



金卡智能集团股份有限公司
GOLDCARD SMART GROUP CO., LTD.

金卡, *Make life better*
让生活更美好!



可持续发展报告2019

Sustainable Development Report 2019



金卡智能集团股份有限公司
GOLDCARD SMART GROUP CO., LTD.





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Sustainable Development Report 2019



关于本报告 About this report

《金卡智能集团股份有限公司2019年可持续发展报告》是金卡智能集团股份有限公司连续第六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，也是对外发布的第二份企业可持续发展报告。

“Sustainable Development Report –2019– Goldcard Smart Group Co., Ltd.” is the sixth consecutive annual report disclosing activity of corporate governance and performance of corporate social responsibility and continuous development strategy of Goldcard Smart Group Co., Ltd (“the Company”) in the past year. It is the Company’ s second edition of published corporate sustainable development report.

企业社会责任报告

Corporate Social Responsibility Reports



可持续发展报告

Sustainable Development Report



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2019年1月1日至2019年12月31日，部分内容超出上述范围。This report covers all entities in which the Company has controlling power or significant influence on the financial and operational policies and practices. The activities disclosed in this report occurs from January 1, 2019 to December 31, 2019, with some reasonable 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 social operations of the Company, as recorded in the Company's official documents and statistical reports. The final data is subject to the Company's annual report.

称谓说明

Clearance on addressing

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”、“公司”或“我们”表示。For the sake of clear statement and convenience of reading in this report, Goldcard Smart Group Co., Ltd is also addressed as “Goldcard Smart Group” , or the Company, or “We” , which all stands 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 edition of this report follows the Global Reporting Initiative (GRI) Sustainable Development Guide 4.0 (G4) and the International Organization for Standardization (ISO 26000).

报告获取方式

Access to this report

网络下载报告请登录<http://www.china-goldcard.com>。
This report can be downloaded from: <http://www.china-goldcard.com>.

金卡，Make life better
让生活更美好！



董事长致辞

MESSAGE FROM THE CHAIRMAN
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MESSAGE FROM THE CHAIRMAN OF THE BOARD



5G时代已来，万物互联全面爆发，公用事业行业数字化转型加速。金卡智能集团充分运用“云大物移智”等前沿技术，让城市更智慧，让公用事业企业获得更高效益，让百姓充分享受智能服务。在过去的20多年，我们不断探索物联智能产业应用，致力于驱动水、气行业数字经济高速发展，服务于30多个国家、1,500多个城市、2,000多家公用事业企业、5,000多万个城市家庭用户。我们也对金卡智能集团做了重新定义：中国领先的物联网企业。我们坚信通过不断创新变革，能为客户创造更大的价值。我们高度重视研发投入，坚持每年投入超过1亿元用于新产品、新技术的研发。目前，公司已有研发人员700余人，建立了8大研发中心，辐射欧美，同时高度重视知识产权，已获得360余项专利，参与行业、国家标准建设40余项。

The era of 5G has come, as evidenced by the outbreak of the Internet of everything. So is the accelerated digital transformation of the utility industry. Goldcard Smart Group takes full usage of cutting-edge technologies in the key domains of "cloud, big data, IOT, mobile, and AI" to help the municipals become more intelligent, the utility enterprises obtain higher efficiency, and people fully enjoy smart services. Over the past 20 years, we have been continuously exploring the application of connected intelligence, with the aim to drive the rapid development of digital economy in water and gas supply industry. We now serve more than 30 countries, 1,500+ cities, 2,000+ utilities, and 50+ million residential households. We have also redefined Goldcard Smart Group goal as being one of China's leading Internet of things companies. We firmly believe that through continuous innovation and change, we can create greater value for our customers. We attach great importance to R&D investment and invest more than 100 million yuan in the development of new products and application of new technologies every year. At present, the Company has more than 700 research and development personnel working in eight research and development centers, radiating Europe and the United States. We attaches great importance to intellectual property rights, has obtained more than 360 patents as well as participated in the work of more than 40 industrial and national standards.

2019年，金卡智能集团在物联网和5G技术上持续发力。累计部署物联网智能终端破千万，NB-IoT智能终端近500万，IoT平台接入智能终端600多万台，云服务接入600多家公用事业企业及7,500多万个终端用户；参与全球首个NB-IoT燃气产业破千万级应用建设、推动数

字广州成为全球首个物联网终端部署破百万的单体城市；不断加强安全体系的构建与大数据的应用，与杭州燃气成立全国首个联合数字能源实验室。

In 2019, Goldcard Smart Group continued to make progress in the IOT and 5G technology application. More than 10 million Goldcard IoT smart terminals have been deployed, including nearly 5 million NB-IoT smart terminals. Our IoT platform provides connection to more than 6 million IoT smart terminals, and more than 600 utilities and 75 million end users have been connected to our cloud services. We have participated in the construction of the world's first network of over 10 million NB-IoT connections in gas industry application, and the "Digital Guangzhou" project: the world's first single city with IoT gas terminal deployment of over one million. Goldcard Smart Group continuously strengthen the construction of security system and the application of big data in energy industry, and established the first joint digital energy laboratory with Hangzhou Gas.

2019年，正值新中国成立70周年，在这70年中我们经历了西部大开发、京津冀协同发展、长三角一体化、粤港澳大湾区建设等国家重点工程项目建设，我们积极参与其中，成为国家重点项目数字化建设的一份子。过去一年，我们为“一带一路”高峰论坛、大兴机场等提供智慧解决方案。70年来，中华民族秉持“奋斗、创新、拼搏”的精神，将中国建设成国际大国，掌握国际话语权。我们也在机遇与挑战中不断开拓国际市场，在全球建立了10余个实验局，物联网智能终端通过欧盟ATEX防爆认证，数字化工厂通过荷兰国家计量院MID D认证，智能燃气终端全球占有率排名第一。

The year 2019 marks the 70th anniversary of the founding of the People's Republic of China. Over the past years, we have been involved in key national projects such as the development of the western region, the coordinated development of the Beijing-Tianjin-Hebei region, the integration of the Yangtze river delta, and the construction of the Guangdong-Hongkong-Macao greater bay area. By active participation we contributed to the digital foundation of these projects. Last year, we have provided smart solutions for Belt&Road Summit Forum, Daxing airport project, etc. Over the past 70 years, the Chinese national has adhered to the spirit of "struggle, innovation and hard work" to build China into an international role and hold the international voice. We also explored the international market in face of the opportunities and challenges. Around the world we have established more than 10 new pilots. Our IoT smart gas terminal got ATEX explosion-proof certification. The digital factory got MID D certification through the Netherlands

National Metrological Institute. Our smart gas terminal deployment ranks the first in global share.

2019年，金卡智能集团勇于担当企业公民责任，以“汇聚善力，创造更美好的未来”为愿景，积极投身社会公益事业。全年捐赠金额达168万元，并携手贵州燃气、青岛华润燃气等伙伴共同投入医疗、扶贫公益慈善项目的建设之中。

In 2019, Goldcard Smart Group endeavored to assume corporate citizenship responsibilities. With the vision of "pooling the good efforts to create a better future", it actively participates in public welfare undertakings. The annual donation amount reached 1.68 million yuan, and the company partnered with Guizhou Gas, Qingdao China Resources Gas and others in medical treatment, poverty alleviation charity projects.

未来，金卡智能集团将充分抓住5G红利，聚焦能源发展，依托端到端优势，围绕客户应用场景，挖掘客户痛点，和生态合作伙伴共同打造数字化解决方案，为实现互联互通、挖掘数据价值不断努力。我们也将不断加强文化建设，惠及员工，更好的履行企业公民责任，为社会与股东交上满意的答卷。

In the future, Goldcard Smart Group will fully take advantage of the 5G technology, focus on energy innovation, rely on the end-to-end advantages, dig into customer application scenarios, solve customers' key concern, and co-work with ecological partners to jointly create digital solutions, to achieve overall connectivity and explore data value. We will continue to strengthen cultural endeavour to benefit employees and better perform corporate citizenship responsibilities, delivering satisfactory results to the society and shareholders.

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



关于金卡智能集团

ABOUT GOLDCARD SMART GROUP

(一) 公司概况

Company profile

金卡智能集团股份有限公司成立于1997年，围绕客户需求持续创新，历经20多年的卓越发展，已成为国内领先的物联网公司。2012年，金卡智能集团在深圳证券交易所成功上市，成为行业内第一家上市公司，股票代码为300349。

Founded in 1997, Goldcard Smart Group Co., Ltd. has become one of the leading IoT companies after over two-decade continuous innovation centered on customer requirements. In 2012, Goldcard was listed on the Shenzhen Stock Exchange with stock code 300349, as the first public listed company in the industry.

金卡智能集团积极追随物联网和互联网的时代潮流，努力构建全新的公用事业行业生态体系，并积极开拓新的技术、产品与业务，在智能终端、智能通讯、大数据、云计算及移动应用等方面，产生强大的协同效应，与旗下金卡水表、天信仪表、天信科技、易联云、银证软件为公用事业领域客户提供从智能设备、通讯网络、应用管理软件到互联网云服务的高价值、高性能的产品及数字化端到端解决方案，并与各大燃气企业、水务企业、华为、阿里巴巴等建立了长期战略合作伙伴关系。

GoldCard 金卡 **TANCY 天信**

ENESYS. 银证 **易联云 link**

Goldcard Smart Group catches up with the tide of IoT and Internet, devotes to build a brand-new public utility industry ecosystem. With new technologies, products, and services expanded, Goldcard brings great synergy in combining smart terminal, smart communication, big data, cloud computing, and mobile application. Together with its subsidiaries: Goldcard Water Meter, Tancy Instrument, Tancy Tech, Eslink, and ENESYS Software, Goldcard Smart Group provides to public utility customers high-value and high-performance products and end-to-end solutions including smart devices, communication networks, application management software and Internet cloud services. Goldcard also builds long-term strategic cooperation relationships with various big gas and water suppliers and other industry leaders such as Huawei, and Alibaba etc.

目前公司服务于30多个国家、1,500多个城市、2,000多家公用事业企业、5,000多万个城市家庭用户。

We now provide service in more than 30 countries and 1,500+ cities, serving 2,000+ utilities and 50+ million residential households.



