

# 2023 SUSTAINABLE DEVELOPMENT REPORT

可持续发展报告



### 关于本报告 ABOUT THIS REPORT



《金卡智能集团股份有限公司2023年可持续发展报告》是金卡智能集团股份有限公司连续第十年对外披露公司履行社会责任、践行可持续发展战略的年度报告,也是对外发布的第六份企业可持续发展报告。

"Sustainable Development Report 2023 Goldcard Smart Group Co., Ltd." is the tenth consecutive annual report disclosing performance of corporate social responsibility and activities of sustainable development strategy of Goldcard Smart Group Co., Ltd. ("the Company"). It is the Company's sixth submission of published corporate sustainable development reports.

#### 企业社会责任报告

CORPORATE SOCIAL
RESPONSIBILITY REPORTS









#### 可持续发展报告

SUSTAINABLE DEVELOPMENT REPORTS











#### 报告范围 Scope of report

本报告的组织范围涵盖了公司对财务和运营政策及措施有控制权或有重大影响的所有实体。本报告所披露信息发生时间为2023年1月1日至2023年12月31日,部分内容超出上述范围。任、践行可持续发展战略的年度报告,也是对外发布的第六份企业可持续发展报告。

This report covers all entities in which the Company has controlling power or significant influence over the financia and operational policies and practices. The activities disclosed in this report occurred from January 1, 2023 to December 31, 2023, with some necessary exceptions.

#### 数据来源 Sources of data

本报告所披露数据均为金卡智能集团股份有限公司在经营、环境和社会方面的运营情况,全部来自公司的正式文件和统计报告,最终数据以集团年报为准。

The data disclosed in this report covers business, environmental and societal operations of the Company, as cited in the Company's official documents and statistical reports. The final confirmation of data is subject to the Company's annual report

#### 称谓说明

为便于表述和方便阅读,在报告中"金卡智能集团股份有限公司"也以"金卡智能集团"、"金卡智能"、"公司"或"我们"表示。

For the sake of clear statement and convenience o reading in this report, Goldcard Smart Group Co., Ltd is also addressed as "Goldcard Smart Group", "Goldcard", the Company, or "We", which shall stand for the same.

#### 编制依据

Reference to standards

本报告编制依据参照全球报告倡议组织 (GRI)《可持续发展指南4.0》(G4)、国际标 准化组织(ISO 26000)。

The compilation of this report follows the Global Reporting Initiative (GRI) organization "Sustainable Development Guide 4.0" (G4) and the International Organization for Standardization (ISO 26000).



## 董事长致辞 SPEECHBYTHECHAIRMANOFTHEBOARD

2023年,我国经济持续回升向好,高质量发展扎实推进,也为金卡智能迈向新的里程奠定坚实基础。我们把握了市场机遇,业绩逆势而上,取得了值得骄傲的成绩。物联网终端全球部署突破6000万台,全球智能燃气表出货量第一,数字燃气板块勇立潮头,数字水务打造样板点,由点到面,辐射全国,实现快速增长。

In 2023, China's economy was continued to rebound and improve, and high-quality development was solidly promoted, laying a solid foundation for Goldcard to move towards a new milestone. We have seized market opportunities and achieved remarkable results against the trend. The global deployment of IoT terminals had exceeded 60 million units, ranking top in the global shipment of smart gas meters. The digital gas sector is at the forefront, and the digital water industry is creating a model point, radiating nationwide from point to all, achieved rapid growth.

2023年,杭州亚运会开在了家门口。为满足亚运场馆和赛事期间的保供需求,我们与杭州燃气达成合作,正式上线数字平台亚运专版,这是国内燃气行业首个专门为重大活动保障开发的数字平台。我们在杭州、温州、金华等地部署了百台智能燃气流量计、智能水务流量计,并配备专业运维团队服务一线,保供亚运。

In 2023, the Hangzhou Asian Games was held at our doorstep. In order to meet the supply needs of the Asian Games venues and events, we have reached a cooperation with Hangzhou Gas and officially launched the digital platform for the Asian Games, which is the first digital platform specifically developed for major events in the domestic gas industry. We have deployed hundreds of smart gas flow meters and smart water flow meters in Hangzhou, Wenzhou, Jinhua and other cities, and equipped professional operation and maintenance teams to serve the front line, ensuring the continuous gas supply for the Asian Games.

我们将发扬积极向上、顽强拼搏的体育精神,秉承"以客户为中心,以奋斗者为本"的核心理念,践行"让生活更美好"的使命,为能源领域的发展贡献更多"金卡智慧"。

We will carry forward the positive and tenacious spirit of sports, adhere to the core concept of "Customer-centered, striver-oriented", practice the mission of "make life better", and contribute more "Goldcard Smart Solution" to the development of the energy field.

2023年,我们在科技创新方面取得重大突破和成就。公司荣获国家级专精特新"小巨人"企业、国家工信部两化融合管理体系评定3A级、浙江省重点企业研究院、浙江省大数据应用示范企业、浙江省科学技术进步二等奖与浙江省科学技术进步三等奖等多项荣誉。我们攻艰克难,突破"卡脖子"技术,超声波流量计取得了全国首家MID 0.5级证书,并在2023年成功入围国家管网框架采购。我们基于物联网、云计算、大数据、人工智能等技术,打造数字化产品与解决方案,推动行业数字化转型。

In 2023, we have made significant breakthroughs and achievements in technological innovation. The company has won many honors such as the national level specialized, refined, and innovative "Little Giant" enterprise, the the 3A level of the national Ministry of Industry and Information Technology's integration management system evaluation, the key enterprise research institute of Zhejiang Province, the big data application demonstration enterprise of Zhejiang Province, the second prize of Zhejiang Science and Technology Progress Award. We overcome difficulties and break through the "neck-pinch" technology. The ultrasonic flowmeter has obtained the first class 0.5 MID certificate in China and successfully entered PipeChina's framework procurement in 2023. Based on IOT, cloud computing, big data, artificial intelligence and other technologies, we developed digital products and solutions to promote the digital transformation of the industry.

我们持续开放合作,加强与政府、客户、合作伙伴等紧密关系。2023年,我们与温州苍南政府、温州公用集团合资成立的浙江金瓯水 务科技有限公司,与江西省天然气投资、苏伊士、格兰富等共同达成战略合作,应对行业痛难点持续推动创新升级,落地样板项目。

We continue to open up and cooperate, strengthening our close relationships with governments, customers, partners, etc. In 2023, we established a joint venture with Wenzhou Cangnan Government and Wenzhou Public Group to form Zhejiang Jinou Water Technology Co., Ltd. We also reached strategic cooperation with Jiangxi Natural Gas Investment, SUEZ, Grundfos, etc. to address industry pain points, continue to promote innovation and upgrade, and implement model projects.

过去一年,我们聚焦业务主航道,加强投入,解决关键困难点,进行架构创新,并通过技术创新、产品创新、商业模式创新提升综合竞争力。新的一年,金卡智能将保持战略定力,持续加强研发投入,加强生态体系建设,不断开拓新的业务模式,为社会、客户、股东和伙伴创造更多价值。

In the past year, we focused on the main business channel, strengthened investment, solved key difficulties, carried out structural innovation, and improved comprehensive competitiveness through technological innovation, product innovation, and business model innovation. In the new year, Goldcard Smart will maintain strategic focus, continue to improve R&D investment, strengthen the construction of ecological system, and constantly explore new business models to create more value for society, customers, shareholders and partners.

金卡智能集团股份有限公司董事长 Chairman of the Board, Goldcard Smart Group Co., Ltd.

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### 公司概况 COMPANY PROFILE

金卡智能集团股份有限公司(股票代码:300349),致力于成为中国领先的数字能源产品与解决方案提供商,业务涵盖数字燃气、数字水务、能源计量等,为智慧城市、能源领域提供数字化整体解决方案。

Goldcard Smart Group Co., Ltd.(securities code: 300349), is devoted to becoming a leading digital solutions provider to the public utility industry, its business covers smart gas, smart water, energy metering, etc.

公司现有2000多名员工,自1997年成立以来,持续加大研发投入和不断致力于技术创新,每年以10%左右的销售收入投入研发。公司已获得1700多项知识产权,870多项专利,参与起草国家、地方标准百余项。公司业务遍布全球40多个国家和地区,产品覆盖2000多座城市,3500多家能源企业,服务超过6000万户城市家庭用户。

The company has more than 2,000 employees. Since its establishment in 1997, it has continued to increase investment in R & D and been committed to technological innovation, invests around 10% of sales revenue in research and development annually. The company has obtained more than 1,700 intellectual property rights, more than 870 patents, and participated in the compiling of more than hundred national and regional standards. With businesses covering more than 40 different countries and regions, products deployed in over 2000 cities, more than 3500 energy enterprises, and serve over 60 million urban household users.

金卡智能依托精准计量和数字技术的多年积淀,构建了完整的数字能源体系,曾先后参与广州、天津、粤港澳大湾区、雄安新区等多个城市燃气建设,北京双奥会、"一带一路"高峰论坛、大兴机场、世博会、白鹤滩水电站、成都大运会、杭州亚运会等多个重大工程项目。

Based on years of accumulation of precise measurement and digital technology, Goldcard Smart has built a complete IoT energy system to provide digital overall solutions for smart cities and energy fields. It has successively participated in gas construction in Guangzhou, Tianjin, Guangdong- Hong Kong- Macao Greater Bay Area, Xiong'an New Area and other cities, as well as several major engineering projects such as the Beijing Double Olympic Games, the "High-Level Belt and Road Initiative Forum", Daxing Airport, World Expo, Baihetan Hydropower Station, Chengdu Universiade, Hangzhou Asian Games, etc.

## **价值理念** PHILOSOPHY AND VALUE STATEMENT

使命:金卡智能,让生活更美好 Mission: Jinka SMART, make life better

愿景:致力于成为中国领先的数字能源产品与解决方案提供商

Vision: Devoted to becoming the leading digital energy products and solutions provider in China

理念:通过技术、解决方案与应用,变革创新,为客户创造价值,赋能万物互联的数字世界 Philosophy: Create value for customers and enable the digital world of everything-connected through innovation in technology, solutions and applications.

价值观:以客户为中心,以奋斗者为本,推动行业数字化升级,持续为客户创造价值 Values: Customer-centered, striver-oriented, to promote industry digital upgrading, and continue to create value for customers

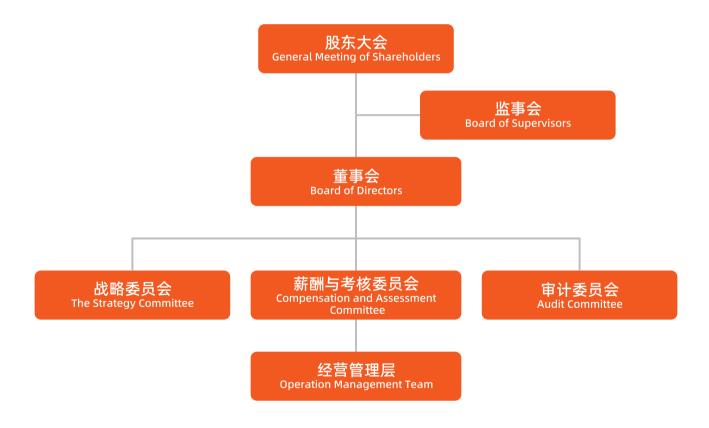
### 公司治理 CORPORATE GOVERNANCE

#### 公司组织架构

COMPANY ORGANIZATION STRUCTURE

公司严格遵守《中华人民共和国公司法》、《中华人民共和国证券法》和《深圳证券交易所股票上市规则》等法律法规和相关规范性文件要求,设立股东大会、董事会、监事会、经营层"三会一层"的现代企业组织制度和运行机制。公司董事会下设战略委员会、提名委员会、薪酬与考核委员会和审计委员会,各专门委员会各司其职,各尽所能,推动公司高效、科学、规范运行。

Goldcard Smart Group strictly follows the "Company Law", "Listed Companies Governance Guidelines", "Shenzhen Stock Exchange GEM Listing Rules", "Shenzhen Stock Exchange GEM Listed Companies Standard Operation Guidelines" and other relevant national laws and regulations. It established a modern enterprise organization system and operational mechanism including the shareholders' meeting, the Board of Directors, the Board of Supervisors, and the management team. The board of directors of the company has a strategy committee, a nomination committee, a compensation and assessment committee, and an audit committee. Each specialized committee performs its duties and does its best to promote the efficient, scientific, and standardized operation of the company.



