员工成为绿色低碳生活方式践行者。公司对既有的办公环境进行节能改造，采用高效率的照明和空调设备；建立并实施绿色办公制度，特别关注办公室用电设备的运行管理；积极拥抱数字化转型，提高运营效率的同时努力实现无纸化办公；鼓励员工以公共交通和低碳方式出行通勤、以远程会议替代商务差旅、选择高铁代替航空出行等方式，不断减少员工差旅通勤的碳足迹；定期组织各种低碳环保公益活动，如“低碳健步走”和“少开一天车”，让员工将低碳理念入心、入行。未来，公司还将积极探索“内部碳定价”与“员工碳账户”等手段，将可持续发展理念融入日常工作和生活。

Zhong Ke San Huan creates a green working environment for employees and guides each employee to lead a low-carbon lifestyle. We implement energy-saving solutions in office buildings, using high-efficiency lighting and AC system. We formulate green office regulations, paying particular attention to the operation and management of office electrical equipment. We actively embrace digital transformation, improve operational efficiency and create a paperless office. We continuously reduce employees' carbon footprint by encouraging commuting by public transportation and sustainable transport modes, attending remote meetings instead of in-person business travels, and travelling by train instead of airplane, etc. We regularly organize various campaigns, such as "Low-carbon Walking" and "Car-free Day", to let our employees take the concept of low carbon into their mind and practice. In the future, we will also actively explore "internal carbon pricing" and "employee carbon budgets" to integrate sustainable development values into our daily work and life.