服务国家
30+



服务城市覆盖
1,500+



服务公用事业企业
2,000+



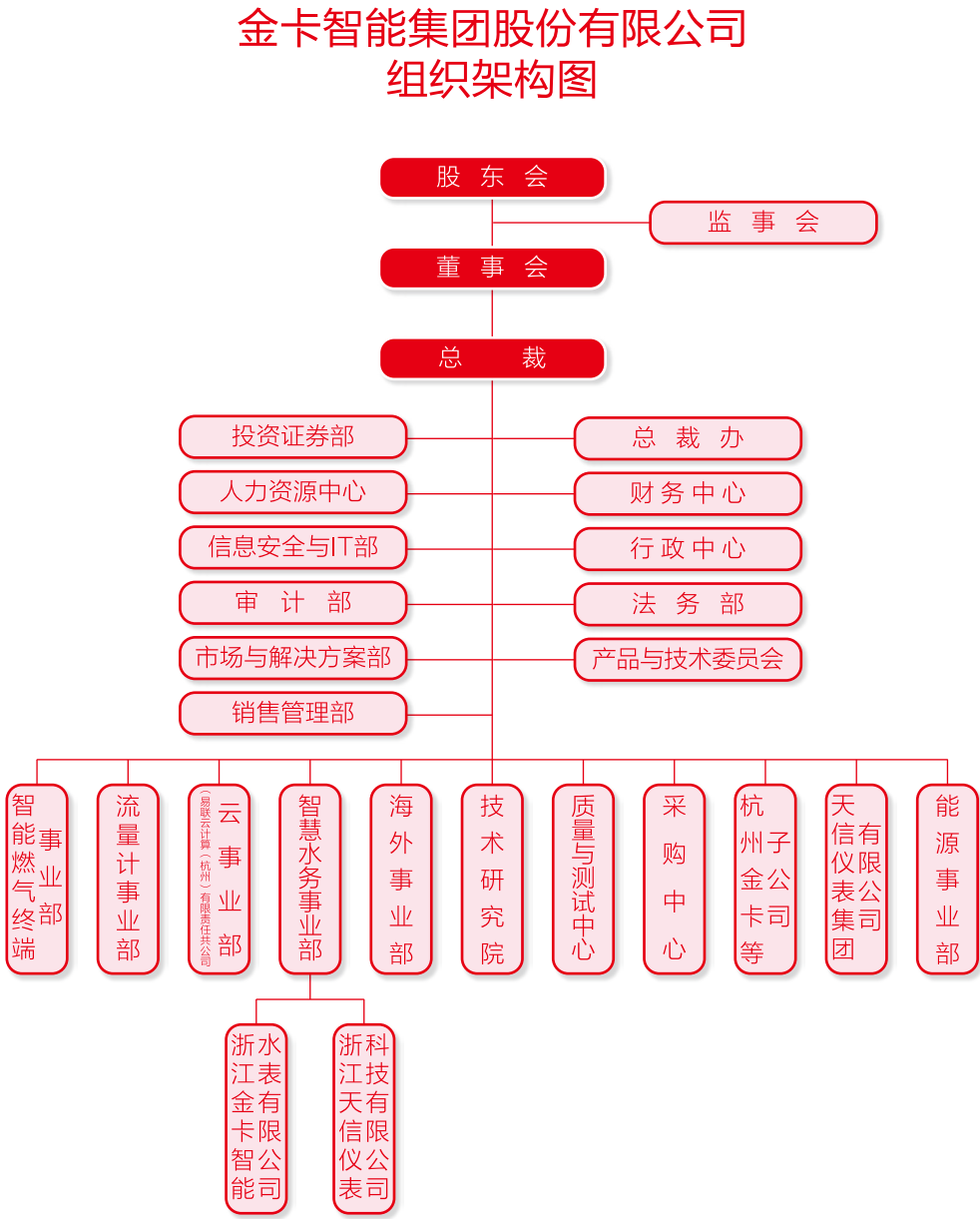
服务城市家庭用户
5,000万+



价值理念
Philosophy and Value Statement



(二) 公司治理
Corporate Governance



图：金卡智能集团组织架构图
Fig. Organizational Structure of Goldcard Smart Group

金卡智能集团严格按照《公司法》、《上市公司治理准则》、《深圳证券交易所创业板上市规则》、《深圳证券交易所创业板上市公司规范运作指引》以及国家有关法律法规的要求，建立包括股东大会、董事会、监事会、公司管理层在内的现代化企业组织制度和运行机制。

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.



金卡可持续发展管理体系

GOLDCARD SUSTAINABLE DEVELOPMENT MANAGEMENT SYSTEM

金卡智能集团严格依照ISO26000、SA8000等相关国际标准和指南，并结合17个联合国可持续发展目标（SDGs），建立并完善公司可持续发展管理体系。

Goldcard Smart Group strictly follows relevant international standards and instructions, such as ISO26000, SA8000, etc., and combines with the 17 SDGs of the United Nations, in establishing and enhancing its corporate sustainable development management system.



可持续发展目标



（一）可持续发展理念

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:

致力于做安全、智能、便捷的智慧公用事业综合解决方案服务商。将安全作为首要目标，把公用事业的智能、便捷和超前的服务作为前提，持续创新，构筑智能城市；以人为本，争做优秀企业公民。

Committed to be a safe, smart and convenient smart utility integrated solution and service provider. Take safety as top priority, put providing smart, convenient and preemptive services of the public utilities as the premises, and continuously innovate to help build smart municipalities. Goldcard Smart Group is people-oriented, and strive to be an excellent corporate citizen.



安全

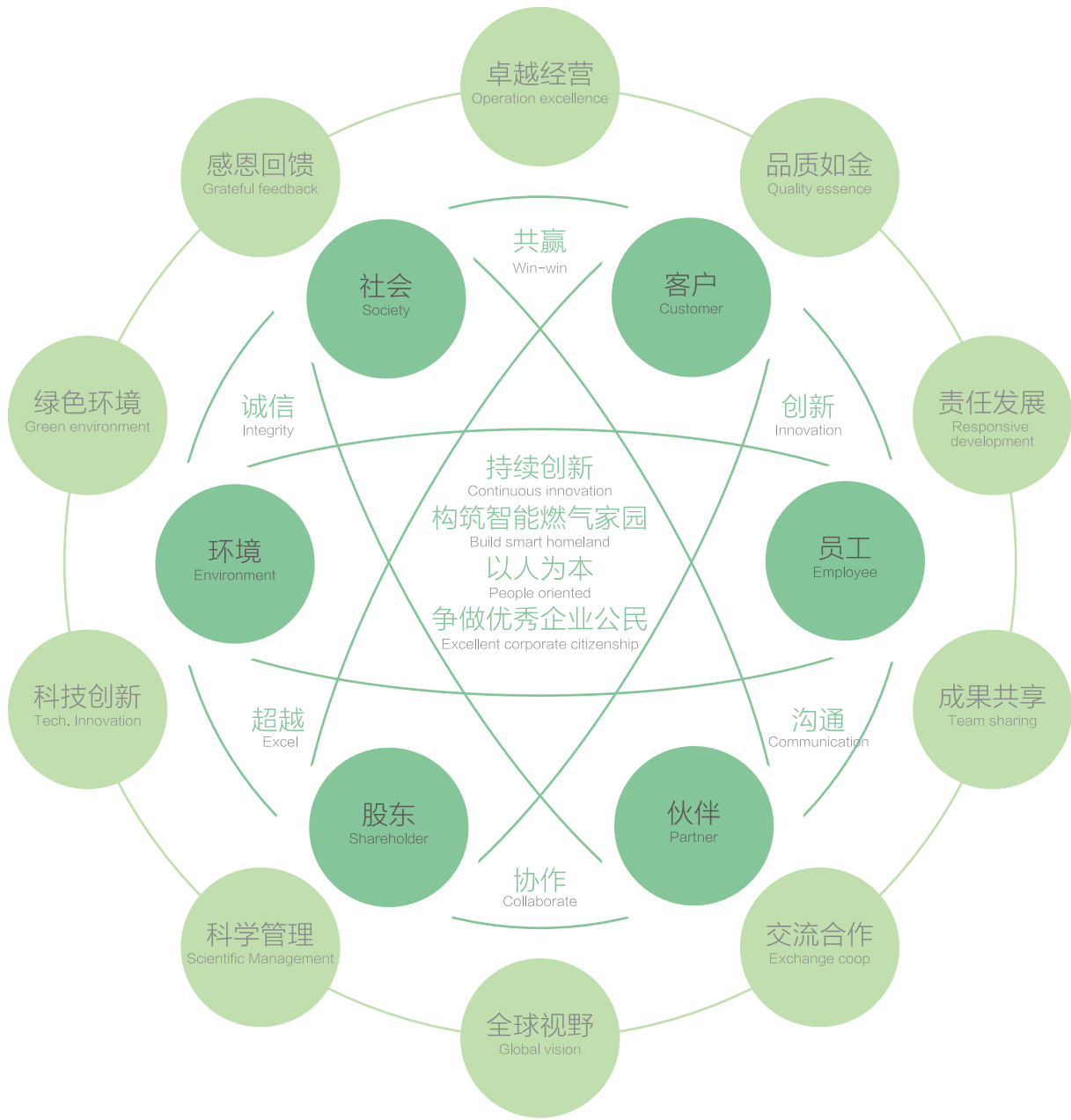


智能



便捷

(一) 可持续发展理念
Sustainable development philosophy



图：金卡智能集团可持续发展模型图
Fig. Goldcard Sustainable development model

(二) 可持续发展议题
Sustainable Development subjects

金卡智能集团将社会责任管理与经营管理相结合，实现社会责任管理与实践的有机统一，是践行公司可持续发展目标、实现公司可持续发展的重要依托。在此基础上，从经济、社会、环境“三重底线”原则出发，结合实际分析并筛选出了公司可持续发展的四大核心议题：

Goldcard Smart Group integrates social responsibility management and operation management to realize the organic unity of social responsibility management and practice, which is an important basis for the implementation of the Company's sustainable development goals and the realization of the Company's continuous development. Based on this and the economic, social and environmental bottom lines, combined with the actual situation analysis, Goldcard Smart Group selected four core subjects of sustainable development of the Company:

 <p>议题一：可持续的商业运营 Subject A: sustainable business operation</p>	<p>遵纪守法、依法合规； Legal operation, following laws and regulations. 保障股东权益； Protection of shareholders' interest 创新驱动； Driven by innovation 关注员工、优化企业文化。 Care for employees, harmonious corporate culture.</p>
 <p>议题二：可持续的客户服务 Subject B: sustainable customer services</p>	<p>以客户满意为原则； Customer satisfactory as principle 以实现客户价值为前提； Customer value creation oriented 持续改进客户服务能力； Continuous improving customer service capacity 保障客户权益。 Protection of customer benefits</p>
 <p>议题三：可持续的生态环境 Subject C: sustainable Eco-environment</p>	<p>以环境优先为原则； Environment protection being priority 积极配合国家环境保护战略； Actively support national environment protection initiative 持续改进节能环保技术。 Continuous improvements on energy efficiency and environment protection technology</p>
 <p>议题四：可持续的社区关系 Subject D: sustainable community relationship</p>	<p>落实国家全面小康战略及扶贫攻坚工作； Support national well-being society strategy and anti-poverty projects; 持续推进和谐社区建设。 Continuously promote building harmonious community activities</p>

(三) 利益相关方沟通
Communication with stakeholders

利益相关方 Stakeholders	要求与期望 Requirements and expectations	沟通方式 Channels of communication
 股东 Shareholders	保障股东权益; Protect shareholders' interests 稳健经营发展; Stably operate and develop 创造持续盈利。 Continued profitability	公平对待所有股东; Treat all shareholders fairly; 完善公司治理机制; Improve corporate governance mechanism 加强内控管理体系建设; Strengthen internal control management system 透明公开披露经营信息。 Disclose operational information clearly and openly
 政府 Government	依法合规运营; Legally operated 依法纳税; Following taxation law 积极带动地区经济发展 及就业。 Promote regional economy development and employment level.	遵守各项法律法规及规范性文件, 主动纳税; Following applicable laws, rules and regulations, proactively pay taxes. 建立与政府良好的沟通渠道; Establish good communication channels with government agencies 积极创造就业机会, 引入人才。 Create employment opportunities, introduce talents.
 客户 Clients	诚实守信的营销理念; Honest and Trust building market principles 提供安全可靠的产品; Supply safe and reliable products 提供智能便捷的解决方案; Supply smart and ready solutions 提供优质的服务。 Provide superior service	制作产品精益求精, 符合国家标准、行业标准和 企业标准; Refined products, meeting national, industry and enterprise standards; 弘扬和践行公司的“工匠精神”; Encourage and promote the spirit of craftsmanship 设立客户服务的监督和抽查机制, 秉承“感动客户” 的信念, 为客户提供最优的服务。 Set up customer service supervision and check mechanism, adhere to the belief of “customer feels”, provide customers with best service.
 合作伙伴 Business partners	遵守商业道德; Abide by business morale 公平竞争; Fair competition 公平、公正、公开采购; 提供相应辅导与支持。 Fair, equity and open procurement, provides counseling and support	健全完善采购体系; Set up perfect procurement system 倡导建立良性的行业竞争秩序; Advocate to establish a benign business competition atmosphere 开展供应链合作, 实现产业链共赢。 Cooperate with the supply chain to achieve win-win.