#### 三会运作

THREE COMMITTEE OPERATION

公司股东大会、董事会、监事会及下设各专门委员会根据《公司章程》、《股东大会议事规则》,《董事会议事规则》、《监事会议事规则》以及各专门委员会实施细则的有关规定,勤勉尽责,合规、高效地开展各项工作。

The general meeting of shareholders, the board of directors, the supervisory board, and various specialized committees of the company shall carry out their work diligently and efficiently in accordance with the relevant provisions of "The company's articles of association", "The general meeting of shareholders procedure rule", "The board of directors procedure rule" and "The supervisory board procedure rule", and the implementation rules of each specialized committee.

#### 股东大会

**GENERAL MEETING OF SHAREHOLDERS** 

作为公司最高决策机构,决定公司的经营计划和投资计划;选举和更换由非职工代表担任的董事、监事的报酬事项;审议批准董事会、 监事会的报告。

As the highest decision-making department of the company, decide on the company's business and investment plans; remuneration matters for the election and replacement of directors and supervisors appointed by non-employee representatives; deliberate and approve reports of the board of directors and supervisory board.

#### 董事会

THE BOARD OF DIRECTORS

董事会:董事会由9名董事组成,其中3名为独立董事。独立董事担任提名委员会,薪酬与考核委员会、审计委员会的主任委员会/召集人;遵守多元化政策,依照提名委员会的程序,科学、合理聘任适合人选;执行股东大会的决议,管理公司信息披露事项。

Board of Directors: The board of directors consists of 9 directors, including 3 independent directors. The independent directors serve as the nominating committee, compensation and evaluation committee, and audit committee chairmen/conveners; comply with diversity policies, scientifically and reasonably appoint suitable candidates in accordance with the procedures of the nominating committee; implement the resolutions of the shareholders' meeting, and manage information disclosure matters of the company.

#### 监事会

SUPERVISORY BOARD

监事会现有3名监事,其中1名职工代表监事;负责对董事会及其成员,以及高级管理人员进行监督,防止其滥用职权,侵犯股东、公司及员工的合法权益。

The Board of Supervisors currently has 3 supervisors, including 1 employee representative supervisor; it is responsible for supervising the Board of Directors and its members, as well as senior management personnel, to prevent them from abusing their power and infringing on the legitimate rights and interests of shareholders, the company, and employees.

组织名称	成员	独立董事成员
Organization Name	Members	Independent Director Members
战略委员会	3人	<b>O</b> 人
Strategic Committee	Four person	Zero person
薪酬与考核委员会	3人	<mark>2</mark> 人
Salary and Assessment Committee	three person	Two person
审计委员会	3人	<mark>2</mark> 人
Audit Committee	three person	Two person

#### 数据绩效

**DATA PERFORMANCE** 

报告期内公司组织召开: 董事会<mark>6次,监事会6次,股东大会</mark>2次

During the reporting period, the company organized 6 meetings of the board of directors, 6 meetings of the supervisory board, and 2 meetings of the shareholders

#### 金卡智能可持续发展管理

GOLDCARD SUSTAINABLE DEVELOPMENT MANAGEMENT

金卡智能集团致力于成为中国领先的数字能源产品与解决方案提供商的同时,将自身业务于与实现联合国可持续发展目标(SDGs)相结合,建立并不断完善公司可持续发展管理体系,进而实现经济、社会与环境的协调可持续发展。

Goldcard Smart Group is devoted to become the leading digital energy product and solution provider in China At same time, it combines its own business with the realization of the United Nations Sustainable Development Goals (SDGs), establishes and constantly improves the company's sustainable development management system, so as to achieve coordinated and sustainable economic, societal and environmental development.

#### 一、可持续发展理念

PART ONE Sustainable development philosophy

#### 金卡智能集团股份有限公司的可持续发展理念是:

The sustainable development philosophy of Goldcard Smart Group is:

以"全感知"、"全数字"、"全安全"、"全生态"为能源发展引擎,致力于成为中国领先的数字能源产品与解决方案提供商。

With "total perception", "total digital", "total security" and "total ecology" as the development engine of smart public utilities, its devoted to become the leading digital energy product and solution provider in China.

金卡智能集团以创新作为企业发展的重要源动力与核心竞争力,通过技术、解决方案与应用,赋能万物互联的数字世界。并坚守以人为本的发展理念,恪守商业准则,重视环境保护,积极履行企业社会责任,坚持践行可持续发展理念。

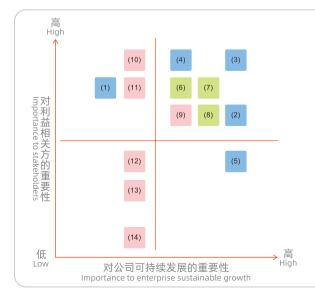
Goldcard Smart Group takes safety as the primary goal, takes innovation as an essential source of power and core competence of enterprise development, and enables the everything-connected digital world through technology, solutions and applications. It adheres to the people-oriented development concept, abides by business principles, pays attention to environmental protection, actively fulfills corporate social responsibility, adheres to the concept of sustainable development.

#### 二、实质性议题矩阵

**PART TWO Substantive Issues Matrix** 

对实质性议题的筛选和管理是公司提升可持续发展管理水平,实现可持续发展目标的重要基础。金卡智能集团通过分析公司业务所产生影响和利益相关方所关注的议题,将其纳入实质性议题矩阵用纵向优先度和横向优先度分别体现对利益相关方评估决策的影响以及对经济、环境和社会影响的重要性。

The screening and management of substantive issues are an important basis for the company to improve the management level of sustainable development and achieve the sustainable development goals. By analyzing the impact of the company's business operations and concerns of the stakeholders, Goldcard Smart Group incorporated them into the substantive issues matrix to reflect the relation of impact on the stakeholder evaluation decision and the economic, environmental and social importance of these issues, with vertical priority and horizontal priority, respectively.



经济	<b>环境</b>	社会
Economy	Environment	Society
(1)诚信合规	(6) 节能减排	(9) 供应链可持续发展
Integrity and compliance	energy saving and emission reduction	sustainable supply chain development
(2) 研发与创新	(7)资源利用	(10)职业健康与安全
R&D and innovation	resource protection	occupational health and safety
(3)产品安全保证	(8) 绿色节能技术研发	(11)员工能力提升与发展
safety of product	green technology development	staff skill promotion
(4)产品与服务质量 quality of product and service		(12)社区发展 community development
(5)客户认可 customer recognition		(13)公益慈善 public charity
		(14)党建工作 party buildup

#### 三、利益相关方沟通

PART THREE Communication with stakeholders

金卡智能集团积极聆听并主动回应利益相关方的期望,根据公司业务及运营的特点,公司识别出包括股东、政府及监管机构、客户、合作伙伴、员工及社区在内的六大利益相关方,并为利益相关方建立了有效的沟通机制和多元化的沟通渠道,确保及时准确的沟通与反馈。

Goldcard Smart Group actively listened and responded to the expectations of stakeholders. According to the characteristics of its business and operation, the company identified six type of stakeholders, including shareholders, government and regulators, customers, business partners, employees and communities, and established an effective communication mechanism and diversified communication channels for stakeholders to ensure timely and accurate communication and feedback.

<b>利益相关方</b> Stakeholders	要求与期望 Requirements & expectations	<b>沟通方式</b> Communication mechanism	
4	公司业绩表现	定期召开股东大会/股东见面会 Scheduled shareholders' conference and briefing	
	Business performance results	平等对待所有股东 Equal rights of all shareholders	
股东 Shareholders	行业前瞻及风险把控	完善公司治理机制 Improve the corporate governance mechanism	
	Business perspective and risk control	透明公开披露公司信息 Transparency in company information disclosure	
	合规经营 Lawful operation	依法合规经营 Operation compliance	
1		政企沟通及会议交流 Communicate through official channels and meetings	
政府及监管机构	环境资源的保护与利用 Protection and efficient utilization of environment and resource	贯彻落实双碳目标 Implement the dual-carbon target	
Shareholders	促进地区经济发展	现场考察及信息披露 Site inspection and information disclosure	
	Promote regional economic development	纳税及创造就业机会 Tax duty and job opportunity	
	提供安全稳定的产品 Supply safe and reliable product	定期召开金卡用户大会 Scheduled Goldcard customers conference	
客户	提供优质服务 Provide high quality service	加大产品和服务研发力度 Enhance new product and service development	
Shareholders	创新及个性化的产品与服务 Innovative and customized products and service	秉承"以客户为中心,持续为客户创造价值"的理念,为客户提供最优服务 Adheres to "Move the customers" morale, provides best service	
	供应链管理 Supply chain management	定期召开供应商大会 Scheduled suppliers conference	
合作伙伴	公平、公正、公开采购 Fair, integral andopen procurement	倡导良性的行业竞争秩序 Advocate goodwill and order in industry competition	
Shareholders	提供相应辅导与支持 Provide relevant guidance and support	开展供应链合作,实现产业链共赢 Cooperate with supply chain to achieve win-win	
	员工健康与安全 Employees health and safety	提供健康安全的工作环境及健康安全培训 Provide healthy and safe working environment and health and safety training	
员工 Shareholders	员工发展及培训 Employees development and training	构建多元化人才发展通道,开展多元化培训 Build multiple personnel promotion channels, diversified trainin	
	构建社区文化,支持社区发展 Support community cultural activity and overall development  开展公益慈善活动 Carry out public welfare and charity activity	开展社区公益活动 Carry out community welfare activity	
社区		组织开展志愿服务活动 Carry out staff volunteer service	
Shareholders		开展基金会公益项目 Carry out charity fund activity	
党工委 Shareholders	大力推进基层组织建设 Vigorously develop the party root organization buildup		
	发挥党组织作用 Give full play to the role of Party organization	定期开展特色党建活动,强化党员教育管理 Regularly carry out special Party building activities to strengthen the education and management of Party members	
	积极推进党的二十大精神学习贯彻 Promote the study and implement of the guiding principles of the 19th CPC National Congress		



#### 四、利益相关方认可

PART FOUR Recognition by Stakeholders

2023年,金卡智能集团持续稳健经营的同时也获得了一系列来自利益相关方的认可与好评。公司未来仍将一如既往的充分听取利益相关方诉求,并持续改进,坚持规范经营,加强创新协作,推动行业发展与变革,践行可持续发展理念。

In 2023, Goldcard Smart Group has won a series of recognition and high opinion from stakeholders while continue to operate steadily. In the future, the company will continue as always to fully listen to the demands of its stakeholders, continue to improve, adhere to standard operation, strengthen innovation and cooperation, promote the development and reform of the industry, and carry on with sustainable development principle.