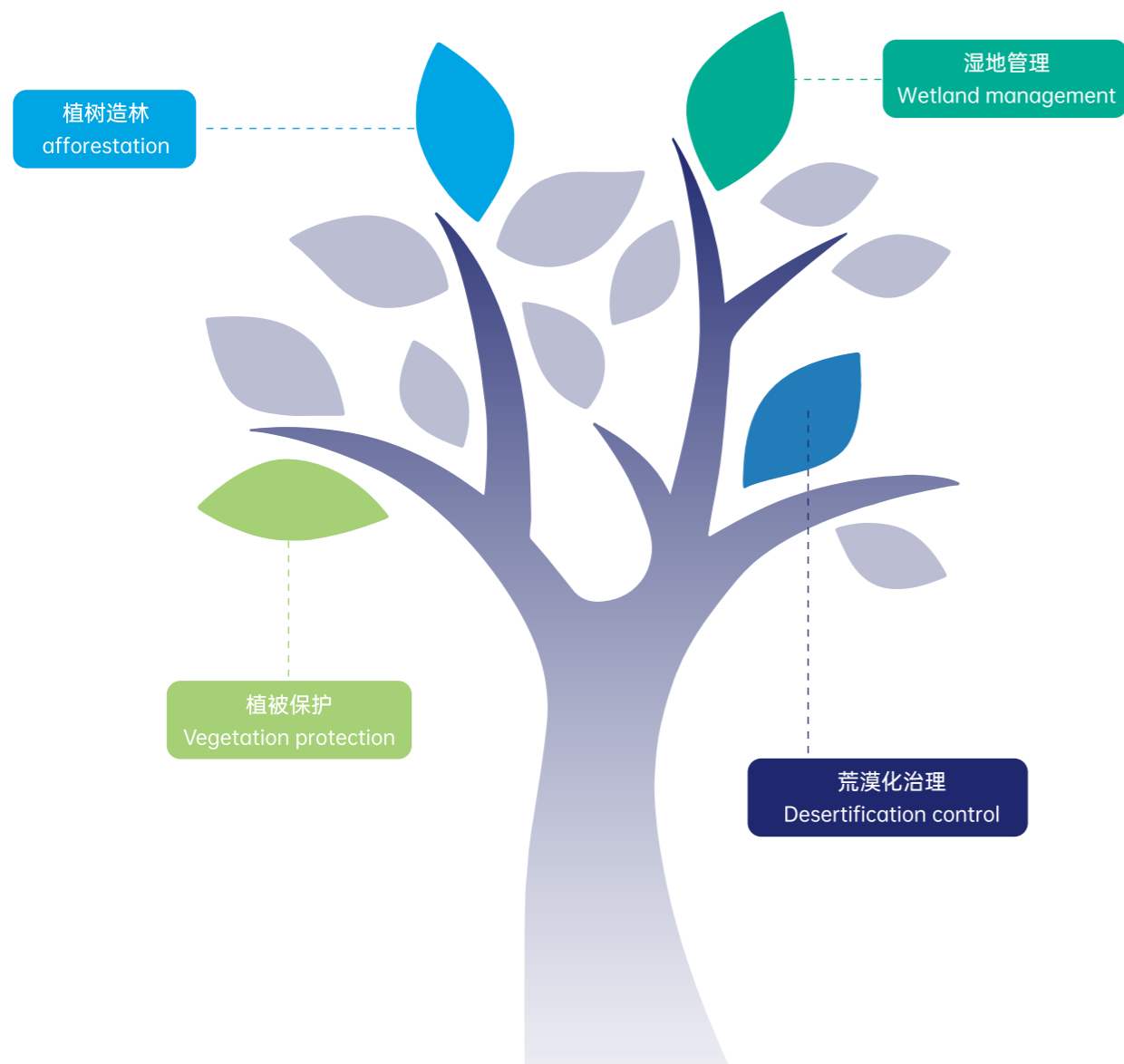


应用温室气体清除措施

GHG EMISSION REMOVAL

中科三环将尽最大努力减少自身的温室气体排放，对于无法减排的部分，采取辅助措施实现碳中和，并制定“最后一公里”的解决方案。公司首选基于自然的碳清除措施，如植树造林、植被保护、湿地管理、荒漠化治理等方式来抵消公司无法减少的温室气体排放。中科三环希望在中和自身排放的同时，对保护生态环境、增进气候韧性贡献力量。

Zhong Ke San Huan will make every effort to reduce its GHG emissions, for the portions that cannot be reduced, we will implement alternative measures to achieve carbon neutrality and develop a "last mile" solution. We prioritize natural-based solutions investing in afforestation, natural plant protection, wetland management, and desertification control projects to offset the emissions that cannot be reduced. We are eager to devote ourselves to ecological environment protection and climate resilience while neutralizing our own emissions.



2 全生命周期温室气体管理

COMPREHENSIVE LIFECYCLE GHG EMISSION MANAGEMENT



稀土资源综合回收利用

RARE EARTH RECYCLING

稀土资源是不可再生的自然资源，也是我国宝贵且关键的战略性资源。作为稀土永磁材料的领军企业，中科三环始终把循环经济理念与企业发展有机结合。使用回收稀土金属原料能够大幅降低产品全生命周期碳排放，公司在此基础上推出100%再生稀土系列产品，为客户提供可持续的产品解决方案。中科三环建立了完善的稀土回收利用体系，对废料进行严格的统计和管理，将废料进行100%闭环回收再利用。公司增加回收稀土金属的采购量，并通过与第三方灵活合作的方式完成稀土资源的回收处置。未来公司还将积极探索稀土金属回收利用重点工程项目，将项目产出的回收稀土服务于企业的生产。

Rare earth resources are non-renewable, valuable and strategic resources in China. As a leading rare earth magnet manufacturer, we always integrate circular economy into business development. The use of recycled rare earth metal can significantly reduce the carbon footprint of products. We have launched 100% recycled rare earth series to provide sustainable product solutions for customers. We have established a comprehensive rare earth recycling system, strictly statistics and manage the waste to achieve 100% closed-loop recycling. We will increase the purchase of recycled materials, and flexibly cooperate with third parties to complete the recovery and disposal of rare earth resources. In the future, we will also actively explore key engineering projects of rare earth recycling and utilization, to support the production with the recycled rare earth materials.



产品绿色改进与创新

GREEN PRODUCT IMPROVEMENT AND INNOVATION

中科三环不断掌控和突破关键核心技术，致力于开发更绿色、更低碳、更可持续的新工艺和新产品。公司重视对关键技术的研究探索，持续保持高研发投入，不断增强产品研发和工艺改进，持续改善原材料的利用率和产品的收得率。公司广泛应用晶界扩散、晶界调控等行业最前沿的技术，不断探索产品绿色改进与创新实践，通过使用碳足迹更低的材料来代替传统高碳材料，持续提高产品的环境友好性。公司不断降低高性能钕铁硼永磁材料中重稀土元素的使用量，并加大对更低碳的轻稀土材料的研发力度，从而实现减少产品碳足迹和降本增效的双赢目标。