利益相关方 Stakeholders	要求与期望 Requirements and expectations	沟通方式 Channels of communication
 员工 Employees	安全健康舒适美丽的工作和 生活环境; Safe, healthy, comfortable and beautiful work and living environment 完善的薪酬福利保障; Perfect salary and welfare protection 提供职业发展与晋升通道; Career development and promotion opportunity 员工对公司存有归属感, 创造良好的企业氛围。 Beneficial internal company atmosphere with strong sense of belonging	构建多样化人才发展通道, 开展定制化培训; Build multiple talent development channels and conduct customized training 开展多形式、个性化的活动丰富员工生活, 陶冶情操; Organize various personalized activities to enrich employees' lives and cultivate sentiment 提供健康安全的工作环境及应知应会培训。 Provide a healthy and safe work environment, and relevant training
 环境 Environment	落实国内外节能减排政 策、法规; Follow domestic and international laws and regulations on energy saving and emission reduction. 关爱环境, 守护碧水蓝天; Care for environment, protect the blue sky and clean water 实现绿色管理与绿色运营; Realize green management and operation 保护生态环境。 Protect the eco system.	贯彻6S管理精髓; Implement the essence of 6S management; 重视环保、资源消耗管理和清洁能源发展并 打造数字化工厂; Pay attention to environmental protection, resource consumption management and clean energy development, building a digital factory; 绿色作业, 绿色服务。 “Green” operation and service
 社区 Community	支持社区发展; Support community development 打造社区文化活动。 Co-sponsor community cultural activities	积极开展公益慈善活动; 开展志愿服务活动; Actively carry out public welfare and charity activities; encourage voluntary service activities 参与社区建设。 Participate in community activities



第一章 助力公用事业智慧前行

CHAPTER I SUPPORT UTILITIES' SMART EFFORTS

随着金卡智能集团的快速发展，在不断追求科技创新的同时，着力推进优势产品与技术的应用和推广，持续扩大金卡服务智慧公用事业的成果，最终让金卡智能产品与服务惠及更多的国家、更多的城市、更多的家庭以及每一个人。

With the rapid development of Goldcard Smart Group, along the pursuit of scientific and technological innovation, we actively promote competitive products and new technology application, continuously expanding Goldcard's service to smart utility business. The aim is to serve more countries, more cities, more families and every one around with Goldcard smart products and services.



(一) 智能金卡服务智慧城市

Supporting smart cities

作为智慧公用事业的推动者，金卡智能集团利用物联网、云计算、大数据、人工智能等前沿技术打造智能化产品与解决方案，致力于让更多城市实现智慧化、数字化转变。

As a promoter of smart utilities, Goldcard Smart Group make use of cutting-edge technologies such as IoT, cloud computing, big data and artificial intelligence to create smart products and solutions, and is committed to help enabling more cities to realize smart and digital transformation.

全球首个百万级物联网燃气表规模化应用数字广州 Digital Guangzhou, China 1st city with 1 million IoT gas meter installation

2019年12月，全球首个基于5G技术的百万级物联网燃气表规模化应用在广州诞生，成为了城市智慧燃气建设的样板项目，标志着广州从传统燃气运营模式向数字化转型的跨越。金卡智能集团倾全力助力数字广州建设，推进建设智能安全供气工程，为市民打造低碳环保、优质高效的智能家居生活，提供更优质、更贴心的燃气服务。

In December 2019, the world's first large-scale application of one-million-level IoT gas meter based on 5G technology was realized in Guangzhou, which became a model project of urban smart gas construction, marking the leap of transformation from traditional operation mode to digital one. Goldcard Smart Group makes every effort to support the construction of Digital Guangzhou, to promote the intelligent and safe gas supply, to create low-carbon, environmentally friendly, high-quality and convenient smart home life for the public, and to provide better quality, more intimate gas service.



图：全球最大NB-IoT智慧燃气项目正式发布



杭燃金卡数字能源联合实验室正式成立 Hangzhou Gas -Goldcard joint digital energy laboratory established

2019年7月，金卡智能集团携手杭州燃气共同打造的“杭燃金卡数字能源联合实验室”正式在杭州挂牌成立。联合实验室通过建立合作纽带、聚焦共赢优势、挖掘增长动能、共创美好城市，为城为民共同打造全国领先、世界一流的燃气服务，形成“杭州经验、杭州模式”。此次合作，双方将借助杭州燃气这一试验场，创新局，人才圈，市场口，集聚双方优势资源，专注智慧燃气创新，通过联合实验室互补共赢、长效发展、共创美好杭州。

In July 2019, the Hangzhou Gas -Goldcard joint digital energy laboratory was officially established in Hangzhou. By establishing this cooperation tie, focusing on win-win advantages, digging into growth momentum and the broad vision of creating a smart city, the joint laboratory aims to create a national leading and world-class gas service for the city and the people, forging the "Hangzhou experience, Hangzhou model". In this cooperation, through the joint laboratory, the two sides will make use of Hangzhou Gas as a testing ground, an innovation platform, a talent circle and a market touch point, gather the superior resources of both sides, focus on smart gas innovation, work for mutual benefit and long-term development, to co-contribute to a beautiful Hangzhou.

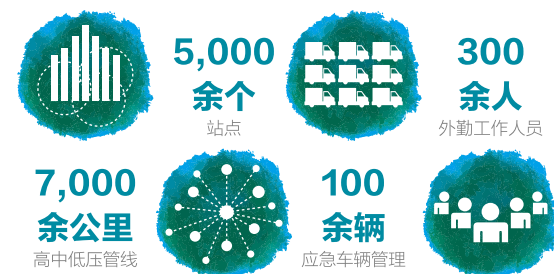




易联云智慧水务服务 葫芦岛智慧城市管理 Eslink smart water solution supports Huludao smart city operation

2019年，金卡智能集团旗下易联云成功为辽宁省葫芦岛市自来水公司提供完成“三中心、两平台”供水安全智慧水务项目。通过易联云物联网平台对设备进行实时监控构建大数据模型，利用分区计量平台有效降低漏损率。截止2019年底，葫芦岛市城市供水漏损率为13%，为实现国家“水十条”中到2020年漏损率控制在10%以内的工作打下坚实基础。

In 2019, Eslink, a subsidiary of Goldcard Smart Group, successfully completed the "three centers and two platforms" smart water safety supply project for Huludao city water company in Liaoning province. The big data model is constructed by real-time monitoring of devices on the IoT platform of Eslink, and the water leakage rate is effectively reduced by using the sectioned metering platform. By the end of 2019, the leakage rate of urban water supply in Huludao city was 13 percent, laying a solid foundation to achieve the country's target to control the leakage rate within 10 percent by 2020 under the "water ten" guidelines.



银证软件助力 杭州燃气信息化平台建设 ENESYS Software supports Hangzhou Gas Information Platform project

2019年，金卡智能集团旗下银证软件为杭州燃气集团提供数字可视化大屏系统，为杭州燃气集团智慧、科学管理提供支撑保障。系统平台承担着杭州燃气集团业务经营的10区2县1市的天然气日常经营，覆盖服务150多万用户，530多万人。数据大屏项目功能覆盖7,000余公里高中低压管线、5,000多个站点、300多人外勤工作人员、100多辆应急车辆管理，资源串联、精准定位、快速相应是系统的主要特点，为杭燃集团天然气供应和城市调峰供气提供可视化管理平台，更切实保障了杭州市燃气用户安全、便捷的用户体验。

In 2019, ENESYS software, a subsidiary of Goldcard Smart Group, supplied Hangzhou Gas Group(HGG) with a digital visualization large-screen system, providing support and foundation for intelligent and scientific management of HGG business. The system platform undertakes the daily operation of natural gas supply in 10 districts, 2 counties and 1 city operated by HGG, covering more than 1.5 million users and more than 5.3 million population. The digital large screen project visualized management of more than 7000 kilometers distribution network of high, medium and low pressure pipelines, over 5000 sites, more than 300 field staff and 100+ emergency vehicles. The key advantage of this system include resources interlink, accurate positioning and fast responding. This system offers HGG a visualized load control management platform of the city gas supply. It enhanced the security of fuel gas supply to Hangzhou residents and provided convenient user experience.

(二) 助力国家重大工程建设 Supporting national major projects

2019年，我们迎来了中华人民共和国建国70周年，金卡智能集团全力支持国家重大工程建设项目献礼祖国70华诞。

In 2019, we celebrated the 70th anniversary of the founding of the People's Republic of China. Goldcard Smart Group gave full support to major national engineering projects to celebrate the 70th birthday of the motherland.



天信仪表350台智能流量计进驻北京大兴国际机场 350 Tancy smart gas flowmeters deployed in Daxing Int'l Airport, Beijing

国庆70周年前夕，北京大兴国际机场正式投入运营。北京大兴国际机场的建设率先使用了5G通讯技术、互联网、物联网、大数据等科技手段，全面贯穿各个生产服务保障链，标志着北京大兴国际机场成为我国首家智慧型机场。作为我国首屈一指的智能公用事业服务企业，金卡智能旗下天信仪表为大兴机场全域配套了350台NB-IoT智能流量计。流量计的基表选用天信自主研发并获得欧盟NMI认证的腰轮流量计和涡轮流量计，配套基于金卡智能NB-IoT技术的物联网控制器，采用“精准计量+物联运营”的模式，实现在线监控、异常报警、防盗技术、智能监控、空中充值、物联网平台数据分析等功能，达到覆盖广，低功耗，安全性高，数据准确、实时、便捷的目的，为北京大兴国际机场的天然气运行带上智慧大脑和安全防护罩。

On the eve of China's 70th anniversary, Beijing Daxing international airport was officially put into operation. The construction of Beijing Daxing international airport takes the lead in the use of 5G communication technology, Internet, IoT, big data and other technical means, throughout the production and service operation chain, marking it as the first intelligent airport in China. As one of the leading intelligent utility service enterprises in China, Tancy Instrument, a subsidiary of Goldcard Smart Group, has supplied 350 units NB-IoT smart gas flowmeters to Daxing airport. The rotary flowmeter and turbine flowmeter developed by Tancy has passed the EU certification through NMI, matched with Goldcard intelligent NB-IoT controller of IoT technology. It uses the "precision measurement + IoT operation" mode to realize the functions of online monitoring, abnormal alarm, anti-tampering, intelligent monitoring, air top up, IoT platform for data analysis, etc. It achieves wide coverage, low power consumption, high safety, and real-time data is accurate and convenient for the purpose of gas operation. It helps to bring wisdom brain and security guard to Beijing Daxing international airport.