颁奖部门	所获认可与荣誉	获奖企业
Award Department	Recognition and Honors Received	Awarded enterprises
国家工信部 Ministry of Industry and Information Technology of China	两化融合管理体系评定AAA级 AAA Level Evaluation of The Integrated Management System for Industrialization and Industrialization	金卡智能 Goldcard Smart Group
浙江省经济和信息化厅	浙江省制造业单项冠军培育企业	金卡智能
Zhejiang Provincial Department of Economy and Information Technology	Zhejiang Province Manufacturing Single Champion Cultivation Enterprise	Goldcard Smart Group
浙江省科学技术厅	浙江省科学技术进步奖二等奖	金卡智能
Zhejiang Provincial Department of Science and Technology	Second Prize of Zhejiang Provincial Science and Technology Progress Award	Goldcard Smart Group
浙江省科学技术厅	浙江省科学技术进步奖三等奖	金卡智能
Zhejiang Provincial Department of Science and Technology	Third Prize of Zhejiang Provincial Science and Technology Progress Award	Goldcard Smart Group
浙江省市场监督管理局	家用铝壳超声波燃气表取得型式批准证书	金卡智能
Zhejiang Provincial Administration for Market Regulation	Household Aluminum Shell Ultrasonic Gas Meter Obtained Type Approval Certificate	Goldcard Smart Group
浙江省企业联合会/浙江省企业家协会	第二十二届浙江省优秀企业家	金卡智能
Zhejlang Enterprise Federation/Zhejlang Entrepreneur Association	The 22nd Zhejiang Province Excellent Entrepreneurs	Goldcard Smart Group
浙江省企业社会责任促进会	浙江省企业社会责任优秀企业	金卡智能
Zhejiang Provincial Association For Promoting Corporate Social Responsibility	Excellent Corporate Social Responsibility Enterprises in Zhejiang Province	Goldcard Smart Group
世界杭商大会	优秀杭商	金卡智能
World Hangzhou Business Conference	Excellent Hangzhou Merchants	Goldcard Smart Group
杭州市公安经济文化保卫支队 Hangzhou Public Security Economic and Cultural Protection Detachment	亚运地下管线空间安保工作先进集体 Advanced Collective for Security Work of Underground Pipeline Space in The Asian Games	金卡智能 Goldcard Smart Group
杭州市总工会	杭州市先进职工之家	金卡智能
Hangzhou Federation of Trade Unions	Hangzhou Advanced Workers Home	Goldcard Smart Group
企业学习设计大赛组委会	"CSTD企业学习设计大赛" 银奖	金卡智能
Organizing Committee of Enterprise Learning Design Competition	Silver Award in CSTD Enterprise Learning and Design Competition	Goldcard Smart Group
杭州市钱塘区政府	数字经济十佳先锋企业	金卡智能
Qiantang District Government of Hangzhou City	Top 10 Pioneer Enterprises in The Digital Economy	Goldcard Smart Group
国家工信部	第四批专精特新 "小巨人"企业	天信仪表
Ministry of Industry and Information Technology of China	The Fourth Batch of Specialized, Refined, and Innovative "Little Giant" Enterprises	Tancy Instrument
浙江省经信厅	浙江省企业技术中心	天信仪表
Zhejiang Provincial Department of Economy and Information Technology	Zhejiang Provincial Enterprise Technology Center	Tancy Instrument
浙江省市场监督管理局	浙江省知识产权示范企业	天信仪表
Zhejiang Provincial Administration for Market Regulation	Zhejiang Province Intellectual Property Demonstration Enterprise	Tancy Instrument
浙江省市监督管理局	浙江省AAA级 "守合同重信用" 企业	天信仪表
Zhejiang Provincial and Municipal Supervision and Administration Bureau	Zhejiang Province AAA Level "Contract Abiding and Creditworthy" Enterprise	Tancy Instrument
温州市经济和信息化局	温州市绿色低碳工厂	天信仪表
Wenzhou Municipal Bureau of Economy And Information Technology	Wenzhou Green and Low Carbon Factory	Tancy Instrument
温州市经济和信息化局	温州市领军型和高成长型工业企业	天信仪表
Wenzhou Municipal Bureau of Economy And Information Technology	Leading and High Growth Industrial Enterprises in Wenzhou City	Tancy Instrument
温州市经济和信息化局	温州市实力百强民企	天信仪表
Wenzhou Municipal Bureau of Economy And Information Technology	Top 100 Private Enterprises in Wenzhou City	Tancy Instrument
温州市经济和信息化局 Wenzhou Municipal Bureau of Economy And Information Technology	温州市装备制造业重点领域首台(套)装备(TSR型气体腰轮流里计) The First Set of Equipment (TSR Type Gas Walst Rotation Odometer) in The Key Field of Wenzhou's Equipment Manufacturing Industry	天信仪表 Tancy Instrument
温州市人民政府 Wenzhou People's Government	市长杯中国(温州)工业设计大赛 产品奖 铜奖(TYL ) Mayor's Cup China Wenzhou Industrial Design Competition Product Award Bronze Award (TYL)	天信仪表 Tancy Instrument
温州市标准创新贡献奖评审委员会	温州市标准创新贡献奖	天信仪表
Wenzhou Standard Innovation Contribution Award Evaluation Committee	Wenzhou Standard Innovation Contribution Award	Tancy Instrument
温州市人民政府	温州慈善奖 "机构捐赠奖"	天信仪表
Wenzhou People's Government	Wenzhou Charity Award "Institutional Donation Award"	Tancy Instrument
苍南县人民政府	2022年度领军企业、领军企业家	天信仪表
Cangnan People's Government	Leading Enterprises and Entrepreneurs in 2022	Tancy Instrument
港华投资有限公司	2021-2022年度港华优秀供应商	天信仪表
Towngas Investment Co., Ltd	Excellent Suppliers for 2021-2022	Tancy Instrument
浙江省经济和信息化厅 Zhejiang Provincial Department of Economy and Information Technology	2023年浙江省专精特新中小企业 2023 Zhejiang Province Specialized, Refined, and Innovative Small and Medium-Sized Enterprise	金卡水务 Goldcard Water
合肥供水集团	五星级供应商	金卡水务
Hefel Water Supply Group	Five Star Supplier	Goldcard Water
浙江省经济和信息化厅 Zhejiang Provincial Department of Economy and Information Technology	2023年浙江省专精特新中小企业 2023 Zhejiang Province Specialized, Refined, and Innovative Small and Medium-Sized Enterprise	易联云 Eslink
浙江省经济和信息化厅	浙江省第九批大数据应用示范企业	易联云
Zhejiang Provincial Department of Economy and Information Technology	The 9th Batch of Big Data Application Demonstration Enterprises in Zhejiang Province	Eslink
第五届中国工业物联网大赛组委会 The Organizing Committee of the 5th China Industrial Internet of Things Competition	工业物联网+产品服务化解决方案全国决赛-优秀奖 National Finals of Industrial Internet of Things+Product Service Solutions - Excellent Award	易联云 Eslink

## THEMATIC FOCUS

## 专题聚焦

## 全面赋能数智亚运

COMPREHENSIVELY EMPOWERING THE DIGITAL ASIA GAMES



第19届亚运会在浙江杭州举办,这是展现"中国新时代、杭州新亚运"的重要窗口。能源供应是服务亚运、保障亚运的重要组成部分。 金卡智能作为浙江本土企业,秉持"绿色、智能、节俭、文明"的办赛理念,全力以赴,护航亚运,获得各方一致认可。

The 19th Asian Games was held in Hangzhou, Zhejiang Province, which was an important window to show "China's new era, Hangzhou's new Asian Games". Energy supply was an important part of serving and protecting the Asian Games held smoothly. As a local enterprise in Zhejiang Province, Goldcard smart group, adhering to the "green, intelligent, thrifty and civilized" concept of hosting the Games, went all out to escort the Asian Games, which was unanimously recognized by all parties.

#### 案例 CASE

#### 数字赋能 同助亚运

#### 金卡智能集团董事长杨斌圆满完成亚运火炬传递

Digital empowering the asian games

Yang Bin, Chairman of Goldcard Smart Group, Successfully Completed the Asian Games Torch Relay



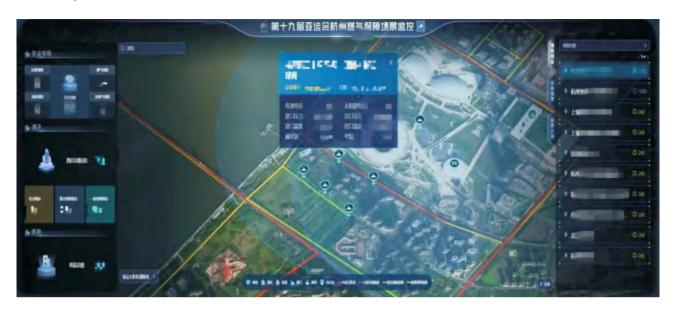
杭州第19届亚运会火炬继续传递,金卡智能董事长、总裁,浙江省第十三届人大代表杨斌高举"薪火"奔跑在传递圣火的道路上,以矫健的身姿展现着金卡智能"让生活更美好"的使命。他表示,"这不仅是火炬的接力,更是对体育精神与中国文化的传承!我深信在数字能源赛道上也需要秉持这样的火炬手精神,一棒接着一棒干,希望未来能为我国能源领域发展贡献更多的金卡智慧。"

The 19th Hangzhou Asian Games torch continues passing, Goldcard Smart Group Chairman, President, Zhejiang Province, the thirteenth session of the National People's Congress deputy Yang Bin held up the "flame" running in the transmission of the sacred fire on the road to the athletic stature of the Goldcard Smart Group "Make Life Better" mission! He said, "This is not only a great opportunity for us to make our lives better, but also an inheritance of sportsmanship and Chinese culture! I am confident that we need to uphold the spirit of torchbearers in the digital energy track, and we will continue to work on it one after another, hoping that we can contribute more to the development of China's energy sector in the future."



#### 案例 以数字赋能 用科技助力 金卡智能上线数字平台亚运专版

Empowering by digital empowering by technology Goldcard smart group launched special edition of digital platform for



金卡智能为了满足亚运场馆和赛事期间的保供需求,与杭州燃气达成合作,正式上线数字平台亚运专版,这是国内燃气行业首个专门为 重大活动保障开发的数字平台。该亚运专版集成GIS管网底图、5G视频技术、智能感知技术、移动端技术和"一点一方案",实现用户侧燃 气设施全方位、全天候监控,让亚运燃气保障更有力度,让用户用气更有底气,充分彰显了科技赋能亚运的实力。

金卡智能收到了来自杭州燃气的表扬信,对金卡智能推动杭州燃气数字平台亚运专版上线,及在亚运会期间保证杭燃数字平台平稳运行 表示感谢。

To meet the supply needs of Asian Games venues and events, Goldcard Smart Group has partnered with Hangzhou Gas and launched a digital platform tailored for the Asian Games. This is the first-ever digital platform in China's gas industry developed specifically for major event support. This Asian Games-dedicated platform integrates GIS pipeline network base maps, 5G video technology, intelligent perception technology, mobile technology, and "one-point solutions", enabling comprehensive, round-the-clock monitoring of gas facilities on the user side. This ensures robust gas security for the Asian Games and gives users safety when using gas, it shows the power of technology in empowering the Asian Games.

Goldcard Smart Group has received a commendation letter from Hangzhou Gas, expressing gratitude for Goldcard Smart Group's promotion of the launch of the Hangzhou Gas Digital Platform Asian Games Edition and ensuring the smooth operation of the Hangzhou Gas Digital Platform during the Asian Games.



#### <sup>案例</sup> 办好亚运会 赋能一座城

#### 金卡智能赋能杭州智慧城市建设

Empowering by digital empowering by technology Goldcard smart group launched special edition of digital platform forasiangames

金卡智能助力杭州举办智慧亚运会的同时,更是依托精准计 量和数字技术的多年积淀,赋能杭州智慧城市建设。金卡智能推 进智慧燃气5G系统项目,运用5G智能传感器、5G摄像机等5G物 联终端,实现5G+AI巡检、5G+XR实时传输抢险现场画面、5G定 位智能应急调度等应用场景。通过主动感知和实时预警,及时发 现并处理各类场站门站、管道、用户现场的安全隐患。

While Goldcard Smart Group assist Hangzhou held the Smart Asian Games, it also empowers the construction of Hangzhou's smart city by relying on years of accumulation of accurate measurement and digital technology. Goldcard Smart Group promotes the smart gas 5G system project, using 5G intelligent sensors, 5G cameras and other 5G IoT terminals to realize 5G+AI inspection, 5G+XR real-time transmission of emergency scene images, 5G positioning intelligent emergency scheduling and other application scenarios. Through active sensing and real-time early warning, it can timely discover and deal with various types of field station gate stations, pipelines, and user sites with potential safety hazards.



## 案例 全方位保供亚运:

#### 卡智能集团荣获"亚运地下管线空间安保工作先讲集体"

All-round protection for the Asian Games:
Goldcard Smart Group won the "Advanced Collective for Underground Pipeline Space Security in the Asian Games".

在亚运会期间,金卡智能在提升水电油气讯地下管线安保工作"政警企协"共建共治能力水平,夯实水电油气讯内部安全稳定基石等献 出绵薄之力,提供的数字化方案及服务获得市公安局经文保支队认可,并荣获"亚运地下管线空间安保工作先进集体",成为唯一一家获此 殊荣的民营企业。

During the Asian Games, Goldcard Smart Group made contribution to improving the security of underground pipelines of water, electricity, oil and gas communications "government, police, enterprises and associations" to build a common level of ability to govern, and to consolidate the internal security and stability of the cornerstone of water, electricity, oil and gas communications, etc., The digital solutions and services provided by Goldcard were recognized by the Economic and Cultural Protection Detachment of the Municipal Public Security Bureau, and were awarded the "Advanced Collective for Space Security Work of Underground Pipelines in the Asian Games", becoming the only private enterprise to have received this honor.