Zhong Ke San Huan continuously masters and breaks through core technologies and is committed to developing new processes and products that are greener, lower carbon and more sustainable. We attach great importance to the research and exploration of technologies, maintain high R&D investment, continuously enhance product and process improvement, and improve the utilization ratio of raw materials and production yield. We widely apply cutting-edge technologies in the industry, such as grain boundary diffusion and grain boundary modification, and continuously explore green improvement and innovation practices of products. We use materials with lower carbon footprints to replace traditional high-carbon materials to make products more environmentally friendly. We continuously reduce the use of heavy rare earth elements in high-performance Nd-Fe-B permanent magnets and increase the research and development strength of lower carbon light rare earth materials to create a win-win solution for reducing carbon footprint, reducing cost and increasing efficiency.



可持续包装解决方案

SUSTAINABLE PACKAGING SOLUTIONS

包装物在磁体产品的分销和储存阶段中至关重要，绿色包装是实现产品全生命周期碳减排的关键途径。中科三环将可持续发展理念融入到包装的设计、采购、使用乃至废弃的各个阶段。公司持续推进包装设计改进，推行包装轻量化、简约化改造，从源头上减少包装材料的耗用量，努力提升包装材料中可回收成分占比，并注重低碳环保材料的选择。公司将进行100%负责的采购，优先选择再生塑料、再生钢铁和再生纤维原料供应商，推动供应商进行森林可持续经营认证和再生材料认证。公司将不断扩大“包装循环生态圈”，与下游客户合作建立包装回收计划，待客户取出产品后将包装物送返，经清洗检验后再次投入使用，从而大幅减少原生包装用量。

Packaging plays an important role in the product distribution and storage stage, and thus green packaging is a key solution to reduce a product's carbon footprint. We apply sustainable packaging at every stage of its lifecycle, including design, purchase, use, and disposal. We will continue to promote the improvement of packaging design, promote lightweight and simplified packaging to reduce material consumption and increase the proportion of recyclable and environmentally friendly components in packaging materials. We will commit to 100% responsible sourcing, prioritizing suppliers of recycled plastic, steel, and fiber materials, and promoting FSC, GRS and RCS certifications. We will continue to implement recycling programs with our clients, and the packaging will be returned, cleaned, inspected, and put back into use to significantly reduce the use of primary materials.





践行资源最大化利用

MAXIMIZING RESOURCE UTILIZATION

中科三环始终以“拒用、减量、回收、再生和恢复”的现代循环经济 5R 原则来引导自身的生产生活实践。公司高度重视原材料的高效和循环利用，制定了标准化作业规范，通过管理手段消除浪费。公司对各类原料物料进行严格的管理，逐步减少和替代对环境对人类健康有害的原料。公司建立了循环包材管理制度，规范员工在生产过程中的循环使用行为。公司以可复用的石墨坩埚替代一次性铸铁坩埚，减少废弃物的产生。公司制定了员工用水、用餐行为管理规章制度，倡导节约用水、支持光盘行动、杜绝铺张浪费。

Zhong Ke San Huan has always been guided by the 5R of the circular economy: Refuse, Reduce, Reuse, Recycle, and Recover. We attach great significance to the efficient and recycling utilization of raw materials, and have established standardized operating procedures to eliminate waste through management means. We also strictly manage all kinds of raw materials and gradually reduce and replace the use of raw materials harmful to the environment and human health. We have established a circular packaging management system to regulate the reuse of materials during the production process. We use reusable graphite crucibles instead of disposable crucibles to reduce waste. We set up regulations for employee behavior, advocate water conservation, support the Clean Plate Campaign, and eradicate extravagance and profligacy.



积极探索绿色物流实践

ACTIVELY EXPLORE GREEN LOGISTICS PRACTICES

物流是产品生命周期温室气体排放管理的重要环节，中科三环将优先采用更加低碳的运输方式，减少运输环节在产品生命周期中的碳排放。公司将减少以空运为代表的高碳运输方式，更明智地选择以海运和铁路为主的低碳物流，开展“汽改水”、“汽改铁”和“海铁联运”的绿色物流转型行动。中科三环将与上下游利益相关方共同制定并优化物流方案，科学安排运输过程，切实减少运输次数，不断提升运输效率。未来公司还将与物流供应商开展合作，积极探索碳中和物流解决方案。

Logistics is a crucial part of managing GHG emissions throughout the product life cycle. Zhong Ke San Huan will give priority to the use of more low carbon transportation model to reduce the carbon emissions of transportation footprint. We will phase out carbon-intensive transportation, such as air freight, and opt for rail and water transportation instead. We will also promote green logistics modes, such as shifting to carbon-efficient solutions and sea-rail combined transportation. We will work with upstream and downstream stakeholders to develop and optimize logistics plans, scientifically arrange the transportation process to reduce transit frequency while improving efficiency. In the future, we will also collaborate with logistics suppliers to actively explore carbon-neutral logistics solutions.