金卡智能集团积极响应国家共建“一带一路”的政策方针，积极参与中国企业“走出去”战略，推动“一带一路”沿线国家公用事业发展新机遇，助力经济发展实现共赢。

Goldcard Smart Group actively responds to the national policy of supporting the "belt and road" initiative, actively participates in the "global growing" strategy of Chinese enterprises, supports new business development opportunities of public utilities in countries along the "belt and road", and helps achieve win-win results in economic development.

金卡智能集团协助巴基斯坦苏伊北方燃气公司实现管理升级 Goldcard Smart Group assists SNGPL of Pakistan in management upgradation

2019年，金卡智能集团携旗下天信仪表共同协助巴基斯坦苏伊北方燃气公司SNGPL完成了工商业流量计检定装置的更新。苏伊北方燃气公司是巴基斯坦最大的燃气公司，目前服务650万+燃气用户，公司一直积极拥抱新的发展趋势，以及新兴的管理技术和管理模式。双方此次的合作极大地提高了其工商业流量计的周期检定效率和精准度，进一步为巴基斯坦天然气贸易的精准计量和公平结算做出贡献。

In 2019, Goldcard Smart Group and Tancy Instrument jointly assisted SNGPL, a gas supplier in northern Sui, Pakistan, to complete the renovation of commercial and industrial flowmeter calibration and verification facility. SNGPL is the largest gas company in Pakistan, currently serving more than 6.5 million gas users. The company has been actively embracing new development trends, as well as emerging management technologies and management models. The cooperation between the two sides has greatly improved the periodic verification efficiency and accuracy of its commercial and industrial flowmeters, further contributing to the accurate measurement and fair settlement of natural gas trade in Pakistan.



2020年1月，一场突如其来的新冠肺炎疫情席卷中国，这场疫情严重威胁人民群众的生命与经济安全。为了减少疫情大规模扩散，党中央下令要求封城、封村、封社区，尽可能减少人员接触。在这场疫情中，金卡智能集团利用无人化、智慧化、非接触化的产品与服务优势确保了在全隔离状态下国民生产生活的正常运行。

In January 2020, a sudden outbreak of covid-19 epidemic swept across China, which seriously threatened the lives and economic security of the people. In order to reduce the large-scale spread of the epidemic, the central government ordered the closure of cities, villages and communities to minimize human contacts. In this outbreak, Goldcard Smart Group made use of the advantages of unmanned, smart and non-contact products and services to help the normal operation of gas supply in the national under the state of full isolation.

疫情发生后，如何遏制病毒在公共场合的传播和交叉感染一直是公众关心的话题，金卡智能集团基于NB-IoT技术的智能燃气表、水表在实现了远程抄表、线上缴费、账单查询等线上业务办理的同时还实现了在线实时监控、远程调价，利用大数据实现区域用气用水分析，完成区域调度，确保集中用气区、用水区不断供，保障了居民在居家隔离期间的正常生活供应，有效降低了病毒传播与交叉感染的风险，为打赢疫情阻击战起到重要作用。

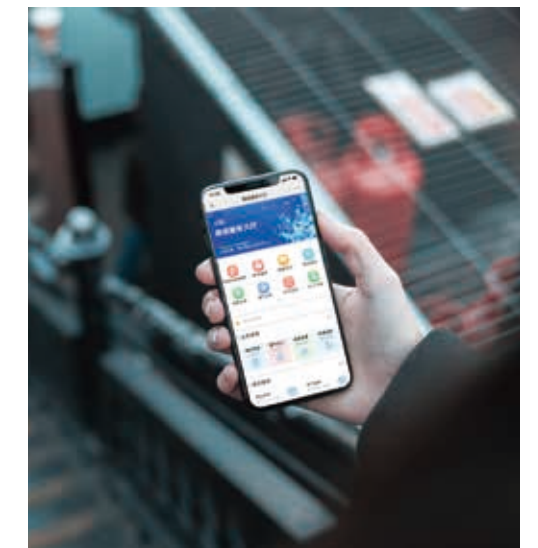
After outbreak, how to contain the virus spread in public and cross infection has been a topic of public concern. Goldcard smart gas meter and water meter solution based on NB-IoT technology support remote meter reading, online payment, billing information query etc., online business functions, as well as online real-time monitoring, remote tariff adjustment, using big data for regional gas/water usage analysis, regional scheduling. It helps to ensure supply of gas and water to concentrated area and support the normal life of the residents in home quarantine period, effectively reducing the risk of the spread of the virus and cross infection, playing an important role in the war against COVID-19.



易联云便捷云服务 为抗击疫情传播做出贡献 Eslink EasyPay cloud service contribute to epidemic control

易联云便捷云服务助力青岛能源华润燃气公司、重庆燃气集团实现线上服务大厅和手机NFC自助充值缴费功能，在应对疫情的严峻斗争中，燃气用户足不出户即可完成IC燃气卡充值。因疫情开工延后，大批用户采用线上购气缴费模式，为市民提供了安全平稳的业务办理平台，避免了病毒传播与交叉感染，有效降低了当地疫情发展速度。燃气公司业务的正常办理也确保了区域用气服务的正常运转，减少市民外出风险，构筑起供气保障防线。

Eslink EasyPay cloud service helps Qingdao Energy China Resources Gas and Chongqing Gas Group to realize online service hall and mobile phone NFC self-service recharge and payment functions. In the severe struggle against the epidemic, gas users could complete the IC card recharge without leaving home. Due to the epidemic and canceling of normal business operation, a large number of users adopted the online gas payment mode. The cloud service provides a safe and stable business platform for the public, avoiding virus transmission and cross-infection, and effectively reducing the spread of the local epidemic. The online operation of the gas company sales business also ensures the normal operation of the regional gas supply service, enforcing gas supply defense line.



（三）创新促进可持续发展 Innovation enhances sustainable development

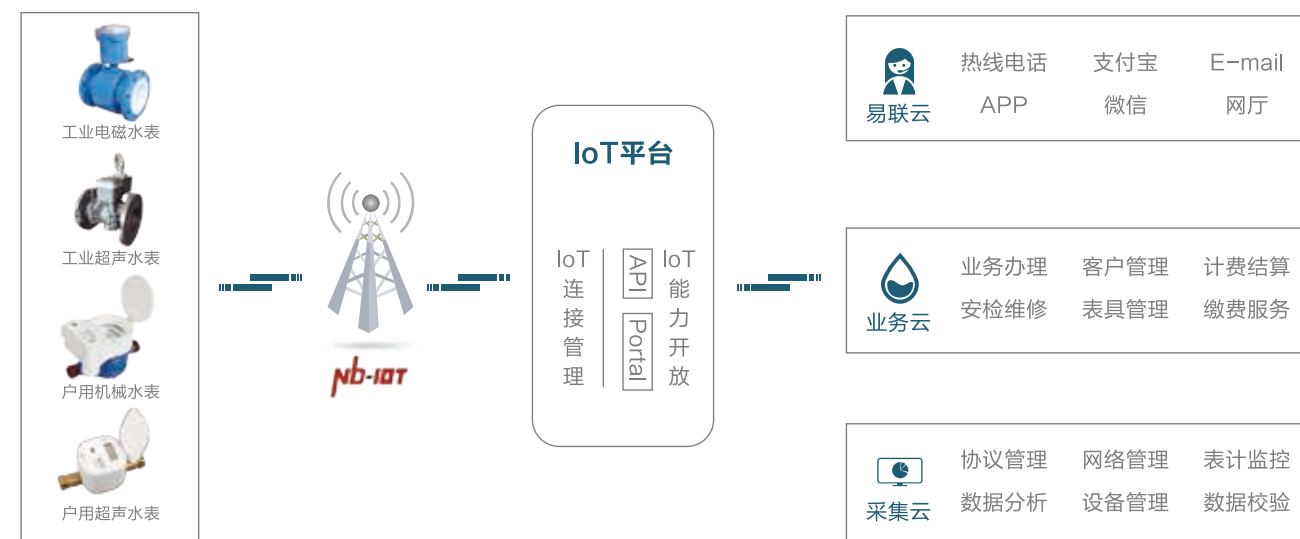
从研发到应用、从实验到市场，金卡智能集团在创新研发的道路上坚持不断探索，始终将创新研发视做企业发展的基石。2019年，公司依托700余人的创新研发团队，8大研发中心，辐射北美、欧洲；公司拥有360余项有效专利，共参与超过40项标准编制；成功引入IPD研发管理体系，具有完善的实验配置和先进的实验设备。形成了一个较为完善的企业研发机构，为公司的创新可持续发展注入活力。

From R&D to application, from lab to market, Goldcard Smart Group insists on continuous exploration on the road of innovative research and development, and always regards innovation and research as the cornerstone of enterprise development. In 2019, the company relies on a team of more than 700 innovative R&D personnel in 8 R&D centers covering North America and Europe. The company owns more than 350 valid patents and has participated in the compilation of more than 40 standards. With IPD research and development management system implemented, and equipped with perfect experimental configuration and advanced experimental equipment, this strong research and development institution injects the vitality for the company's innovation sustainable development.

1. 智能水表研发 Smart water meter R&D

随着公司在NB-IoT技术研究方面的不断成熟，依托NB-IoT技术广覆盖、大连接、低功耗、高可靠等技术优势，推出了NB-IoT智慧燃气解决方案与NB-IoT智慧水务解决方案，助力公用事业客户降本增效。

With the company's growing maturity in NB-IoT R&D, based on the advantages of NB-IoT network, such as wide coverage, mass connection, low power consumption and high reliability, the Company has launched NB-IoT smart gas solutions and smart water solutions, to help utility customers reduce cost and increase efficiency.



金卡智能集团自主研发智能水表投入应用 Smart water meter designed by Goldcard Smart Group put in operation



在水行业，当前水表保有量3亿以上，国家积极推行“6年轮换水表”与“漏损控制率在10%以内”等政策，智能表渗透率越来越高。2019年，金卡智能集团自主设计研发的采用NB-IoT通讯方式的智能水表正式投入应用。金卡智能水表利用现代微电子技术、传感技术、物联网技术对水量进行计量、监测，并把数据传递给云平台进行贸易结算，具有免人工抄表、远程数据采集和控制、实时监测和预警等功能，对推进智慧城市建设、提高公共服务水平具有积极意义。

In the water industry in China, the amount of water meters is more than 300 million. The state implements policies such as "six-year replace of water meters" and "leakage control rate within 10%", and the penetration rate of smart meters is getting higher and higher. In 2019, smart water meter with NB-IoT communication mode designed by Goldcard Smart Group has been put into use. The Goldcard smart water meter uses modern microelectronics technology, sensor technology,

and IoT technology for measuring and monitoring water flow. The data is passed to the cloud platform for trade settlement. The features of no human meter reading, remote data acquisition and control, real-time monitoring and early warning, etc., have positive influence to build the smart city and improve the level of public services.