#### 塞例 全方位保供亚运:

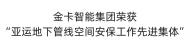
#### 金卡智能旗下天信仪表收到金华中燃感谢信

All aspects guarantee supply for Asian Games: Tancy Instrument, a subsidiary of Goldcard Smart Group, receives thanks letter from China Gas Jinhua branch

在亚运会期间,金卡智能在杭州、温州、金华等地部署了百台智能燃气流量计、智能水务流量计,并配备专业运维团队服务一线,保供 亚运。金卡智能旗下天信仪表收到一封来自金华中燃城市燃气发展有限公司的感谢信。金华中燃对天信仪表在亚运会期间组织专业人员驻守 金华提供专业指导,并保障亚运赛事场馆燃气安全平稳运行表示感谢。

During the Asian Games, Goldcard Smart Group deployed one hundred smart gas flow meters and smart water flow meters in Hangzhou, Wenzhou and Jinhua, and equipped with professional operation and maintenance team to serve the front line and ensure the supply for the Asian Games. Tancy Instrument, a subsidiary of Goldcard Smart Group, received a thanks letter from China Gas Jinhua City Gas Development Co., who expressed its gratitude to Tancy Instrument for organizing professional staff stationed in Jinhua to provide professional guidance during the Asian Games and guaranteeing the safe and smooth operation of gas in the venues of the Asian Games.







金卡智能旗下天信仪表 收到金华中燃感谢信

## CHAPTER ONE

## 第一章

## 共筑数智生态 推动行业高质量发展

BUILDING A DIGITAL ECOSYSTEM TO PROMOTE HIGH-QUALITY DEVELOPMENT OF THE INDUSTRY.

2023年10月25日,国家数据局正式揭牌。国家数据局成立的首要任务即建立数据基础制度,构建数字经济时代的规则体系。同时统筹推进数字中国、数字经济、数字社会规划和建设,协调推进数据基础制度建设,统筹数据资源整合共享和开发利用,全面赋能经济社会发展。

On October 25, 2023, the National Data Bureau was officially inaugurated. The first task of the National Data Bureau is to establish a data base system and build a rule system in the era of digital economy. At the same time, it will coordinate the planning and construction of digital China, digital economy and digital society, coordinate the construction of the data foundation system, coordinate the integration and sharing of data resources and their development and utilization, and comprehensively empower economic and social development.

面对千行百业的数字化转型趋势,金卡智能通过物联网、云计算、大数据、人工智能等技术,与客户、合作伙伴共筑数智生态,打造感知端、物联端、应用端,帮助能源行业加速释放数字生产力,推动能源行业高质量发展。

Facing the digital transformation trend of thousands of industries, Goldcard Smart Group, through the Internet of Things, cloud computing, big data, artificial intelligence and other technologies, builds a digital intelligence ecosystem with customers and partners, creates the sensing end, the Internet of Things end, and the application end, helps the energy industry to accelerate the release of digital productivity, and promotes the high-quality development of the energy industry.

截止2023年,金卡智能已经在全球部署了6000多万台物联网智能终端,5500多万台NB-IoT智能终端,智能燃气表全球市场占有率第一。物联网平台接入3000多万台智能终端,云服务为亿级用户提供便利。

As of 2023, Goldcard Smart Group has deployed more than 60 million IoT smart terminals globally, more than 55 million NB-IoT smart terminals, and the smart gas meters have the first global market share. The IoT platform accesses more than 30 million smart terminals, and the cloud service provides convenience for hundreds of millions of users.



#### 案例 赋能数智水务,打造美好生活! 浙江金瓯水务科技揭牌启航

Empowering Digital Smart Water, Creating a Better Life! Zhejiang Jin'ou water science and technology unveiled and set sail



温州苍南政府、温州公用集团与金卡智能集团合资成立的浙江金瓯水务科技有限公司,此次合资公司的成立,为二次供水的落地提供全新范式,为加快构建节能节水、漏损管控、安全高效的数字水务行业提供有力支撑,为加快数字基建、增进民生福祉、赋能城市治理提供全面保障,为公用事业高质量发展注入新活力。

Wenzhou Cangnan Government, Wenzhou Public Utilities Group and Goldcard Smart Group joint venture Zhejiang Jinou Water Technology Co., Ltd. the establishment of this joint venture for the landing of the secondary water supply to provide a new paradigm for accelerating the construction of energy-saving and water conservation, leakage control, safety and efficiency of the digital water industry to provide a strong support for accelerating the digital infrastructure, enhance the well-being of people's livelihoods, empowering the urban governance to provide a full safeguard for the public utility injecting new vitality into the high-quality development of public utilities.

#### **囫** 苏伊士与金卡水务签订战略合作,联合打造数字水务

SUEZ and Goldcard Water sign strategic partnership to jointly build digital water services

金卡智能旗下金卡水务科技有限公司和中法水务管理(中山)有限公司(简称"苏伊士")签订战略合作协议。双方将在智慧水务行业的自动化、信息化、数据化、智能化解决方案领域深入合作,结合各自优势互补有无,联合打造引领行业标准的多元场景智慧建设方案,助力水务行业管理增效、优化信息科技服务,为数字化转型释放更多的"数智"生产力。

Goldcard Water Technology Co., Ltd., a subsidiary of Goldcard Smart Group, and Sino-French Water Management (Zhongshan) Co.,Ltd., signed a strategic cooperation agreement. The two sides will cooperate in the field of automation, informatization, data and smart solutions in the smart water industry, combine their respective advantages to complement each other, jointly create industry-standard intelligent construction solutions for multiple scenarios, help the water industry manage efficiency, optimize information technology services, and unleash more "digital intelligence" for digital transformation productivity.





#### <sup>案例</sup> 金卡智能助力嘉善打造燃气高质量发展 "新引擎"! 助力实施数字经济"一号工程"

Goldcard Smart Group Helps Jiashan Build a "New Engine" for High-quality Development of Gas! Helping to Implement the "No. 1 Project" of Digital Economy

嘉善县是目前全国唯一的县域高质量发展示范点,深入实施数 字经济"一号工程"。金卡智能助力嘉善构建数字燃气平台,按照 "顶层设计,分步实施"的建设原则,引入AI、大数据、区块链、 数字孪生等前沿技术,围绕优化管理、服务百姓、强化安全等方 面,集成多套子系统,集监测预警、日常运营、设备管理、智能调 度、应急指挥、智能考核于一体,实现"一网统管",实现优化营 商环境,提升燃气安全,合力推进嘉善地区数字生态体系建设。

Jiashan County is currently the only demonstration site for high-quality development in the country, and is deeply implementing the "No. 1 Project" of the digital economy. Goldcard Smart is assisting Jiashan in building a digital gas platform. According to the construction principle of "top-level design and stepby-step implementation", it introduces cutting-edge technologies such as AI, big data, block-chain, and digital twins. It integrates multiple subsystems around optimizing management, serving the people, strengthening security, and integrates monitoring and early warning, daily operations, equipment management, intelligent dispatching, emergency command, and intelligent assessment. It realizes "one network unified management", optimizes the business environment, improves gas safety, and promotes the construction of a digital ecosystem in Jiashan.



#### 新疆浩源携手金卡智能共建数字燃气平台 实现从0到1的信息化建设

Xinjiang Haoyuan and Goldcard Smart Group Co-build a digital gas platform to realize the information construction from 0 to 1



新疆浩源与金卡智能携手共建物联网管理平台、大数据平台、 GIS、巡检、客户服务系统、应急管理系统等10多套系统,实现新 疆浩源从0到1的信息化建设,实现设备统一管理和数据统一采集, 加强智慧服务水平,优化营商环境,强化用气安全管理,为城市安 全保驾护航,降低供销差,为企业降本增效,提供可视化、数字化管 理手段,提高决策经营科学性,助力提升新疆地区燃气信息化建设。

Xinjiang Haoyuan and Goldcard Smart Group jointly build more than 10 systems including IoT management platform, big data platform, GIS, inspection, customer service system, emergency management system, etc., to realize the information construction of Xinjiang Haoyuan from 0 to 1, realize the unified management of equipment and unified collection of data, strengthen the level of intelligent service, optimize the business environment, strengthen the safety management of gas use, escort the city security, reduce the supply and marketing gap, reduce the cost and improve efficiency for enterprises, provide visual and digital management means, improve the scientific decision-making and operation, and help to enhance the information construction of gas in Xinjiang.

#### <sup>案例</sup> 金卡智能旗下金卡水务助力龙门县打造首座智慧水厂上线! 实现无人值守、全自动生产

Goldcard Water helped Longmen County build the first smart water plant online!Realizing unattended and fully automated production

金卡水务与龙门县水务慕思嘉华水厂达成合作,通过新一代信 息技术与水务技术的深度融合,成功上线并运行"智慧水务"系 统,助力龙门县打造县域首座智慧水厂,实现24小时不间断、连续 监测与远程监控水质,实现无人值守、全自动生产,让水务业务系 统的控制智能化、数据资源化、管理精确化、决策智慧化,保障水务 设施安全运行,使水务业务运营更高效、管理更科学和服务更优质。

Goldcard Water and Longmen County Water Works MUSI Jiahua Water Works have reached a cooperation agreement. Through the deep integration of new generation information technology and water technology, the "Smart Water" system has been successfully launched and operated, helping Longmen County to build the first smart water plant in the county, realizing 24-hour uninterrupted, continuous monitoring and remote monitoring of water quality, achieving unattended, fully automated production, making the control of water business system intelligent, data resource, management precise, decision-making wise, ensuring the safe operation of water facilities, making water business operation more efficient, management more scientific and service more quality.



#### 案例 CASE

#### "0.01立方米的关爱" 很温暖 金卡水务智能水表守护独居老人

"0.01 cubic meter of care" is very warm, and the smart water meter of Goldcard Water keeps watch over the elderly living alone

江苏太仓的不少独居老人都免费用上了金卡智能旗下金卡水务智能水表。当24小时内读数低于0.01立方米时,智能水表将会发出预警信息,为老人增设一重"数字守护"。这项举措被老人们称赞为"0.01立方米的关爱"。金卡水务智能水表可实时监测用户居家用水量,一旦用水出现异常情况,智慧水务平台立即报警,便于及时上门,为独居老人提供服务和援助。

Many elderly people who are living alone in Taicang, Jiangsu have used the Goldcard Smart Water Meter for free. When the reading falls below 0.01 cubic meters within 24 hours, the smart water meter will send a warning message, adding a "digital guard" for the elderly. This measure has been praised by the elderly as "0.01 cubic meters of care". The Goldcard smart water meter can monitor the water consumption of users at home in real time. Once there is an abnormal situation in water usage, the intelligent water platform will immediately report to the police, making it convenient for timely door-to-door visits and providing services and assistance for elderly people living alone.



安装金卡水务智能水表



## 金卡水务助力阳谷县数字水务发展全力做好农村供水保障工作

Goldcard Water Services Assists the Development of Digital Water services in Yanggu County and Strives to Ensure Rural Water Supply



据当地村民反映,"以往村里经常停水,村民使用自来水都是定时、定量的,缴费还得专门跑一趟营业厅。"为解决农村村民用水困难、缴费难等问题,金卡水务携手阳昇水务对整个阳谷县实施了数字水务改造,给当地村民安装了智能机械阀控水表,定时将数据汇总采集系统,协助水司掌握各村镇实时用水情况,针对用水异常、设备异常等情况及时做出反馈。

According to the feedback from local villagers, "In the past, the village often had no water supply, and the villagers used tap water at a fixed time and in a fixed amount. They also had to go to the business hall to pay for the bills." To solve the problems of water use and payment difficulties for rural villagers, Goldcard Water and Yangsheng Water carried out a digital water management transformation of the entire Yanggu County, installing intelligent mechanical valve controlled water meters for local villagers, regularly summarizing and collecting data systems, and assisting the water company in grasping the real-time water use situation of each village and town, and providing timely feedback on abnormal water use and equipment error.

## CHAPTER TWO

## 第二章

## 共建安全体系 打造韧性宜居智慧城市

JOINTLY BUILD A SAFE SYSTEM AND CREATE A RESILIENT AND LIVABLE SMART CITY

习近平总书记在党的二十大报告中指出,打造宜居、韧性、智慧城市,旨在不断提升城市环境质量、人民生活质量、城市竞争力。要求实施基础设施补短板和更新改造专项行动,建设集约高效、经济适用、智能绿色、安全可靠的现代化基础设施体系。要求建设安全健康、设施完善、管理有序的完整居住社区。

The general-secretary of Communist Party Mr XI Jinping pointed out in the report of the 20th National Congress of the Communist Party of China that building livable, resilient, and smart cities aims to continuously improve city environmental quality, people's quality of life, and city competitiveness. Require the implementation of special actions to address infrastructure shortcomings and upgrade, and build a modern infrastructure system that is intensive, efficient, economically applicable, intelligent, green, safe, and reliable. Require the construction of a safe and healthy, well-equipped, and orderly managed complete residential community.