3 全价值链协同绿色转型

COORDINATED GREEN TRANSFORMATION OF VALUE CHAIN



供应链排放绩效调查跟踪

COORDINATED GREEN TRANSFORMATION OF VALUE CHAIN

中科三环不仅关注自身运营的温室气体排放绩效，还希望将温室气体排放管理实践延伸至整个价值链上下游企业，推动价值链的绿色低碳协同发展。公司建立了全生命周期产品碳足迹计算模型，提升了产品碳排放数据透明度，帮助下游客户了解所用中科三环产品的气候影响。中科三环还将推动力不断向上游延伸，计划创建重点供应商温室气体排放数据问卷体系，鼓励和推动主要供应商逐步开展能源资源消耗数据和温室气体排放数据的披露工作并持续跟踪供应商的温室气体排放表现。

In addition to tracking our own emissions performance, we hope to extend GHG management practices throughout the entire value chain and drive synthetic green transportation. We have established a full lifecycle product carbon footprint assessment model that improves the transparency of product carbon emissions data and helps our customers understand the climate impact of our products. We also plan to expand our efforts by creating a GHG emissions questionnaire for key suppliers, encouraging and promoting major suppliers to disclose energy consumption and GHG emissions data, and continuously tracking their emissions performance.



推动供应商参与双碳行动 DRIVING SUPPLIER PARTICIPATION

作为领先的磁性材料和器件供应商，中科三环率先发布了碳达峰碳中和战略目标及实施路径，与此同时，公司致力于推动 100% 供应商参与双碳行动，一起承担绿色低碳的社会责任。中科三环将通过鼓励重点供应商做出自己的“双碳”承诺，协助合作伙伴制定可持续发展目标，共同传播可持续发展理念，共享行业最佳减排实践与见解，逐步引导合作伙伴提升能源效率、不断提升可再生能源使用比例，让越来越多的供应商承诺并实践减排行动，实现全产业链的绿色低碳高质量发展。

As a leading supplier of magnetic materials and devices, we are taking the initiative to announce our climate goals and pathway to carbon neutrality. Besides, we are committed to promoting 100% supplier participation in climate action as a shared corporate responsibility. To achieve this, we will encourage key suppliers to make their own climate change commitments, assist our partners in developing sustainable targets, jointly spread the concept of sustainable development, and share best practices and insights of the rare earth industry. We will gradually guide our partners to improve energy efficiency, increase renewable energy consumption, and drive emission reduction measures and thus promote the development of a low-carbon value chain.



逐步实施绿色供应链管理 GREEN SUPPLY CHAIN MANAGEMENT

实施绿色供应链管理是提高企业竞争力并实现绿色可持续发展的有效途径。中科三环将逐步建立起绿色供应链管理计划和绿色供应商评价体系，健全供应商绿色绩效评价标准，将能源资源消耗、温室气体排放目标纳入到供应链管理规则，优先与环境绩效表现突出的供应商建立合作关系。公司将不断加大绿色采购力度，制定绿色采购标准，优先采购更多节能、节水、节材、环保、低碳、绿色的产品和服务，优化中科三环供应链的整体环境绩效。

Implementing green supply chain management is an effective way to enhance the company's competitiveness and achieves sustainable development. We will gradually establish a green supply chain management plan and supplier evaluation system with performance indicators that integrate energy and resource consumption and GHG emission performance. We will give priority to building partnerships with suppliers with outstanding environmental performance. We will continue to strengthen our green procurement efforts, develop green procurement standards, and prioritize the purchase of energy-saving, water-saving, material-saving, environmental-friendly, low-carbon products and services, optimizing the overall environmental performance of the supply chain.