金卡智能水表功能



2. 超声波流量计研发 Ultrasonic flowmeter development

以超声波为代表的电子化计量具备精准可靠、运行稳定、免于维护等特点，是未来气体计量的重要发展方向。公司自主研发的新型工商业超声波流量计采用NB-IoT技术，具备微小流量泄漏检测功能、高气体计量精度等优势，不仅有效提高燃气使用安全性和计量贸易结算的公平性，还具备低功耗、节能环保等重要特性。

Electronic measurement technology, represented by ultrasonic sensors, has the advantages of accurate and reliable, stable operation and free from maintenance, etc. It is an important direction of gas measurement development in the future. The company's self-developed new NB-IoT industrial and commercial ultrasonic flowmeter has the advantages of small flow leakage detection function and high metering accuracy. It not only effectively improves the safety of gas use and the fairness of metering trade settlement, but also has the characteristics of low power consumption, energy saving and environment protection.



图：工商业超声波流量计

3. IoT云平台技术研发 IoT cloud platform development

智慧物联离不开多功能、高可靠的系统平台。公司自主开发的IoT云平台具有大连接、高并发、高安全、分部式集群部署等特点，支持大数据和人工智能接口，支持未来业务延展。通过大数据采集、分析、实时监控、预警以及商业智能分析等，打通公用事业企业各业务系统墙，打破数据孤岛，帮助企业更准确地分析经营数据，为决策层及管理者提供更可靠、更准确的辅助决策分析。

Smart connectivity is inseparable from the multifunctional, highly reliable system platform. The IoT cloud platform independently developed by the Company is characterized by mass connectivity, high concurrency, high security, and distributed cluster deployment, which supports big data and artificial intelligence interfaces and supports future business extension. By means of big data acquisition, analysis, real-time monitoring, early warning and business intelligence analysis, the wall between each business systems of public utility enterprises can be broken through, and the data islands can be merged. So the system can help enterprises to analyze business data more accurately, and provide more reliable and accurate decision support analysis for decision-makers and operation managers.



4. 创新对标海外 Innovation and following overseas standards

一直以来公司高度注重对标海外标准，努力提升产品竞争力，争取更大的海外市场。在海外产品的研发方面，模块化智能燃气表遵循欧盟、俄罗斯等世界主流国家智能表设计规范，秉承结构化设计理念，在确保计量稳定的基础上，通过结构、软硬件创新设计，将通讯模组与计量和基表完全分离，实现“1+N”组合产品。物联组合过程，无需拆表，无需升级表端程序，便可快速接入甚至切换不同网络，快速切换不同客户协议，有效提升了燃气公司对网络的适应度，避免通讯升级而导致的表具失效或更新，保护燃气公司长期稳定运营。

The Company highly valued on following international standards. It worked hard to improve product competitiveness for a larger overseas market share. In overseas product development, the modular smart gas meter follows main stream design specifications of countries such as the European Union, Russian, etc. It adheres to the modular design concept. While ensuring the stability of metrological part, through the structural, hardware and software innovative design, communication module and measurement unit are separated from base meter, realizing the combination of "1 + N" products. The network commissioning process is easy: access or even switch different networks, switch different customer protocols with no need to dismantle the meter or upgrade the meter software. This effectively improves the adaptability of the gas company to the communication network, avoids the failure or replacement of meters caused by communication infrastructure upgrades, and protects the long-term stable operation of the gas company.

金卡NB-IoT智能燃气表荣获欧盟防爆认证 Goldcard NB-IoT smart gas meter got EU ATEX certificate

2019年，金卡智能集团NB-IoT智能燃气表荣获欧盟ATEX防爆认证，标志着金卡智能燃气表在行业内率先通过欧盟权威认证机构的检测，顺利取得欧盟准入的合格评定。金卡NB-IoT智能燃气表技术具有中国自主知识产权。金卡智能集团通过不断进行技术创新，努力争取更多技术高地，为赢得智能燃气表的中国话语权而不懈努力。

In 2019, The NB-IoT smart gas meter of Goldcard was awarded the ATEX explosion-proof certification by the European Union, marking the first in the industry to pass the inspection by the European Union's authorized certification body, and successfully obtained the EU entry qualification. Goldcard has its own intellectual property rights on NB-IoT smart gas meter technology. Goldcard Smart Group strives for more technical heights through continuous innovation, and makes unremitting efforts to define the future of smart gas meters in China.



5. 知识产权保护 Protection of IP rights

在持续加大创新研发投入力度的同时，公司也加紧建设知识产权保护管理机制。2019年，公司通过引进专业的知识产权人才，形成了一支专业的知识产权人才队伍，通过优化和完善集团及子公司的知识产权的相关管理制度和流程，使知识产权工作与研发工作融合更加紧密、对接更加高效。同时，通过重新修订知识产权的相关奖励制度，大幅提高对知识产权申请的奖励力度，从而提高员工申请知识产权的积极性，使公司的研发成果可以得到更加全面、及时的保护。截至2019年，金卡智能集团累计获得专利认证366项，其中授权发明专利31项、实用新型专利298项、外观设计专利37项。

At the same time with more investment in R&D, the company is stepping up forging intellectual property protection and management mechanism. In 2019, through the introduction of professional IP talents, the company has formed a professional IP team. By optimizing and improving the relevant intellectual property management system and process of the group and its subsidiaries, the intellectual property work and R&D work will be more closely and efficiently integrated. At the same time, by revising the relevant IP incentive system, the incentive for intellectual property application is greatly increased, so to encourage the enthusiasm of employees in applying for IP rights. The company improved the overall and timely protection of its R&D achievements. By 2019, Goldcard Smart Group has obtained a total of 366 patents, including 31 utility patents, 298 utility model patents and 37 design patents.

6. 数字化工厂建设 Building digital factory

多年来，公司着力推进数字化工厂建设，建立了高度自动化的装备和设施，建设了智能制造单元、智能生产线、数字化车间、智能工厂，努力推动生产方式向柔性化、智能化、精细化转变。

Over the years, the Company has made great efforts to promote the construction of digital factories, set up highly automated equipment and facilities, and built smart manufacturing units, smart production lines, digital workshops, and smart factories, striving to enhance more flexible, intelligent, and refined production.



金卡智能集团实现 5G数字化工厂网络建设 Goldcard Smart Group realizes 5G digital factory network

随着金卡智能集团生产设备的数字化需求越来越高，数字化设备布置密度越来越大，对网络的要求也越来越高。2019年，公司基于5G网络的高带宽、低延时、大链接的特性，引入了基于5G网络的工业互联网组网工程，满足了数字工厂中独立生产设备的互联互通。在整个运作的架构中，5G、AI、边缘计算与实时数据分享技术的整合成为关键，从而保证对设备的高效控制、在线监管，增强信息的传输能力、高实时性分析处理，有效提升产品质量与生产效率。

The demand for Goldcard Smart Group's production equipment being digital is ever increasing, the digital equipment layout density is getting higher, and demand for network capacity is also rising. In 2019, the company introduced the industrial internet networking project based on 5G network, which has the advantages of high bandwidth, low delay and large connection. The project satisfied the requirement of interconnection of independent production equipment in digital factory. In the whole operation architecture, the integration of 5G, AI, edge computing and real-time data sharing technologies has become the key, so as to ensure the efficient control and online supervision of equipment, enhance the transmission capacity of information, enable highly real-time analysis and processing, and effectively improve product quality and production efficiency.

金卡智能集团5G数字化工厂 荣获MID模块D认证 Goldcard Smart Group digital factory obtained MID D module certification



2019年，金卡智能集团5G数字化工厂荣获由荷兰国家计量院NMI颁发的MID模块D认证。MID模式D认证的审核极为严格，包括产品生产时的校准检定设备、检定时环境条件的管理、检定测试方法、检定设备不确定分析、检定人员的资质能力及管理流程文档等。通过NMI专家组一天半的严格审厂，金卡智能均符合MID模块D指令中的所有要求。该认证覆盖了公司机械铝壳膜表、智能钢壳膜表及热式燃气表的生产线，标志着金卡智能生产质量体系符合欧盟要求，也是公司推进数字化工厂建设的又一项重要成绩。

In 2019, Goldcard Smart Group 5G digital factory obtained the MID module D certification issued by NMI, the national metrology institute of the Netherlands. The audit of MID mode D certification is very strict, including the calibration and verification equipment used in production, the management of environmental conditions during the verification, the verification and test methods, the uncertainty analysis of the verification equipment, the qualification and capability of the verification personnel and the management process documents, etc. After one and a half day of strict audit by NMI expert group, Goldcard Smart Group meets all requirements in MID module D instruction. The certification covers the production lines of the company's mechanical aluminum shell diaphragm meter, smart steel shell diaphragm meter and thermal gas meter, marking that the production quality system of Goldcard meets the requirements of the European Union. It is another important achievement for the company in the construction of digital factory.

金卡智能集团创新数字化工厂 云检测技术 Goldcard Smart Group innovative digital factory cloud inspection technology

2019年，金卡智能集团针对数字化工厂检测技术进行了改造与升级，由公司自主创新研发的数字化工厂云检测技术正式应用。通过将设备检测软件直接布置在云端，实现云端检测、云端数据共享。改造升级后的云检测技术提升了20%的设备检测效率，还有效避免了数据丢失、数据传输速度慢等一系列问题，切实保障了产品质量的安全与稳定，更进一步推进了公司数字化工厂与智能制造的应用水平。

In 2019, Goldcard Smart Group transformed and upgraded the digital factory inspection technology and formally applied the cloud inspection technology developed by the company independently. The inspection equipment software is directly deployed in the cloud to realize cloud inspection and cloud data sharing. The upgraded cloud inspection technology has improved the efficiency of inspection equipment by 20%, as well as avoided a series of problems such as data loss and slow data transmission speed, effectively guaranteed the safety and stability of product quality, and further promoted the application level of the company's digital factory and intelligent manufacturing.



云检测技术
提升了20%的
设备检测效率

(四) 全方位构建安全体系 Building an all-round security system

随着我国天然气消费的快速增长，燃气安全成为全社会共同关注的话题。多年来，金卡智能集团紧随天然气行业发展需求，开发了包括燃气工程管理、智慧燃气解决方案、切断式智慧燃气表、NB-IoT天然气报警器等一系列高级别安全保障产品与服务，实现了从管道施工到燃气供应的全流程控制，确保天然气稳定供应，保障百姓安全。

With the rapid growth of natural gas consumption in China, gas safety has become a common concern of the whole society. Over the years, Goldcard Smart Group followed closely the natural gas industry development needs, developed a series of high level security products and services, including gas engineering project management, smart gas solution, smart gas meter with cutting-off valve, NB-IoT gas alarm etc.. It covers the whole process control from the pipeline construction to the gas supply, ensuring the stable supply of natural gas and the safety of the people.



5G时代到来，物联网、大数据、云计算、人工智能等前沿技术在公用事业行业融合日趋深入，信息安全问题备受瞩目。金卡智能集团打造数据安全解决方案，杜绝了数据窃取、终端仿冒、中间人攻击、重放攻击、网络劫持、非授权控制等安全隐患。

With the advent of the 5G era, cutting-edge technologies such as the IoT, big data, cloud computing and AI are increasingly integrated in the utility industry, information security issues are attracting much attention. Goldcard Smart Group works on data security solutions, to deal with data theft, terminal counterfeiting, middle-man attack, replay attacks, network hijacking, unauthorized control and other security risks.