金卡智能积极贯彻党的二十大发展方针,推出的燃气安全生命线解决方案、二次供水综合解决方案、智慧 直饮水解决方案等已在全国落地,有效保障供水供气安全,为百姓提供安全、安心、安稳的居住环境,守护城 市安全。

Goldcard Smart Group actively implements the development policy of the 20th CPC National Congress, and has launched gas safety lifeline solutions, comprehensive solutions for secondary water supply, and smart direct drinking water solutions, which have been implemented nationwide to effectively ensure the safety of water and gas supply, provide a safe, secure, and stable living environment for the people, and safeguard urban security.



#### <sup>案例</sup> 格兰富与金卡智能签署共建绿色高效供水基础设施战略合作协议

Grundfos and Goldcard Smart Group sign strategic cooperation agreement to build a green and efficient water supply infrastructure

格兰富(中国)投资有限公司(简称"格兰富公司")与金卡 智能签署共建绿色高效供水基础设施的战略合作协议, 双方基于对 可靠的城市供水系统与人民用水安全的共同关心、对稳定高效的供 水设施所具有重要战略意义的共识,就提升优化城市供水设施建设 与智慧供水建设达成合作,助力人民用水安全。

Grundfos (China) Investment Co., Ltd. (referred to as "Grundfos") and Goldcard Smart Group had signed a strategic cooperation agreement to jointly build green and efficient water supply infrastructure. Based on their common concern for reliable city water supply systems and water-using safety, and the important strategic significance of stable and efficient water supply facilities, the two sides have reached a cooperation on improving and optimizing the construction of city water supply facilities and smart water supply, to help people's water-using safety.





#### 温州执法推广"瑞安模式"! 金卡智能燃气安全多维预警,确保"城市生命线"安全运行

Wenzhou Law Enforcement Promotes the "Rui'an Model"! Goldcard smart gas safety multi-dimensional warning to ensure the safe operation of the "urban lifeline"

为进一步提升城市燃气安全运行管理水平和防灾减灾能力,瑞 安市综合行政执法局联合金卡智能创新打造"管道燃气安全监测预 警系统",全面整合监测预警、研判分析、可视一张图、管理驾驶 舱等九大模块,在市区范围内316公里地下燃气管网安装1000个多 维传感"监测仪,为管道燃气配上智能"安全锁",实现隐患排查速 度和精准度提高80%,为百姓安全保驾护航。

In order to further improve the level of city gas safety operation management and disaster prevention and reduction capabilities, Rui'an Comprehensive Administrative Law Enforcement Bureau, in collaboration with Goldcard Smart Group, has created a "Pipeline Gas Safety Monitoring and Early Warning System", which comprehensively integrates nine modules including monitoring and early warning, analysis, visualization of a single map, and management of the cockpit, 1000 multi-dimensional sensing "monitors are installed in the 316 kilometer underground gas pipeline network within the city area, equipped with intelligent" safety locks "for pipeline gas, achieving an 80% increase in the speed and accuracy of hazard identification, and safeguarding the safety of the people.



#### 强化河北赵县气代煤项目安全运行!金卡智能助力打造安全运行驾驶舱

安全运行驾驶舱项目,是石家庄国投集团所属国经公司蓝天能 源发展有限公司携手金卡智能,为强化赵县气代煤项目安全运行所 引入的实时监测系统。项目通过充分利用现代物联网、大数据、 AI分析等先进技术手段,将电子地图、GIS管网信息与管道运行、交 叉施工监管、供气量动态监控等业务的高度集成,构建了"一张网 检测、一平台统筹、一张图可视"的一体化、可视化的数字平台, 极大地提高了燃气管网的安全管理水平,为企业数字化、智能化赋 能,为科技兴安、创新发展保驾护航。

The Safe Operation Cockpit Project is a real-time monitoring system introduced by Blue Sky Energy Development Co., Ltd., a subsidiary of Shijiazhuang CIC Group, in collaboration with Goldcard Smart Group, to strengthen the safe operation of the Zhao County Coal to Gas Project. The project fully utilizes advanced technologies such as modern IoT, big data, and AI analysis to highly integrate electronic maps, GIS pipeline network information with pipeline operation, cross construction supervision, and dynamic monitoring of gas supply. It constructs an integrated and visualized digital platform with "one network detection, one platform coordination, and one map visualization", greatly improving the safety management level of gas pipeline networks, empowering enterprises with digitization and intelligence, and safeguarding the development of technology and innovation.





#### 案例 聚焦民生水先行!

#### 卡水务以大运会为契机,创新科技赋能成都智慧饮水

Focus on Livelihood Water First!

Goldcard Water takes the opportunity of the Universiade to innovate technology and empower smart drinking water in Chengdu

成都高新区社事投资发展有限公司以第31届大运会为契机,联合苏伊士智慧水务和金卡水务,在成都高新区多个公园打造的直饮水便 民工程,该工程在公共人流密集处安装直饮水机,运用物联网、大数据及云计算等创新技术为直饮水智慧站点赋能,实时展示直饮水出水量 和水质数据,为市民提供便捷、安全且高效的饮水服务,让市民和国际友人喝上更高品质饮用水。

Chengdu High Tech Zone Social Investment and Development Co., Ltd., taking the 31st Universiade as an opportunity, collaborated with Suez Smart Water and Goldcard Water to create a convenient direct drinking water project in multiple parks in Chengdu High Tech Zone. The project installs direct drinking water dispensers in areas with high public pedestrian flow, empowers direct drinking water smart sites with innovative technologies such as the Internet of Things, big data, and cloud computing, and displays real-time data on direct drinking water output and quality, providing convenient, safe, and efficient drinking water services for citizens and international visitors to drink higher quality drinking water.





#### <sup>案例</sup> 金卡水务携手多家水务企业完成二供项目改造*,* 为数万户百姓解决"最后一公里"饮用水安全

Goldcard Water collaborated with multiple water companies to complete the renovation of secondary supply projects, Solving the "last mile" drinking water safety problem for tens of thousands of households

成都高新区社事投资发展有限公司以第31届大运会为契机,联 合苏伊士智慧水务和金卡水务,在成都高新区多个公园打造的直饮 水便民工程,该工程在公共人流密集处安装直饮水机,运用物联 网、大数据及云计算等创新技术为直饮水智慧站点赋能,实时展示 直饮水出水量和水质数据,为市民提供便捷、安全且高效的饮水服 务,让市民和国际友人喝上更高品质饮用水。

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## CHAPTER THREE

## 第三章

## 共行科技创新 实现国产化突破

JOINTLY PROMOTE TECHNOLOGICAL INNOVATION AND ACHIEVE LOCALIZATION BREAKTHROUGH

2023年4月21日,二十届中央全面深化改革委员会第一次会议审议通过了《关于强化企业科技创新主体地位的意见》。指出强化企业科技创新主体地位,是深化科技体制改革、推动实现高水平科技自立自强的关键举措。要聚焦国家战略和产业发展重大需求,加大企业创新支持力度,推动企业在关键核心技术创新和重大原创技术突破中发挥作用。

April 21st 2023,the first meeting of the 20th CPC Central Committee's Committee for Comprehensively Deepening Reform deliberated and adopted the "Opinions on Strengthening the Dominant Position of Enterprises in Scientific and Technological Innovation". It pointed out that strengthening the dominant position of enterprises in scientific and technological innovation is a key measure to deepen the reform of the science and technology system and promote the realization of high-level scientific and technological self-reliance. We should focus on national strategies and major demands for industrial development, increase support for enterprise innovation, and promote enterprises to play a role in key core technological innovation and major original technological breakthroughs.

金卡智能牢牢把握"科技是第一生产力"的时代脉搏,通过科技创新,持续为客户创造价值。截止目前,公司荣获国家级专精特新小巨人企业、浙江省重点企业研究院、浙江省知识产权示范企业等多项荣誉,设有1个省博士后工作站,拥有了1700多项知识产权,880多项国家专利,主编、参编百余项标准起草。

Goldcard Smart Group firmly grasps the key point of the era of "science and technology are the primary productive forces" and continues to create value for customers through technological innovation. Till now, the company has won multiple honors such as National Specialized, Refined, Unique, and New Small Giant Enterprise, Zhejiang Key Enterprise Research Institute, and Zhejiang Intellectual Property Demonstration Enterprise. It has one provincial postdoctoral workstation, owns more than 1700 intellectual property rights, 880 national patents, and is the editor in chief and participated in drafting more than 100 standards.

同时,公司突破"卡脖子"技术,实现高端设备国产化,打破国际垄断。超声波流量计取得了全国首家 MID 0.5级证书,已成功应用在长输管道的"三桶油"及燃气企业大中型场站,并在2023年成功入围国家管网框架采购

At the same time, the company breaks through the bottleneck technology, realizes the localization of high-end equipment, and breaks international monopolies. The ultrasonic flowmeter has got the first class 0.5 MID certificate in China and has been successfully applied in large and medium-sized stations of "three barrels of oil" and gas enterprises in long-distance pipelines. In 2023, it was successfully shortlisted for the national pipeline network framework procurement.





## 能源领域国产化进程坚实的一步: 江西省天然气投资与金卡智能达成战略合作

A Solid Step in the Localization Process of Energy Sector: Jiangxi Province's Natural Gas Investment and Goldcard Smart Group Achieve Strategic Cooperation



江西省天然气投资有限公司与金卡智能签署战略合作协议,双方将利用江西天然气市场影响力、专业规模化的长输管线领域行业优势, 及金卡智能在天然气流量计专业领域的研发和规模生产试验能力,开展天然气领域的广泛合作,共同提升国产气体超声流量计计量系统应用 方面的技术水平,提高产品适用本土应用的特性,共同探索国产超声计量应用,打破国际垄断局面,提升设备国产化率,为行业创造更多价值。

Jiangxi Natural Gas Investment Co., Ltd. and Goldcard Smart Group had signed a strategic cooperation agreement. The two parties will use the influence of Jiangxi's natural gas market, professional advantages in the field of long-distance pipelines, and Goldcard Smart Group's research and development and large-scale production testing capabilities in the field of natural gas flow meters to carry out extensive cooperation in the natural gas field, jointly improve the technical level of domestic gas ultrasonic flow meter measurement systems, enhance the characteristics of products suitable for local applications, jointly explore domestic ultrasonic measurement applications, break international monopolies, improve equipment localization rates, and create more value for the industry.



#### 国产硬核实力!

#### ₹智能旗下天信仪表TUS型气体超声流量计荣获ATEX及IECEx认证

-in-China Hardcore Strength! Goldcard Smart Subsidiary Tancy Instrument TUS Ultrasonic Gas Flowmeter Passed ATEX and IECEx Certification

金卡智能旗下天信仪表自主研发的TUS型气体超声流量计荣获 ATEX及IECEx双重认证,是继国内首个被NMI授予OIML0.5级证书 后,取得的又一重量级认证。此产品已成功应用在长输管道的"三 桶油"及燃气企业大中型场站,并且在2023年入围国家管网框架采 购。打破了国外品牌对国内长输天然气管道计量设备的长期垄断, 还取得走向国际市场的凭证,为高端国产化燃气高压超声流量计走 向世界打下基础。

Goldcard Smart subsidiary Tancy TUS ultrasonic gas flowmeter has successfully passed ATEX and IECEx certification, it is another heavyweight certification after passing the class 0.5 OIML certification in NMI. This product has been successfully applied in the long-distance pipeline of China National Petroleum Corporation (CNPC), China Petrochemical Corporation (Sinopec) and China National Offshore Oil Corporation (CNOOC), and large and medium-sized stations of gas enterprises, and it has successfully shortlisted in PipeChina's framework procurement in 2023. Breaking the long-term monopoly of foreign brands on domestic long-distance natural gas pipeline metering equipment, also obtaining the credentials of the international market, laying the foundation for moving forward high-end localized high-pressure gas ultrasonic flowmeter to the world.