创新助力产业链绿色发展 GREEN VALUE CHAIN DEVELOPMENT

中科三环始终保持以创新驱动发展的战略，以高新技术产业发展和科技成果转化为重点，坚守初心、不断创新，牢牢掌握全产业链的核心技术。公司致力于发挥自身优势，积极承担行业内可持续发展议题研究，主导和参与稀土资源回收利用、生产工艺革新、节能减排研发与实践等创新活动。秉持着中科三环一贯的坚持科技创新的理念，公司将不断扩大在绿色低碳领域的研发投入，加快成果转化，为产业链可持续发展创造更多价值。

Zhong Ke San Huan always maintains an innovation-driven strategy with a key focus on high-tech industries and the transformation of scientific and technological achievements. We remain true to our original aspirations and continuously innovate the core technology of the whole industrial chain. We are dedicated to leveraging our strengths in research activities in sustainable development fields, such as rare earth recycling, process innovation, energy saving, emission reduction practices, and etc. Adhering to our consistent value of technological innovation, we will continue to expand our R&D investment, accelerate performance transformation, and creat value to a sustainable industrial chain.



持续赋能全球零碳转型 EMPOWERING GLOBAL NET-ZERO TRANSITION

稀土永磁材料广泛应用于节能环保与新能源产业，为产业链节能减排绩效和碳中和目标做出了巨大贡献。作为国际绿色、低碳、新能源市场的领导者，公司的客户分布于国内外新能源汽车、汽车零部件、风力发电、工业节能电机等工业领域，公司的产品助力实现的温室气体减排量是自身排放的数十倍。未来，公司将继续扩大低碳影响力，为节能环保和新能源产业提供高性能的永磁材料，为推动全球净零转型贡献中国力量。

Rare earth magnets are widely used in energy conservation, environmental protection, and renewable energy industries, contributing significantly to the energy conservation and emission reduction performance of the industrial chain and the goal of carbon neutrality. We are building strong partnerships with international industry leaders across the fields of electric vehicles, automotive components, wind power generation, and industrial energy-saving motors. The GHG reductions enabled by our products are tens of times greater than our own GHG emissions. We will continue to expand our impact by providing high-performance magnets to continuously contribute to the global net-zero carbon transformation.





实施保障

IMPLEMENTATION AND SUPPORT



1 组织领导

ORGANIZATIONAL LEADERSHIP

公司成立了中科三环可持续发展委员会，并对委员会的使命、愿景和工作目标、机构组成、职责和权限等进行了明确的规定。在可持续发展委员会的框架下，公司设立了碳中和工作小组，负责全面管理企业温室气体并对绩效进行追踪。该工作小组设有日常工作机构，由公司董事会领导下的职能部门及企业负责人组成。工作小组各成员及其所在部门将认真履行可持续发展工作中的职责，以确保各项双碳工作的落地实施和有效管理。

We establish the Sustainable Development Committee with a clear framework regarding the committee's mission, vision, objectives, organizational structure, responsibilities, and authorities. Under the framework of the committee, we establish a working group responsible for GHG emission management and performance tracking, team members of the working group consisting of employees from all departments and facilities, all under the direction of the company's board of directors. The working group will carry out its responsibilities to ensure the effective implementation of emission reduction actions.

2 责任落实

RESPONSIBILITY IMPLEMENTATION

在中科三环可持续发展委员会的组织指导下，企业各级人员和所在部门明确“双碳”工作方案的路线图、时间表和具体任务。公司将公司总体减排目标责任层层分解并落到实处，实行关键节点进度跟踪，评估十五项关键行动的实施效果以及阶段性成果，确保各项重点工作的顺利开展，以如期实现公司的“双碳”战略目标。

Under the leadership of the Sustainable Development Committee, the roadmap, timeline, and key actions for the carbon neutrality pathway are well recognized by all employees. We are breaking down the overall goals at different levels and implementing progress tracking at key milestones, evaluating the implementation effect and periodic achievement of the fifteen key actions to ensure the realization of our sustainable objectives.