金卡智能集团NB-IoT天然气报警器打造安全智慧厨房 Goldcard Smart Group NB-IoT gas alarms support safe and smart kitchen



在中国，每年大约发生800起燃气泄漏及爆炸事故，造成超过1,000人伤亡，平均每天发生2到3起的室内燃气泄漏及爆炸事故，占总爆炸数的70%。面对全国燃气爆炸事故频发的严峻形势，国家从上到下逐级颁布了相关的政策，并通过标准对燃气安全进行规范。金卡智能集团NB-IoT天然气报警器基于NB-IoT技术完成远程报警，一旦出现燃气泄漏，报警器及时将信息发送至燃气企业后台及用户手机，及时掌控险情状况，同时自主联动燃气表、机械手关闭阀门，开启智能窗户，打开智能排风扇等，打造智慧厨房，降低危险隐患。

In China, there are about 800 gas leak and explosion cases every year, causing more than 1,000 casualties. On average, two to three indoor gas leaks and explosions occur every day, accounting for 70% of the total number of explosions. Faced with this severe situation, the state has promulgated relevant policies from top to bottom and regulated the gas safety through standards. Goldcard Smart Group gas alarm based on NB-IoT technology. Once gas leakage is detected, alarm information will be sent to the gas supplier's back office and the user's mobile phone, to initiate timely control of the situation. At the same time the alarm system can connect with smart gas meter, close the gas valve automatically, open the smart windows, open the smart fan, etc., realizing a smart kitchen and safeguarding the life.

金卡智能集团推进数字安全保护 Goldcard Smart Group supports digital security efforts



随着NB-IoT技术全面应用于产品，金卡智能集团着力推动通讯安全保护工作。在产品的设计过程中，采用表端加密芯片、云端商用等级的密码机，通过安全服务器实现对密钥及关键参数进行保护；通过消息认证码及签名数据实现双向身份认证，能快速识别虚假攻击，并杜绝燃气表终端被非授权控制。通过对端到端通信数据进行硬件加解密，有效防止用户及公用事业公司信息泄漏。

With the full application of NB-IoT technology in products, Goldcard Smart Group works hard on promoting communication security. In the process of product design, the meter uses security chips, the cloud server uses commercial grade cipher machine, security server enforces protection of security keys and critical parameters. Through message authentication code and digital signature to achieve two-way identity authentication, false attacks can quickly be identified, and unauthorized control of the gas meter terminal is prevented. Through hardware encryption and decryption of end-to-end communication data, the information leakage of users and utility companies is effectively prevented.



（五）优质服务赢得客户感动

High quality service win client's heart

伴随金卡智能集团业务量的明显提升，提升客户服务能力成为公司重点突破的工作。客户服务部门与客户直接接触，是产品信息、市场信息反馈的重要源头，通过优化客户服务流程，提升客户服务效率，为客户提供优质服务进而打动客户，帮助客户解决业务痛点。2019年，金卡智能集团一线客户服务团队以及及时、热情、高效的服务态度得到了广大客户的高度评价和广泛认可，以专业、精湛的技术为客户排除了众多技术难题，帮助客户及时挽回损失，有力地保障供气稳定与安全。

With the fast increase of Goldcard Smart Group's business volume, the improvement of customer service capability has become the company's key concern. The customer service department is in direct contact with customers, and is an important source of product and market information feedback. By optimizing the customer service process, the customer service efficiency is improved, so as to provide customers with quality service, impress customers and help customers solve business pain points. In 2019, the front-line customer service team of Goldcard Smart Group, with its timely, enthusiastic and efficient service attitude, has been highly appraised and widely recognized by the majority of customers. They have solved many technical problems for customers with professional and exquisite expertise, helped customers recover losses in time, and effectively guaranteed the stability and security of gas supply.



1.提升售后服务能力 Improve after sales service capability

2019年，公司客服部门锐意改革，以顾客对产品售后服务的需求为基础，结合企业的实际情况，通过分析、优化企业产品售后服务的业务流程，建立售后服务信息化模型——全生命周期服务系统，以求不断达到提高售后服务质量，提升顾客的满意度和忠诚度的最终目的。

In 2019, based on customer requirements for after-sale service, combined with the actual situation of enterprises, through analysis and optimization of the company's service business process, the customer service department made a reform and set up an after-sales service information model—the whole life cycle service system, in order to constantly improve the service quality, enhance the ultimate goal of customer satisfaction and loyalty.

金卡智能集团开展客户服务培训 Goldcard Smart Group customer service training



为提高公司客户服务团队的协同服务能力与效率,实现客户服务人员各项技能的全面提升,2019年2月,公司客户服务部门统一开展年度培训工作。为提升客户服务水平,满足不同客户的个性化需求,培训项目内容涉及能源云3.0系统、银证服务系统、NB-IoT物联网/采集器、超声波流量计等一系列公司最前沿的产品与应用。通过此次培训,有效增强了公司客户服务团队的协同服务能力,为提升客户服务水平奠定基础。

In order to improve the service collaboration ability and efficiency of the company's customer service team and overall skills of customer service personnel, the company's customer service department carried out annual training in February 2019. In order to improve customer service level and meet the personalized needs of different customers, the training program covers a series of brand new products and applications of the Company, including ENESYS Cloud V3.0 system, ENESYS server system, NB-IoT network/Data collector, and ultrasonic flowmeter. Through this training, the service collaboration ability of the company's customer service team was effectively enhanced, which laid a foundation for the improvement of customer service level.

2.为客户提供优质服务
Provide superior customer service

5G时代下，软件与云服务成为公用事业企业数字化转型关键，金卡智能集团借助信息技术和物联网+应用，切实帮助燃气企业降本增效，助力燃气企业提供智慧服务，提升百姓满意度，受到燃气企业广泛好评。

In the era of 5G, software and cloud services have become the key to the digital transformation of public utilities. With the help of information technology and IoT+ application, Goldcard Smart Group effectively helps gas enterprises to reduce costs and increase efficiency, helps gas enterprises to provide smart services, and improves consumer satisfaction, which is widely praised by gas enterprises.



引入金卡平台服务提升新疆燃气客户服务水平
Enhance consumer service level with Goldcard platform in Xinjiang.

多年来，金卡智能集团同新疆克拉玛依燃气公司携手提升当地用气管理能力。截至2019年底，金卡智能集团共向克拉玛依市燃气公司提供NB-IoT燃气表42,000台。基于稳定的网络传输，以及云平台大数据支撑，新疆克拉玛依燃气公司目前已全部开通微信公众号缴费，有效提升了便捷化服务体验。运用金卡平台实现了远程阀门控制、远程用气监控、阶梯气价实时调整以及大数据分析和异常报警功能。帮助新疆克拉玛依燃气公司提升综合管理水平的同时有效提升了客户服务水平和企业形象。

Over the years, Goldcard Smart Group has worked with Xinjiang Karamay Gas Company(XKGC) to improve local gas usage management capacity. By the end of 2019, Goldcard Smart Group has supplied a total of 42,000 NB-IoT gas meters to XKGC. Based on stable network transmission and cloud platform big data support, XKGC has opened the WeChat public account payment channel for all users, effectively improving the convenient service experience. The Goldcard platform is used to realize the functions of remote valve control, remote usage monitoring, real-time adjustment of block tariff, big data analysis and abnormal event alarm. While helping XKGC to improve the overall level of management, Goldcard effectively improves its level of customer service and enhances corporate image.



银证软件助力杭州燃气打造DT时代客户管理云平台
ENESYS software support Hangzhou Gas to build customer management cloud platform



2019年，金卡智能集团旗下银证软件携手杭州燃气共同建设客户云平台，打造城市燃气数字化客户服务场景。双方合计研发360+个功能点、集成17+套系统、整合18+种银行及第三方支付渠道、迁移数亿条数据，组织400+人次培训，从实际行动谱写了居民用户信息管理平台建设的多项行业领先。平台打破原有的数据孤岛，真正实现用户业务办理、坐席服务、安检抄表等多业务层互联互通，帮助燃气企业为530多万用户提供“又好又快”的服务体验，真正实现“民有所呼，我有所应”，打造百姓专属“贴心管家”。

In 2019, ENESYS software, a subsidiary of Goldcard Smart Group, joined hands with Hangzhou Gas to jointly build a customer cloud platform and create an urban gas customer digital service scene. In total, the two sides have designed 360+ function points, integrated 17+ sets of systems, integrated 18+ types of Bank and third-party payment channels, migrated hundreds of millions of data, organized 400+ person-time training, and built a number of industry-leading practices of information management platforms for residential users. The platform breaks the original data island, fully realizes the interconnection of multiple business layers such as user business handling, counter service, security check and meter reading, etc., helps the gas enterprise to provide good and fast service experience to more than 5.3 million users, truly realizes "Whatever people call-in, we respond", and creates an exclusive "intimate steward" for the people.



第二章 关注员工推动企业发展

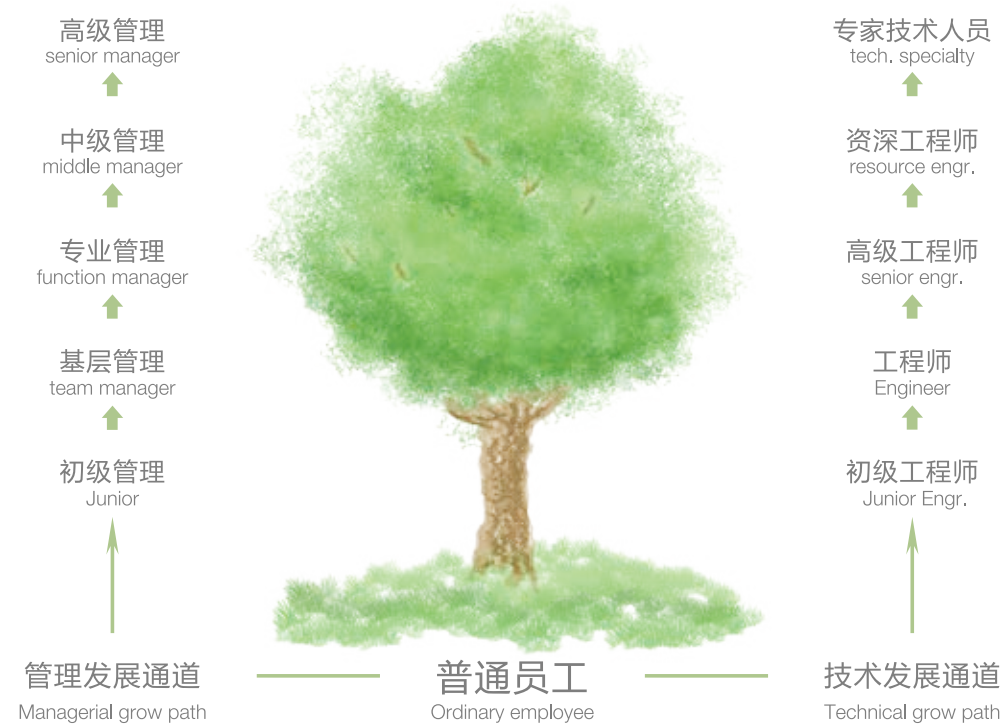
CHAPTER II CARE FOR EMPLOYEES, GROW WITH THE COMPANY

金卡智能集团以开放包容的胸怀，广阔吸纳各领域的优秀人才，为社会提供就业机会，为员工创造职业舞台。公司秉承以人为本、人尽其才、唯贤任用的人才宗旨，为员工提供良好的就业环境、关注员工需求、倾听员工声音，全方位地开展员工管理工作。

With an open and inclusive mind, Goldcard Smart Group attracts talents from various fields, provides employment opportunities for the society and creates a professional stage for employees. The company adheres to the principle of people-oriented, talent speaks and appointment by merit, providing a healthy work environment for employees, paying attention to the needs of them, listen to their voices, managing staff activities all-around.