#### 金卡智能旗下天信T3RM腰轮流量计完成在德国Pigsar的实流测试

Goldcard subsidiary Tancy T3RM Rotary Flowmeter completed actual gas flow testing in Pigsar, Germany

金卡智能旗下天信仪表T3RM型气体腰轮流量计通过了在德国联邦物理技术研究院(PTB)旗下Pigsar的实流测试(精准度达到0.2级),成为国内首个获得该认证的三转子高压腰轮流量计。该设备采用多项发明创新技术,具有计量精度高、重复性好、脉动小、工作压力高等特点,由三对转子以特定的角度并排组合成一个计量组,有效改善单组转子的计量脉动问题。

The T3RM rotary gas flowmeter of Tancy Instrument, has passed the real gas flow test at Pigsar, a subsidiary of the German Federal Institute of Physical Technology (PTB), with an accuracy of class 0.2, becoming the first three rotor high-pressure rotary flowmeter in China to have obtained this certification. This device adopts multiple innovative technologies and features high measurement accuracy, good repeatability, small pulsation, and high working pressure. It is composed of three pairs of rotors arranged side by side at specific angles to form a measurement group, effectively improving the measurement pulsation problem of a single rotor group.



#### 案例 CASE

#### 金卡智能集团两个项目荣获2022年度浙江省科学技术进步奖

Two projects of Goldcard Smart Group won the 2022 Zhejiang Province Science and Technology Progress Awards

省科技厅公布2022年度浙江省科学技术奖获奖名单,共有298项成果(项目)获省自然科学奖、技术发明奖和科学技术进步奖。其中,金卡智能《燃气流量精准计量与智慧物联技术研发及产业化应用》、《面向多气源脉动流的天然气能量计量物联网监测技术及应用》两个项目,分别荣获2022年度浙江省科学技术进步奖二等奖和三等奖。

The Provincial Department of Science and Technology has announced the list of awards for the 2022 Zhejiang Provincial Science and Technology Award, with a total of 298 achievements (projects) winning the Provincial Natural Science Award, Technology Invention Award, and Science and Technology Progress Award. Among them, Goldcard Smart Group's two projects, "Research and Industrialization of Gas Flow Precision Measurement and Intelligent IoT Technology" and "IoT Monitoring Technology and Application of Natural Gas Energy Measurement for Multi source Pulsating Flow", won the second and third prizes of the Zhejiang Province Science and Technology Progress Award in 2022, respectively.



燃气流量精准计量与智慧物联技术研发及产业化应用》主要针对燃气行业流量计量准确可靠、数智化能力提升的行业难题,研发了系列燃气流量计量仪表和智慧分析平台。目前全国已有广州燃气等1000多家燃气公司应用了该项目的智慧分析平台,智慧物联分析相关技术也推广到全国智慧燃气和智慧水务等多个应用场景。

The research and industrialization application of precise gas flow measurement and intelligent IoT technology mainly focuses on the industry challenges of accurate and reliable flow measurement, as well as the improvement of digital capabilities in the gas industry. A series of gas flow measurement instruments and intelligent analysis platforms have been developed. At present, more than 1000 gas companies including Guangzhou Gas have applied the smart analysis platform of this project nationwide, and the related technologies of smart IoT analysis have also been promoted to multiple application scenarios such as smart gas and smart water management nationwide.

面向多气源脉动流的天然气能量计量物联网监测技术及应用》主要针对多气源脉动流下的天然气能量计量的需求和技术难点,开展了深入的理论分析和试验研究。目前已为浙江省天然气集输管网的40多个门站等提供了计量技术服务,有效推动了我国的天然气能量计价体系的建设。

The IoT monitoring technology and application of natural gas energy measurement for multi source pulsating flow mainly focuses on the needs and technical difficulties of natural gas energy measurement under multi source pulsating flow, and conducts in-depth theoretical analysis and experimental research. At present, we have provided measurement technology services for more than 40 gate stations in the natural gas gathering and transmission pipeline network in Zhejiang Province, effectively promoting the construction of China's natural gas energy pricing system,





## **CHAPTER FOUR**

## 第四章



#### 节能减排,促进绿色可持续发展

ENERGY CONSERVATION AND EMISSION REDUCTION, PROMOTING GREEN AND SUSTAINABLE DEVELOPMENT

新能源建设关系到大国的低碳转型、能源安全和能源服务水平。各国纷纷出台政策坚定"双碳"目标,保障绿电发展,支持光伏产业。 党的二十大报告强调"加快规划建设新能源体系""积极稳妥推进碳达峰碳中和"。得益于政策支持与技术发展,光伏成为绿电之基,"绿电 +储能"是最终梦想。

The construction of new energy is related to the low-carbon transformation, energy security, and energy service level of major countries. Various countries have introduced policies to firmly adhere to the "carbon peaking and carbon neutrality" goals, ensure the development of green electricity, and support the photovoltaic industry. The report of the 20th National Congress of the Communist Party of China emphasizes "accelerating the planning and construction of a new energy system" and "actively and steadily promoting carbon peak and carbon neutrality". Thanks to policy support and technological development, photovoltaics have become the foundation of green electricity, and "green electricity+energy storage" is the ultimate dream.

2023年,苍南县工业建设投资有限公司与金卡智能旗下天信新能源公司合资成立的温州金苍新能源有限公司,致力于"清洁低碳能源事业的推动,绿水青山就是金山银山理念的践行,人类生态文明可持续发展的循环",是一家专业从事光储系统工程及服务的公司。

In 2023, Wenzhou Jincang New Energy Co., Ltd., jointly established by Cangnan County Industrial Construction Investment Co., Ltd. and Tancy New Energy Co., Ltd., a subsidiary of Goldcard Smart Group, is committed to promoting the clean and low-carbon energy industry, practicing the concept of "green mountains and clear waters are the essence of gold and silver", and promoting the sustainable development of human ecological civilization.lt is a professional company engaged in optical storage system engineering and services.

光伏发电系统是安全、绿色可持续的清洁能源,在发电过程中零排放、零污染,有效减低对周边环境的影响。

Photovoltaic power generation system is a safe, green and sustainable clean energy source, with zero emissions and pollution during the power generation process, effectively reducing the impact on the surrounding environment.



#### 自发自用 Self generation self use

享受电费优惠,降低电费支出。

Enjoy electricity tariff discounts and reduce electricity expenses.



#### 保障生产 Ensuring production

光伏可以缓解夏季限电危机,不再完全依赖电网,可保障生产有序。

Photovoltaics can alleviate the summer power shortage crisis, no longer relying solely on the power grid, and can ensure orderly production.



#### 延长屋面使用寿命 Extend the service life of the roof

彩钢瓦屋顶的寿命为10~15年,安装光伏后彩钢瓦维护由投资方承担。

The service life of the color steel tile roof is 10-15 years, and the maintenance of the color steel tile after the installation of photovoltaics is borne by the investor.



#### 调温 Temperature regulation

夏天可作隔热层,一般可以降低室内温度2~3℃。冬天可作保温层,有效保持室温。

It can be used as an insulation layer in summer and can generally lower the indoor temperature by 2-3 °C. In winter, it can be used as an insulation layer to effectively maintain room temperature.



#### 提升企业形象 Enhance corporate image

降低企业能耗,完成政府要求的节能指标。

Reduce energy consumption and achieve energy-saving targets required by the government.



#### 推进温州苍南公共光伏建设,为高质量发展积蓄绿色动能

Promoting the construction of public photovoltaics in Cangnan, Wenzhou, and accumulating green energy for high-quality development.

2023年,温州金苍新能源有限公司分别为苍南县政府会议中心、苍南书城及青年创业园进行分布式光伏项目建设。三个项目均采用自发自用余电上网方式,苍南县政府会议中心建设容量83kWp,年发电量8.3万千瓦时;苍南书城建设容量183kWp,年发电量18万千瓦时;青年创业园建设容量200kWp,年发电量20万千瓦时

In 2023, Wenzhou Jincang New Energy Co., Ltd. will carry out distributed photovoltaic project construction for the Cangnan County Government Conference Center, Cangnan Book City, and Youth Entrepreneurship Park. All three projects adopt a Self generation self use surplus electricity grid connection method. The construction capacity of the Cangnan County Government Conference Center is 83kWp, with an annual power generation of 83000 kilowatt hours; The construction capacity of Cangnan Book City is 183kWp, with an annual power generation of 180000 kilowatt hours; The construction capacity of the Youth Entrepreneurship Park is 200kWp, with an annual power generation of 200000 kilowatt hours.



#### 当下,光伏发电与储能系统深度融合的光储一体化发展是大势所趋,光储一体化具有以下四大优势:

At present, the integration of photovoltaic power generation and energy storage systems is the trend, and the integration of photovoltaic and energy storage has the following four advantages:

#### 削峰填谷 Peak shaving and valley filling

通过谷时充电储能、峰时放电供能减少企业或园区的用电成本,为客户节约用电端电费。

By charging and storing energy during valley hours and discharging energy during peak hours, the electricity cost of enterprises or parks can be reduced, saving customers electricity costs.

#### 需求响应 Demand response

当短期用电功率大于变压器容量时, 储能系统进行快速放电, 满足负载电能需量要求。

When the short-term power consumption exceeds the capacity of the transformer, the energy storage system will perform rapid discharge to meet the load energy demand requirements.

#### 离网备电 Off grid backup

在电力中断时,为重要负载进行不间断短时供电,减少由于负载突然掉电造成的经济损失。

In case of power interruption, provide uninterrupted short-term power supply to important loads to reduce economic losses caused by sudden power outages.

#### 电力交易 Electricity trading

在电力市场交易平台上,结合负荷预测进行短期电力交易,实现收益最大化。

Combining load forecasting with short-term electricity trading on the electricity market trading platform to achieve maximum returns.

#### 案例

#### 打造光储一体化低碳产业园,助力双碳目标

Building an integrated low-carbon industrial park for light storage to support the dual carbon goals

天信园区光储一体化项目由温州金苍新能源有限公司负责整体方案设计及实施,该项目以打造低碳产业园为目标,将分布式光伏、储能深度融合,有力促进园区产业绿色化发展、能源低碳化转型、设施集聚化共享、资源循环化利用。天信园区在光伏建设方面采用自发自用余电上网方式,建设容量1000kWp,年发电量100万千瓦时,同时部署2台储能一体机,90天内收益6.3万。

The integrated photovoltaic and energy storage project in Tancy Park is designed and implemented by Wenzhou Jincang New Energy Co., Ltd. The project aims to create a low-carbon industrial park, deeply integrating distributed photovoltaics and energy storage, effectively promoting the green development of the park's industry, low-carbon energy transformation, facility aggregation and sharing, and resource recycling. In terms of photovoltaic construction, Tancy Park adopts a self generation self use surplus electricity grid connection method, with a construction capacity of 1000kWp and an annual power generation of 1 million kilowatt hours. At the same time, two integrated energy storage machines are deployed, resulting in a revenue of 63000 yuan within 90 days.



#### 精益求精,促进品质可持续发展

STRIVING FOR EXCELLENCE AND PROMOTING SUSTAINABLE DEVELOPMENT OF OUALITY

公司以客户需求为导向,凭借先进的设计制造实力和健全的全过程质量管理体系,用"匠心精神"打磨中国智造,为高可靠性、高品质产品的生产研发提供有力支撑。

The company is oriented to customer needs, with advanced design and manufacturing strength and sound whole-process quality management system, polishing China's smart manufacturing with "craftsmanship", and providing strong support for the production and development of high-reliability and high-quality products.

公司全面通过ISO9001、ISO14001、ISO45001、ISO27001管理体系认证,实施BTO订单生产模式,推行TPS精益生产理念,通过机 联网系统和MES系统实时监测生产数据,实现生产过程的信息化管理,显著提升生产效率和质量控制。

The company has fully passed ISO9001, ISO14001, ISO45001, ISO27001 management system certification, implemented BTO order production mode, implemented TPS lean production concept, real-time monitoring of production data through the machine networking system and MES system, realizing the information management of the production process, and significantly improving production efficiency and quality control.

对供应商进行全面信息化管理,上线的SRM系统,涵盖供应商全生命周期管理,包括实时信息共享、协同工作和质量追溯等功能。

Carries out comprehensive information management of suppliers, and the SRM system on line covers the whole life cycle management of suppliers, including real-time information sharing, collaborative work and quality traceability.

采用MES系统进行生产信息化管理,包括自动化的生产线体管理、物料追溯、SPC管理和售后质量管理等,实现了从原材料采购到最终产品的全过程质量追踪和控制。

Adopts MES system for production information management, including automated production line body management, material traceability, SPC management and after-sales quality management, etc., which realize the whole processes of quality tracking and control from raw material purchasing to final products.