3 要素保障

ELEMENT GUARANTEE

中科三环着重强化人才和资金的保障，为双碳目标的如期实现保驾护航。公司不断加强低碳人才队伍建设，完善人才培养机制，努力打造一支绿色低碳技术人才团队。与此同时，公司将定期评估“双碳”相关的投入和产出，为减排措施的落地提供充足的资金支持。此外，公司还将设立专项碳中和奖励基金，对双碳工作成效突出的企业、部门和个人进行表彰奖励。

Attach great importance to talents and resources to ensure the achievement of our goals. We will continue to strengthen the construction of the talent team and improve the talent development mechanism. At the same time, we will regularly evaluate the input and output of key actions implementation and provide sufficient financial support. In addition, we will establish carbon neutral fund to recognize and reward outstanding facilities, departments, and individuals.





4 交流合作

COMMUNICATION & COOPERATION

中科三环始终高度重视交流合作，通过调动各方资源力量，与政府部门、行业协会、产业链上下游企业、非政府组织、高校和科研机构以及其他利益相关方紧密联系、深度合作，实现优势互补、成果共享、价值共创、相互促进。公司将通过一系列的项目合作、课题研究、培训考察、交流研讨、社区活动，构建中科三环的“碳中和生态圈”，推动绿色低碳协同发展。

Zhong Ke San Huan always attaches great importance to communication and cooperation. We closely cooperate with government departments, industry associations, upstream and downstream companies in the value chain, non-governmental organizations, universities, research institutes, and other stakeholders to share results with each other. We will achieve synergetic development through a series of cooperation, research, training, education, communication, and community activities.



5 宣传教育

PUBLICITY & EDUCATION

为传播可持续发展管理理念和技术知识，中科三环将在内刊上开辟“可持续发展专栏”，建立起集团公司与下属企业之间的沟通桥梁，并在此基础上整合内部对于可持续发展理念的共识。公司将定期策划“低碳向未来”主题系列培训，对温室气体核算规则和流程、国内外碳中和相关时事政策、行业内先进节能减排优良实践等内容进行宣传教育，不断提升员工的认识水平和参与能力，持续提高企业内部“双碳”工作能力。

To promote the knowledge of sustainable development management, we have established a sustainability column to create a communication system among each facility and build internal consensus. We will hold regular training sessions under the theme "Towards a Low-Carbon Future" to promote education and awareness of GHG accounting, carbon policy, and advanced practices in the industry to enhance employees' skills and capabilities.



结语

CONCLUSION

生活在一个巨大变革的时代，碳达峰碳中和是一场广泛而深刻的系统性变革。“绿色”已成为企业高质量发展的底色，低碳是实现新时代可持续发展的必然要求。在全球绿色低碳转型的浪潮中，没有一个企业能置身事外。

We live in a fast-changing world. The vision of reaching carbon peak and achieving carbon neutrality is guiding a wide-ranging and profound systemic transformation. "Going green" is an increasingly important issue and essential requirement for enterprises to achieve high-quality and sustainable development. No sector of the global economy will remain unaffected.

中科三环不但致力于减少自身生产经营活动带来的环境影响，并承诺实现自身运营的净零排放，而且通过提供高性能稀土永磁材料，持续助力全球新能源汽车、风力发电、节能环保等产业的快速发展，不断为全球的绿色转型贡献力量。

Zhong Ke San Huan strives to reduce the environmental impact related to its business activities and commit to achieve net-zero in its own operations. Moreover, we make constant contributions to global green transformation by providing high-performance rare earth permanent magnets and promoting the development of electric vehicles, wind power generation, energy-saving appliances, and environmental protection industries.

“碳达峰”和“碳中和”是国家重要的战略目标，着眼于未来，公司现在就开始行动。中科三环将尽己所能，团结一致，心往一处想，劲往一处使，通盘考虑、权衡利弊、认真谋划、步步落实，为实现碳中和目标而努力奋斗！

Peaking carbon emissions and achieving carbon neutrality is a major national strategy. Focused on what will happen in the future, we must act right now. We will engage and motivate all the employees and partners to work together and make the greatest possible effort to achieve our goal of carbon neutrality!



中 科 三 环
ZHONG KE SAN HUAN

为全球可持续发展提供绿色动力

To provide green impetus
for global sustainable development

总部 HEADQUARTERS

地址 Add 北京市海淀区中关村东路 66 号甲 1 号楼 27 层
Haidian District, Beijing 100190, China
27/F, Building A, No.66 East Road, Zhong Guan Cun,
邮编 P.C. 100190
电话 Tel 010-82645082
邮箱 Email sustainability@san-huan.com.cn
网站 Web www.san-huan.com.cn