(一) 员工与公司共同成长 Employees growth with the Company



图：金卡智能集团职业成长树
Fig: Goldcard Smart Group career development tree

2019年，金卡智能集团持续深化员工培训，重点推进人才培养工作。公司通过人才盘点、关键岗位关键人才识别，建立公司后备队伍，并通过企业大讲堂、青年讲师挖掘、基层管理干部培训及轮岗计划，加强后备力量培养；建立岗位资格任职体系，发布《职等职级管理制度》，明确职业发展通道，激发员工自我学习和自我提升的积极性。在管理机制方面，加强HR业务协同能力，以业务驱动促进人力资源各项协同工作，帮助解决业务痛点，协同部门开展全方位管理工作。

In 2019, Goldcard Smart Group continued to provide staff training and paid special attention to talent cultivation. The company establishes a reserve team through internal talent screening and the identification of key staff in key positions, and strengthens the reserve team training through the enterprise lecture hall, the finding of young lecturers, the training of junior management cadres and the job rotation plan. It established a professional post qualification system, with published "Professional grade and rank management regulation" defining a clear career development channel to stimulate the enthusiasm of the staff to learn and improve themselves. In terms of management mechanism, we strengthened HR business coordination ability, let the business needs to drive the coordination of human resources activity to help solve business pain points, and cooperate with business departments to carry out all-round management.

金卡智能集团开展青年领袖培养计划 Goldcard Smart Group young leader training programme



2019年，金卡智能集团从企业发展战略出发，着眼后备人才培养为目标，发起了金卡青年领袖培养计划。项目联合复旦大学管理学院，为公司40余位青年领导者和重要岗位继任者开设变革领导力、企业发展战略、创新思维等18门企业管理课程。青年领袖营项目将金卡智能集团的实际需求与复旦大学的优势资源相结合，通过第一阶段的学习，学员们寓学于练，从视野、知识、能力、素养以及管理水平等方面得到全方位的提升，为公司的人才培养与可持续发展提供强大的动力支持。

In 2019, Goldcard Smart Group launched Goldcard young leader training programme, starting from the enterprise development strategy requirement and aiming at the cultivation of reserve talents. In conjunction with the School of Management, Fudan University, the project offers 18 business management courses, including change leadership, corporate development strategy and innovative thinking etc., for over 40 young leaders and candidates to important positions in the company. Youth leadership program combined the actual demand of Goldcard Smart Group with the resource advantage of Fudan University. Through the first phase of study, the students learned together with practice, and got a full scope advance in vision, knowledge, ability, accomplishment and management capability. It is a great support to the talent training and the sustainable development of the company.

(二) 完善员工激励机制

Improve employee incentive system

良性的人才发展战略离不开合理的员工激励机制。2019年，公司继续完善并落实员工激励机制，制定了公司《福利管理制度》、《荣誉项目申报奖励办法》，实行了职称津贴制度，不断优化员工的薪酬福利待遇，有效提高了员工的工作积极性和创造性。

A sound talent development strategy is inseparable from a reasonable employee incentive mechanism. In 2019, the company continued to improve and implement the employee incentive mechanism. It formulated "Welfare management rules" and "Award method for the application of honor projects", implemented the professional title allowance system, continuously optimized the salary and welfare treatment of employees, effectively improved the work enthusiasm and creativity of employees.

金卡智能集团创新员工股权激励机制

Goldcard Smart Group innovative employee stock incentive mechanism

2019年，为落实企业员工激励工作，创新员工激励机制，金卡智能集团第四届董事会第十次会议审议通过了《关于回购公司股份的议案》，同意公司在不低于人民币5,000万元（含）且不超过10,000万元（含）额度范围内使用自有资金回购部分社会公众股份用于股权激励计划或员工持股计划。截至2019年12月31日，公司回购股份1,142,800股，占公司当前总股本的0.27%，总金额达16,354,149.97元。

In 2019, to implement the employees incentive undertaking and innovate in staff incentive mechanism, Goldcard Smart Group board of directors examined and passed the bill on the buyback of shares of the company, approving the company to buy back part of the public shares from the stock exchange within the scope of using its own funds, at no less than RMB 50 million (including) and not more than RMB 100 million (including), for the purpose of equity incentive plan or employee stock ownership plan. As of December 31, 2019, the company had repurchased 1,142,800 shares, accounting for 0.27% of the company's total listed shares, for a total amount of RMB 16,354,149.97.



截至2019年12月31日，公司回购股份

1,142,800股



占公司当前总股本的

0.27%



总金额达

16,354,149.97元



(三) 企业文化与氛围建设

Corporate culture and atmosphere building



随着金卡智能集团的不断发展壮大，公司高度重视推动企业文化融合，营造良好的企业文化氛围。2019年，公司持续开展员工互动、员工关怀活动，开展了金秋毅行、程序员猿节、年轮纪等一系列主题鲜明，具有金卡特色的员工活动，努力打造团结、快乐、奋进的企业文化，提升员工凝聚力。

With the continuous growth of Goldcard Smart Group, the Company attaches great importance to promoting the integration of corporate culture and creating a good corporate culture atmosphere. In 2019, the company continued to carry out employee interaction and employee care activities, and carried out a series of employee activities with distinctive themes such as golden autumn walk, programmer festival, and annual ring commemorate, in an effort to create a united, happy and progressive corporate culture and enhance employee cohesion.





2019年，金卡智能集团篮球队获得钱塘新区篮球大赛总决赛第一名
In 2019, Goldcard basketball team won championship in Qiantang New District



金卡智能集团啦啦队获得钱塘新区操舞大赛啦啦操企业组第一名
Goldcard cheerleading team won the first prize in the Qiantang New District dance-gymnastics competition

金卡智能集团拓展特色员工团建活动 Goldcard Smart Group distinctive employee team building activity



2019年，金卡智能集团为激发员工职业荣誉感，激励新入职员工，举办了“年轮纪”员工入职周年纪念活动。通过此次向多年伴随公司成长，坚持为公司服务的老员工表达感谢的同时也激励新入职员工努力向老员工学习，感受积极进取的企业文化。

In 2019, Goldcard Smart Group held "annual ring commemorate" employee induction anniversary activity to stimulate employees' sense of professional honor and inspire new employees. Through this activity, the Company expressed gratitude to the old employees who had grown up with the company for many years and insisted on serving the company. At the same time, new employees were encouraged to learn from the old employees and feel the positive corporate culture.





金卡智能集团开展“不忘初心、牢记使命”主题教育活动

Goldcard Smart Group Carry out theme activity "never forget your original intention and remember your mission"



2019年，金卡智能集团党支部围绕民营企业“不忘初心、牢记使命”主题教育，结合公司企业文化开展形式多样的员工活动。公司开展了名为“榜样的力量”分享座谈会，邀请优秀员工作为嘉宾分享和讲述其个人或与公司同行的奋斗事迹。同时，为了解中国共产党领导中国人民所走过的峥嵘岁月和新中国成立以来所取得的伟大业绩，缅怀革命先烈，牢记历史，进一步增强党组织的凝聚力和战斗力，激励党员继承和发扬党的光荣传统，增强党性意识，金卡智能支部委员会组织开展了“追忆峥嵘岁月，传承革命精神”党员活动，组织前往中共杭州小组纪念馆、浙江革命烈士纪念馆，参观缅怀革命先烈。

In 2019, the CCP branch of Goldcard Smart Group carried out various forms of staff activities in support of the corporate culture, focusing on the

theme of "never forgetting the original intention, remembering your mission" of private enterprises. The company held a sharing forum named "the power of role models", in which outstanding employees were invited as guests to share the stories about their personal struggles or growth together with Goldcard. At the same time, to understand how the CCP led the Chinese people go through those eventful years and the great achievements it has made since the founding of new China, to cherish the memory of the revolutionary martyrs, to remember history, to further enhance the cohesion and effectiveness of the party organization, motivate members to inherit and carry forward the glorious tradition of the party, strengthen the consciousness of the party spirit, the Goldcard Smart Group party branch committee organized a "recall the glory days, upholding revolutionary spirit" activity among party members, arranged visits to the memorial of the first group of the CCP in Hangzhou, and Zhejiang revolutionary martyr memorial hall, to the memory of the revolutionary martyrs.



天信仪表开展“奋斗者”企业文化建设活动

Tancy Instrument carry out "Striver" corporate culture building activity



2019年，金卡智能集团旗下天信仪表组织开展“奋斗者”企业文化建设活动，通过《匠心筑梦》奋斗者故事会、读书分享会、树立身边榜样等主题活动推进企业文化融合提升。通过广大员工之间的交流与分享，营造浓郁的学习氛围，促进员工综合素养提升，进而打造积极向上的企业文化氛围。

In 2019, Tancy Instrument organized the enterprise culture building activity of "Strivers", and promoted the integration and enhancement of enterprise culture through theme activities such as "dreams of workman" storytelling of strivers, reading sharing sessions, and setting-up model roles around, etc. Through the communication and sharing among the large number of employees, a strong learning atmosphere was created, and the comprehensive quality of employees was improved, so to help create a positive corporate culture atmosphere.



第三章 践行责任贡献社会和谐

CHAPTER III PRACTICE RESPONSIBLY, CONTRIBUTE TO SOCIAL HARMONY

多年来，金卡智能集团始终坚持诚信合规经营，努力推动供应链可持续发展，坚持走环境友好型企业发展道路，关注社会、回馈社会，积极为运营所在社区做出贡献，携手各利益相关方共建美丽、和谐的生态家园。

Over the years, Goldcard Smart Group has always adhered to management with integrity and in compliance with regulations, striven to promote the sustainable development of the supply chain, insisted on the path of environmentally friendly enterprise development, paid attention to the society and feedback to the society, actively contributed to the resident community, and worked with all stakeholders to build a beautiful and harmonious ecological homeland.



（一）推进供应链可持续发展

Support sustainable development of supply chain

伴随金卡智能集团的快速发展，公司不断规范并实行更加严格的供应链管理制度。公司愿意和具有社会责任感的供应商开展合作，在同等条件下提高履行社会责任优秀供应商采购份额，优先提供业务合作机会；对于履行社会责任表现差，尤其是违反公司要求的供应商提出限期整改要求，同时降低采购份额或限制业务合作机会。2019年，公司继续实行集团统一化管理模式，进一步优化供应商管理机制，持续推进供应商专项改善小组工作，提升供应商决策及执行管理水平。

Along with the rapid development of Goldcard Smart Group, the company has been standardizing and implemented more strict supply chain management system. The company is willing to cooperate with suppliers with a sense of social responsibility, increases the procurement share to suppliers who fulfill social responsibility better, and gives them priority in more business cooperation opportunities. For the poor performance in fulfilling social responsibility, especially for the suppliers who violate the company's requirements, a deadline is put forward for rectification, while reducing the purchase share or limiting the business cooperation opportunities. In 2019, the company continued to implement the group unified management mode, further optimized the supplier management mechanism, continuously strengthened the supplier improvement special team work, and improved the level of supplier decision-making and operation management.