实施严格的质量检验流程,包括产品静态功耗分析、器件负载能力测试、通信性能测试等,并采用MES系统记录物料批次信息,确保质量检验数据与物料批次相匹配,实现源头到成品的追溯。

Implements strict quality inspection processes, including product static power consumption analysis, device load capacity testing, communication performance testing, etc. It also adopts the MES system to record material batch information to ensure that the quality inspection data matches the material batch and realize the traceability from the source to the finished product.

在产品检验环节,无论是生产过程中的检验还是出货前的检验,均与QMS系统保持信息同步,确保产品质量符合标准。

Keeps information synchronized with the QMS system in the product inspection process, whether it is in the production process or before shipment, to ensure that the product quality meets the standards.

#### 以人为本,促进人才可持续发展

PUTTING PEOPLE FIRST AND PROMOTING SUSTAINABLE DEVELOPMENT OF TALENTS

金卡智能集团以开放包容的胸怀,广阔吸纳各领域优秀人才,并始终坚持"以人为本"的发展理念,在向物联网企业转型发展的过程中,秉承着人尽其才、唯贤任用的宗旨。公司坚定保障员工合法权益,关注员工健康与安全,重视员工提升与发展,关注员工需求与员工携手共进美好未来。

Goldcard Smart Group, with an open and inclusive mind, has attracted outstanding talents from various fields, and always adheres to the development concept of "people-oriented". In the process of transforming and developing into an Internet of Things enterprise, it adheres to the principle of making the best use of talents and appointment based on merit. The company firmly safeguards the legitimate rights and interests of employees, pays attention to their health and safety, values their improvement and development, and pays attention to their needs to work together with them for a better future.

#### 保障员工健康安全

Protecting the Health and Safety of Employees

金卡智能集团获得环境管理体系认证和职业健康安全管理体系认证,并以此为基础实施生态管理,在所有的工作场所识别、确定存在的环境问题、安全隐患、职业健康危险因素,通过在整个工厂系统精确定位问题根源,提出相应的解决方案,采取预防措施。

Goldcard Smart Group has obtained environmental management system certification and occupational health and safety management system certification, and on the basis of these implements ecological management, to identify and determine the environmental problems, safety risks, occupational health risk factors in all workplaces, through the precise location of root causes in the factory system, put forward the corresponding solutions, take preventive measures.

公司定期开展隐患排查工作,严格排查工艺系统、基础设施、作业环境、防控手段等硬件方面存在的隐患,以及安全生产体制机制、制度建设、安全管理组织体系、责任落实、事故查处等薄弱环节,认真解决存在的突出问题,从而有效防范和遏制事故的发生。

The company regularly carries out hazard investigation work, strictly identifying hidden dangers in hardware aspects such as production process systems, infrastructure, working environment, and prevention and control measures, as well as weak links in safety production system mechanism, system construction, safety management organization system, responsibility implementation, accident investigation, etc., seriously solving prominent problems to effectively prevent and curb the occurrence of accidents.

2023年隐患排查计划实施情况:全年总计排查隐患246项,隐患整改率100%。主题内容为:1、日常及节前隐患排查;2、春夏季防汛防汛;3、防雷接地检查;4、消防专项检查。

Implementation status of the 2023 hidden danger investigation plan: a total of 246 hidden dangers were investigated throughout the year, with a 100% rectification rate for hidden dangers. The theme content is: 1. Daily and before holiday hazard investigation; 2. Flood control in spring and summer; 3. Lightning protection grounding inspection; 4. Special fire inspection.



#### 金卡智能开展多项紧急预案演练

Goldcard carried out a number of emergency plan drills

公司制定了健全的应急管理体系和应急管理预案,并组织员工开展各项培训及演练,提升突发事件发生时组织应急处理能力。 2023年公司分别组织了电梯困人救援的应急预案演练、化学品泄露应急救援演练、物流仓储消防疏散逃生应急演练、触电事故应急 预案等。

Goldcard Smart Group has formulated a sound emergency management system and emergency management plan, and organized employees to carry out various training and drills to improve the ability to organize emergency handling. In 2021, the company has carried out emergency plan drill for chemical leakage, elevator rescue and fire emergency.







#### 培训赋能员工发展

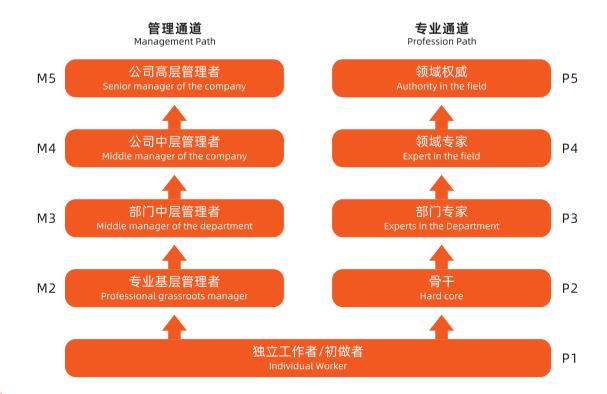
Training Enables Employee Development

金卡智能与员工并肩前行、共同成长。为激励员工潜力,实现自我提升,我们打造双通道职业发展路径,丰富人才培训与发展计划,全方位赋能员工。提供多样晋升通道。

Goldcard Smart Group moves forward and grows together with its employees. To motivate employees and achieve self-improvement, we have created a dual career development path, enriched talent training and development plans, fully empowered employees, and provided diverse promotion channels.

公司秉承 "公平公正、择优任用"的原则,建立内部晋升、轮岗等机制,为专业技术人员和管理人员提供相同的职位、薪酬及发展机会,充分发挥其自身优势。

The company adheres to the principles of "fairness, impartiality, and appointment based on merit", establishes internal promotion and rotation mechanisms, and provides professional and technical personnel and management personnel with the same positions, salaries, and development opportunities, fully leveraging their own advantages.



#### 开设多种培训项目

**Set Multiple Training Programs** 

#### 2023年度,为实现企业人才发展战略目标,经营目标,人力资源中心学习发展部立足于以下重点工作:

In 2023, in order to achieve the strategic and operational goals of enterprise talent development, the Learning and Development Department of the Human Resources Center focused on the following key tasks:

开展人才盘点,并通过继任计划培养等方式建立后备干部 长效的培养机制。

Carried out talent inventory and establish a long-term training mechanism for reserve cadres through succession planning and other methods.

按计划开展全集团通用管理类培训、领导力培训、新员工培训等项目,落实培训政策。

Carry out general management training, leadership training, new employee training and other projects for the entire group according to the plan, and implement training policies.

02 梳理人才培养发展体系,完善内训师管理制度。

Sort out the talent training and development system, and improve the management system for internal trainers.

04 致力培养卓越金卡人、培养领军人才,致力为实体企业的 持续发展贡献力量,成为员工成长的顾问、业务发展伙伴、 组织文化传承、实战价值平台。

Dedicated to cultivating outstanding Goldcard talents and leading talents, committed to contributing to the sustainable development of physical enterprises, becoming a consultant for employee growth, business development partner, organizational culture inheritance, and practical value platform.

#### 整体运营数据

03

Overall Operational Data

2023年度全年集团共新增74个培训项目,覆盖5662人次,总学时10304.86小时。

In 2023, the group added a total of 74 new training programs, covering 5662 people and a total of 10304.86 hours of learning.

#### 各层级人才培养

Talent Cultivation At All Levels

公司根据业务发展与不同层级、不同岗位的员工发展需要,制定系统性的学习发展规划与计划,培训内容涵盖成长力培训、专业力培训、文化力培训、领导力培训等,通过线上线下丰富的培训活动和课程,为员工提供不间断、贯穿式的培训资源,营造良好的组织学习氛围,持续打造极具竞争力的组织能力。公司亦鼓励员工自我学习提升学历,为员工提供多元的职业发展机会。

The company formulates a systematic learning and development plan based on business development and the development needs of employees at different levels and positions. The training content includes growth training, professional training, cultural training, leadership training, etc. Through rich online and offline training activities and courses, the company provides employees with uninterrupted and continuous training resources, creates a good organizational learning atmosphere, and continuously builds highly competitive organizational capabilities. The company also encourages employees to learn and improve their education, providing them with diverse career development opportunities.



#### 聚焦干部人才管理主体责任,,强化干部在组织能力升级、文化渗透、人才管理的责任 担当。大力支持高管参加EMBA、MBA等进修学习,通过参加行业论坛、会议、培训深入 了解行业发展趋势,组织青年领袖营等领导力培训,提升战略眼光、战略思维,支撑公 高层管理者 司战略执行发展。 Training on Focus on the responsibility sense of senior executives, strengthen their responsibility undertaking in technical upgrading organizational capacity, cultural penetration, and talent management. Support senior specialties executives to participate in EMBA、MBA and other further studies, and obtain in depth understanding of industry development trends through participating in industry forums, conferences and trainings. Organize leadership training such as youth leader camps to improve managers strategic vision and strategic thinking, and support the company's strategy implementation and development. 参与行业论坛、标杆参观、读书等活动,组织各类培训,从管理角色认知、管理工具方 法、到管理理念,全面提升管理能力,在完成重点战略任务中提升管理水平。 中层管理者 Participate in industry forums, benchmark business visits, reading and other activities, organize all kinds of Middle - Level training, from the management role cognition, management tools and methods, to the management Manager 分层级培训 concept, comprehensively improve the management ability, and improve the management skill level while completing key strategic tasks. Leveled training "学以致用"到"用以致学",从实践中萃取智慧经验,提炼具有实战指导意义的体系化 课程,做企业"训战结合"一体化培养。外部培训与内部培训相结合,导师在岗辅助,在 专业技能、行业知识等多方面进行培养,达成团队管理绩效。 基层员工 From "apply what you learn" to "learn what you do", extract wisdom and experience from practice, refine Staff the systematic courses with practical guiding significance, and complete the integrated training while practice in enterprises. External and internal training are combined with on-the-job assistance from mentors to develop professional skills, industry knowledge and other aspects to reach team management performance. 公司高度重视技术人员培训,包括外送研发人员学习先进技术及前沿趋势,如人工智能、大数据、云计算、物 联网、互联网等前沿技术及其应用;结合公司实际、岗位技能,组织内部技术分享;引入行业专家对预研工作 专业技能 进行培训指导,将前沿技术及其应用传递至每个人的同时打造内部人才梯队,激活内部中高级专家队伍,搭建 人才培养 完善课程体系,抓发展,促内生。 The company attaches great importance to the training of technical personnel, including sending out R&D personnel to learn advanced Training on technologies and cutting - edge trends, such as Artificial Intelligence, Big Data, Cloud Computing, Internet of Things, Internet and their technical specialties applications. Organizes internal knowledge sharing according to the actual work and job skills requirements. Introduces industry experts to provide training and guidance on pre-research projects, and transfer the cutting - edge technologies and their applications to everyone. At the same time, build the internal talent echelon, activate the internal middle and senior expert team, build and perfect the curriculum system, focusing on development, and promoting endogenous growth. 新员工入职后除参加新员工专项培训外,在试用期内全程安排导师辅导,制定试用期目标计划表,通过开展新 员工座谈、新员工培训,试用期管理等,保证新员工的快速融入及产出绩效。 In addition to participation in the dedicated new entrance training courses, new employees will be provided with tutor guidance during the probation period. Probation period target plan is drawn, together with the entrance discussion, new employee training and probation period management, to ensure the rapid integration and output performance of new employees . 培养方向 培养计划 培养对象 聚焦干部思维迭代与意识升级,导入基于<u>领导力提升的自我认知,</u> 青年领袖训练营 新员工培训 定位于公司中层管理干部自学互学、企业文化得以持续传承的平台。 领航计划 New employee training 计对新入司的社招新员工,以帮助能快速了解公司制度及常用 流程 领英计划 统筹各职能部门及业务部门的培训项目,提升专业能力,如营销春 耕计划;工程师训练营质量绿带、班组长训练营:集成产品开发IPD 金橙项目 "学以致用" 到 "用以致学" 从实践中萃取智慧经验,提炼具有实战 指导意义的体系化课程,做企业 "训战结合" 一体化培养。 青年干部训练营 对应届大学生快速融入职场的打造,支持校招生顺利融入环境,快 金种子计划 恵上手工作*,*并在工作中达成高绩效。

小金人训练营



#### "金种子"培训

Gold seed training

为引导和支持校招生从校园人向职场人的角色转身。支持校招生顺利融入环境,快速上手工作,并在工作中达成高绩效。帮助校招生正确理解、接纳认可公司的文化价值观,并支持校招生在公司获得良好的职业成长和发展。在这里以新员工0-90天融入与发展解决方案为案例,当新员工熟悉岗位后,需要对其进行转正考核,这个时候可以采用答辩以及绩效评价的方式相结合,来进行筛选。

To guide and support the transformation of campus students into professionals in school enrollment. Support the smooth integration of school enrollment into the environment, quickly get started with work, and achieve high performance in work. Assist the school admissions in correctly understanding and accepting the cultural values of the company, and support the school admissions in achieving good career growth and development in the company. Here, taking the 0-90 day integration and development solution for new employees as a case study, when new employees become familiar with their positions, they need to undergo a probationary assessment. At this time, a combination of defense and performance evaluation can be used to screen them.





#### 青年领袖营

Youth Leadership Camr

青年干部训练营是一项从金卡的企业发展战略出发,结合金卡人才培养的目标,提升组织凝聚力与战略执行力,提高组织的工作与管理效率的人才培养计划。其主要用团队行动学习打造学习型组织,层层递进。

The Youth Leadership Training Camp is a talent training program that starts from the development strategy of Goldcard Smart Group, combines the goals of Goldcard talent training, enhances organizational cohesion and strategic execution, and improves the efficiency of organizational work and management. It mainly uses team action learning to build a learning organization, progressing layer by layer.





#### 解决经营管理问题、急用促。

Level 1: Solving business management issues and promoting urgent use



掌握行动学习方法论、学以致用。

Level 2: Master the methodology of action learning and apply what is learned.



#### 觉察发展领导力、借事修人。

Level 3: Awareness and development of leadership, borrowing skills to cultivate individuals.



#### 融合跨部门团队、协同作战。

Level 4: Integrating cross departmental teams and collaborative operations.



打造学习型组织、引领文化面向金卡未来,打造一支卓越的领导者队伍。项目自2022年10月启动,2023年3月结业,完成4大核心能力,15个模块,50+微课的专业知识获取,知识分享,100余知识拓展,共有30余位金卡的青年潜才与重要岗位继任者顺利结业。

Level 5: Building a learning organization, leading culture towards the future of Goldcard, and building an outstanding leadership team. The project started in October 2022 and ended in March 2023, completing 4 core competencies, 15 modules, 50+ online courses for professional knowledge acquisition, knowledge sharing, and more than 100 knowledge expansion. More than 30 young potential talents and important position successors with goldcard have successfully graduated.

11月29日,由中国领先的人才发展平台CSTD主办的"第八届企业学习设计大赛决赛"圆满落幕,经过层层选拔,金卡智能与中兴通讯、卡游动漫、华友钴业、绿城、阳光电源等12家企业入围杭州综合赛区决赛,并凭借《青年干部训练营》项目在淬炼组织经验与干部梯队建设方面的创新与成效,摘得银奖。

On November 29th, the "8th Enterprise Learning and Design Competition Finals" hosted by China's leading talent development platform CSTD came to a successful conclusion. After multiple rounds of selection, 12 enterprises including Goldcard Smart Group, ZTE, Kayou Animation, Huayou Cobalt, Greentown, and Sunshine Power were nominated for the Hangzhou Comprehensive Competition Zone Finals. They also won a silver medal for their innovation and effectiveness in refining organizational experience and cadre team construction through the "Youth Leadership Training Camp" project.



#### 供应链培训

Supply Chain Training

围绕技术人才梯队发展需求,抓能力建设、抓知识沉淀。职业素养、专业技能、业务逻辑优化为支撑点,内部人才建设为核心,提升人员综合素质为出发点,供应链内部还自我进行了问题解决思路和方法专题课程学习。包含大绿带,精益制造及班组长培训,共计30门专业课程,60门通用课程及沙龙。

In combination with the development needs of the technical talent pool, we focus on capacity building and knowledge accumulation. Professional competence, professional skills, and business logic optimization are the support points, internal talent development is the core, improving the comprehensive quality of personnel is the starting point. Within the supply chain, we have also conducted specialized courses on problem-solving ideas and methods. Including the Green Belt, Lean Manufacturing, and Team Leader Training, a total of 30 professional courses, 60 general courses and salons.





#### 营销领英训练营

Marketing Elite Training Camp



营销领英训练营是培养营销管理储备,通过管理者角色和高效能,基于LTC的分析性销售流程管理等内容,从管理自我到管理他人转型,助力公司业务扩大。

The Marketing Elite Training Camp aims to cultivate marketing management reserves, transform from managing oneself to managing others, and help the company expand its business through managerial roles and high efficiency, based on the LTC(Lead to Cash) analytical sales process management and other content.

培训邀请PPI首席顾问刘起予老师,具备20多年跨国企业管理和培训经验,专注领导力发展,是情景领导中国Master Trainer、贝尔宾团队角色国际认证顾问、Everthing Disc国际认证顾问。

The training invited Professor Liu Qiyu, the chief consultant of PPI, with over 20 years of experience in multinational enterprise management and training, focusing on leadership development. He is a scenario leader China Master Trainer, an international certified consultant for the Belbin team role, and an Everything Disc international certified consultant.

#### 完善薪酬绩效管理

Improve Salary and Performance Management

2023年,金卡智能持续优化绩效管理体系,运用绩效管理工具,牵引组织聚焦市场与客户,推动集团业务发展,提升客户满意度和市场认可度。

In 2023, Goldcard Smart Group continue to improve and optimize the performance management system, use performance management tools to lead the organization to focus on the market and customers, promote group business development, enhance customer satisfaction and market recognition.

同时启动华营咨询项目,引入BLM战略工具,通过管理团队集体共创的方式,澄清集团战略,并进行战略解码,将集团战略规划分解为上下统一的绩效目标与行动计划,推动集团战略的落地执行。

At the same time, Goldcard Smart Group introduced the Huaying consulting project, inducted BLM strategic tools, clarified the group's strategy through the management team group co-working, and conducted strategic decoding, decomposed the group strategic plan into top-bottom unified performance goals and action plans, and promoted the implementation of the group's strategy.

#### 汇聚善力,促进公益可持续发展

GATHERING GOOD FORCES TO PROMOTE SUSTAINABLE DEVELOPMENT OF PUBLIC WELFARE

金卡智能积极投身于公益事业,回报社会。持续26年在捐资助学、关爱弱势群体、抗疫救灾等方面实施130多项公益项目,捐赠金额超过2800万,资教助学超过20家。

Goldcard Smart Group actively participates in public welfare undertakings and feedback to the society. it has continuously implemented more than 130 public welfare projects in providing donations, caring for vulnerable groups and anti-epidemic reliefs etc. in the past 26 years. Donation amount exceeds 28 million yuan, with over 20 schools providing funding and teaching assistance.

2018年,金卡智能正式成立公益基金会,基金会以"助人发展、助社会和谐、助生活美好"为使命,以"汇聚善力,创造更美好的未来"为愿景,聚焦教育支持、医疗救助、脱贫助困等领域,倡导和鼓励更多人关心民生、关爱他人、促进社会和谐发展。

In 2018, Goldcard Smart Group officially established the Public Welfare Foundation, with the mission of "helping people develop, promoting social harmony, and promoting a better life" and the vision of "gathering good forces and creating a better future". The foundation focuses on education support, medical assistance, poverty alleviation, and other fields, advocating and encouraging more people to care about people's livelihoods, care for others, and promote social harmonious development.

同时公司高度重视自身运营对社区的影响,同时结合党建工作活动,努力带动当地社区共同发展,营造良好社会关系。

At the same time, the company attaches great importance to the impact of its own operations on the community, and combined with party building activities, strives to drive the common development of local communities and create good social relationships.



#### 金卡智能在温州大学设立奖学金,加强人才培养与产学研合作

Goldcard Smart Group sets up scholarships at Wenzhou University to strengthen talent cultivation and industry university research cooperation



为完善计量测试关专业人才培养创新机制,提高人才培养质量,进一步加强产学研合作,通过友好协商,建立互相扶持、互相依托、共同发展的长期战略伙伴关系,在人才培养、师资互聘、项目合作、党支部共建等方面深入开展合作。

In order to improve the innovative mechanism for cultivating professional talents in meteorology and testing, improve the quality of talent cultivation, further strengthen cooperation between industry, academia, and research, the company established a long-term strategic partnership of mutual support, mutual reliance, and common development through friendly negotiations, and deepen cooperation in talent cultivation, teacher recruitment, project cooperation, and party branch co-construction.



#### 金卡智能"雄鹰、鲲鹏奖学金"颁奖大会隆重举办, 助力莘莘学子逐梦未来

Goldcard Smart Group "Eagle and Kunpeng Scholarship" Awards Ceremony was grandly held, helping students pursue their dreams for the future

教育决定着国家和民族的未来,支持教育事业发展是整个社会共同的责任。2023年2月20日,2022学年"金卡智能雄鹰、鲲鹏奖学金"颁奖大会在乐清中学举行,助力莘莘学子逐梦未来。早在2021年3月30日,金卡智能在乐清中学成立"金卡智能教育基金",旨在激励乐中学子可以全身心投入到学业之中,通过学习来提升自我价值,为学子们打通成才就业之路,支持培养人才。

Education determines the future of a country and a nation, supporting the development of education is a common responsibility of the entire society. On February 20, 2023, the 2022 academic year "Goldcard Smart Group Eagle and Kunpeng Scholarship" award ceremony was held at Yueqing Middle School to help students pursue their dreams for the future. As early as March 30, 2021, Goldcard Smart Group established the "Goldcard Smart Group Education Fund" at Yueqing Middle School, aiming to motivate students to fully devote themselves to their studies, improve their self-worth through learning, and pave the way for students to become successful and find employment, supporting the cultivation of talents.



#### 赓续助力巾帼力量,与"她"编织"共富蓝图"

Continuously supporting the power of women and weaving a "blueprint for common prosperity" with "her"



2023年8月18日,钱塘区巾帼共富工坊服务中心正式揭牌,在区委组织部、区妇联牵线搭桥下,金卡智能集团党委与巾帼共富工坊建立了合作共建关系,成为首批与钱塘区巾帼共富工坊签订了合作共建关系的企业,以党建促合作,深化结对帮扶,与工坊一起编织"共富蓝图"。

In order to improve the innovative mechanism for cultivating professional talents in meteorology and testing, improve the quality of talent cultivation, further strengthen cooperation between industry, academia, and research, the company established a long-term strategic partnership of mutual support, mutual reliance, and common development through friendly negotiations, and deepen cooperation in talent cultivation, teacher recruitment, project cooperation, and party branch co-construction.



#### 金卡智能旗下天信仪表获第四届温州慈善奖

Tancy Instrument, a Subsidiary of Goldcard Smart Group, won the 4th Wenzhou Charity Award

金卡智能旗下天信仪表在企业做大做强的同时,把积极践行 企业社会责任作为重要使命之一,常献爱心,多行义举,回报家 乡,反哺社会,迄今已捐款捐物累计上千万元。

Tancy Instrument, a subsidiary of Goldcard Smart Group, regards actively practicing corporate social responsibility as one of its important missions while expanding and strengthening the enterprise. It regularly donates love, conducts charitable acts, returns to its hometown, and feeds back to society. So far, it has donated millions of yuan in total.

2023年,天信仪表主要在助老、助孤、助医、助学、助困、助残、拥军等方面开展活动,慈善支出约15万元,有上百位困难群众受到慰问和帮扶。2023年,天信仪表被温州市人民政府授予"温州慈善奖(机构捐赠)奖。

In 2023, Tancy Instrument mainly carried out activities in areas such as assisting the elderly, orphans, doctors, students, those in need, the disabled, and supporting the military. The charity expenditure was about 150,000 yuan, and over a hundred disadvantaged people received comfort and assistance.



### 展望2024 OUTLOOK TO 2024

展望2024,金卡智能集团将继续发挥行业领军作用,将继续以物联网和数字技术为核心,依托大数据、人工智能等前沿技术,始终坚持"以客户为中心,以奋斗者为本",为智慧能源。智慧城市的建设而不解努力,让生活更美好。

Looking forward to 2024, Goldcard Smart Group will continue to play a role of industry leader, continue to center on the Internet of things and accurate measurement, rely on big data, artificial intelligence and other cutting-edge technology, always adhere to the " Customer-centered, striver-oriented ", make unremitting efforts for the smart utilities and smart city construction, and make life better.



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