金卡智能集团深化推进供应链合作

Goldcard Smart Group deepens collaboration with supply chain



2019年，金卡智能集团组织召开了以“感谢、共进、共赢”为主题的供应商大会。此次供应商大会，金卡智能集团向供应商分享了当前国内外发展形势下的行业动态，以及公司未来的战略发展方向。同时，通过供应商大会公司努力倡导将可持续发展更好地融入供应链管理之中，希望各合作伙伴在自动化、智能化、精益化等方面与公司形成发展合力，以建设行业智慧生态，共同助力行业深化改革。

In 2019, Goldcard Smart Group organized a supplier conference with the theme "thanks, co-growth and win-win". At the supplier conference, Goldcard Smart Group shared with the suppliers the latest industry trends under the current domestic and international situation, as well as the company's future strategic development directions. At the same time, through the supplier conference, the company strive to advocate the better integration of sustainable development concept into supply chain management, and hoped that all partners can form a joint development force with the Company in automation, smart production, lean production etc., so as to build a smart ecology of the industry and jointly help deepen the reconstruction of the industry.

（二）坚持践行绿色发展战略

Insist on following green development strategy

金卡智能集团一直以来坚持走环境友好型企业发展道路，致力于将绿色发展理念融入产品与服务的全生命周期，积极面对生产过程中可能产生的环境影响因素，主动开展环保技术改造，在创新研发过程中植入节能减排理念与设计，强化供应链履行环境保护责任，竭尽所能降低对环境的影响。

Goldcard Smart Group always adheres to the road of environmentally friendly enterprise development, is committed to incorporation of green development concept into the whole life cycle of products and services, proactively deals with possible environmental impact factors in the production process, actively carries out environment protection technical innovation, implants in the process of product development the energy conservation and emissions reduction concept and design, and strengthens the supply chain performance of the environmental protection responsibility, doing our utmost to reduce the impact on the environment.

天信仪表积极开展阳极氧化工艺环保技术改造

Tancy Instrument environment protection renovation of anodic oxidation process

2019年，金卡智能集团旗下天信仪表积极开展阳极氧化工艺环保技术改造。技改应用后，取消了传统表面处理工艺中使用的挥发性硝酸、重金属六价铬等化学药品，消除了对员工健康的影响；利用化学磨砂替代传统震抛工艺，消除了传统震抛过程所产生的大量污泥，污泥产出减少50%以上。通过阳极氧化环保技术改造，彻底解决了废水排放的去铬、去酸难题，有效降低了对环境的危害，为行业树立了标杆。

In 2019, Tancy Instrument actively carried out environmental protection technical renovation of anodic oxidation process. After application of the technical modification, volatile nitric acid, heavy metal hexavalent chromium and other chemicals used in traditional surface treatment process are eliminated, eliminating the influence on the health of employees. Chemical scrubbing was used to replace the traditional vibration polish process, reducing sludge output by more than 50%. Through the environmental protection renovation of anodic oxidation technology, the issue of removing chromium and acid from wastewater discharge is completely solved, effectively reducing the harm to the environment, which sets a benchmark for the industry.

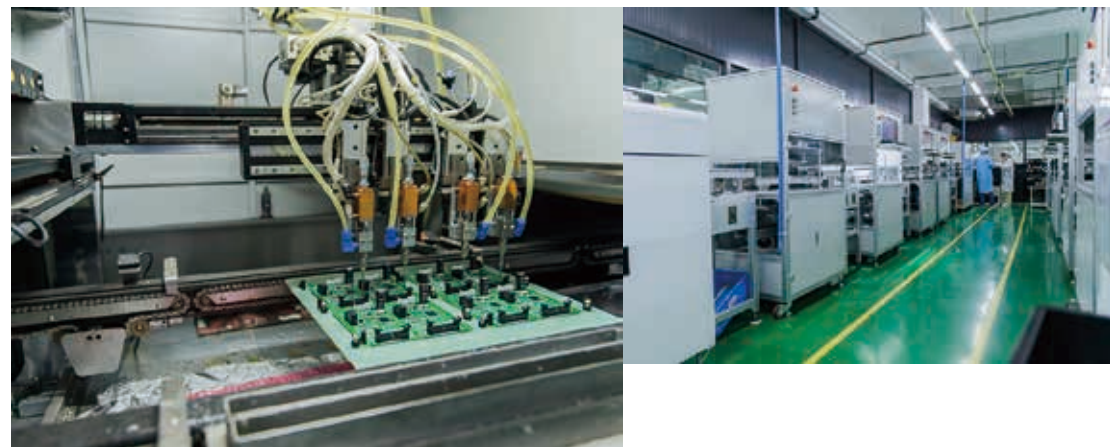




金卡智能集团持续推动生产车间排放系统改造 Goldcard Smart Group continuously improve its workshop discharge system renovation

2019年，金卡智能集团在原有的生产车间气体排放工程基础之上进一步推动排放系统改造工程。经过整改后，焊接废气、喷漆废气等少量有害气体经过滤网过滤、光解光催化、活性炭净化三步有效过滤后向外排放。经检测，焊接、喷漆废气排气筒出口的锡、非甲烷总烃排放浓度及排放速率提升到87%，有效提高了有害气体排放管理能力，为大气环境的改善做出了贡献。

In 2019, further on the previous production workshop gas emission project, Goldcard Smart Group continued the discharge system renovation project. After rectification, the small amount of harmful gases from the welding and spray painting process were treated with three steps of filtration: screen filter, photocatalytic decomposition and activated carbon purification, before being discharged outward. Test result shows that the efficiency of discharge increased to 87%, effectively improving the management ability of harmful gas emission and contributing to the improvement of the atmospheric environment.



（三）践行公益爱心回馈社会 Charity activity and feedback to society

作为一家优秀公共事业服务企业，我们本着人本主义精神，在做好业务的同时积极开展各类社会公益事业，努力践行公司可持续发展理念。2019年，金卡智能集团携手各利益相关方，通过创新和协作的方式来为所在地区及社区解决经济、社会问题，开展了类型丰富的公益活动，为支持当地社区的全面可持续发展做出应有的贡献。

As an excellent service provider to public utility industry, in the spirit of humanism, we actively carry out various social public welfare undertakings while maintaining a sound business, and strive to practice the company's concept of sustainable development. In 2019, Goldcard Smart Group worked with various stakeholders to solve economic and social problems for the local area and community through innovation and collaboration, and carry out a variety of public welfare activities, so as to make due contribution to the comprehensive and sustainable development of local communities.

1. 快速应对抗击新冠病毒 Fast response to combats against COVID-19



图：金卡智能集团积极筹集抗疫物资
Figure: Goldcard Smart Group actively raising anti-epidemic materials

面对突如其来的新型冠状病毒疫情，金卡智能集团快速响应，积极参与抗击疫情的，为一线抗疫工作者构筑了强有力的后盾。当金卡智能集团了解到奋战在一线的医疗队伍面临物资匮乏的情况之后，公司迅速、积极地展开行动，联系全球的伙伴迅速采购物资并联系对接捐赠事宜并第一时间设立了600万元的防疫专项基金。

In face of sudden novel coronavirus outbreak, Goldcard Smart Group quickly responded and actively participated in the fight against it, contributed to provide a strong backup for the first-line anti-epidemic workers. When Goldcard Smart Group learned that the front-line medical team was facing a shortage of protection materials, the company quickly and actively started actions, contacted global partners to quickly purchase required materials and arranged donation channels. We have also set up a special epidemic prevention fund of 6 million RMB yuan.



图：金卡智能集团捐资抗疫
Figure: Goldcard Smart Group donation against epidemic

截至2020年2月10日，金卡智能公益基金会向杭州市卫健委捐赠200万元（包括50万元医用物资），向乐清市政府捐赠240万元，向苍南县慈善总会捐赠60万元（包括价值10万元的防护服）；同时，公司还向湖北等地公用事业企业捐赠价值100余万元的物资，支持他们的紧急防护需要。金卡智能集团还在公司内发起员工爱心捐赠，近千名员工积极响应号召踊跃行动，累计筹款超71万元。

As of February 10, 2020, Goldcard Smart Group Public Welfare Foundation has donated 2 million yuan (including 500,000 yuan of medical supplies) to Hangzhou Municipal Health Commission, 2.4 million yuan to Yueqing Municipal Government, and 600,000 yuan (including 100,000 yuan worth of protective clothing) to Cangnan Charity Federation. At the same time, the company also donated more than 1 million yuan worth of materials to public utilities in Hubei Province and other places to support their emergency protection needs. Goldcard Smart Group employees also participated in donation of the company, nearly 1,000 employees actively responded to the call for action raising a total of more than 710,000 yuan.

向杭州市卫健委 捐赠 200 万元 (包括50万元医用物资)
向乐清市政府 捐赠 240 万元
向苍南县慈善总会 捐赠 60 万元 (包括价值10万元的防护服)
向湖北等地公用事业企业 捐赠 100 余万元物资
发起员工爱心捐赠 累计筹款超 71 万元

2. 积极投身公益事业 Take part in public welfare causes

金卡智能集团积极响应国家扶贫、减贫政策，和社会发展具体需要，联合利益相关方开展了类型多样的公益慈善活动。2019年，金卡智能集团累计对外捐赠资金达168万元。

Goldcard Smart Group actively responded national policies in poverty assistance and relief. In line with the requirement of society development, it carried out various forms of public welfare activities together with other interested parties. In 2019, Goldcard Smart Group has made public donations accumulating 1.68 million yuan.

金卡智能公益基金会资助贵州唇腭裂儿童 Goldcard Smart Group Foundation support to children with cleft lip and palate in Guizhou

2019年4月，金卡智能公益基金会携手贵州燃气鸿济基金会联合“微笑行动”公益机构在六盘水市人民医院举行了大型唇腭裂公益救助行动。本次行动希望为贵州省六盘水市和毕节市的150余名贫困家庭唇腭裂患儿实施整形修复手术，让患儿重绽幸福微笑。经过专业医疗队的层层筛选，本次共有114名患儿接受免费唇腭裂手术救治。金卡智能公益基金会携手贵州燃气鸿济基金会向本次公益行动捐赠80万元善款，为患儿提供免费救治。

In April 2019, Goldcard Smart Group Public Welfare Foundation, together with Guizhou Gas Hongji foundation and "Make smile" public welfare organization, held a large-scale public welfare initiative for cleft lip and palate relief in Liupanshui People's Hospital. The campaign aimed at providing plastic and repair surgery for more than 150 children with cleft lip and palate from poor families in Liupanshui and Bijie of Guizhou Province, so that the children can smile happily again. A total of 114 children get through the screening of the professional medical team and received free treatment of cleft lip and palate surgery. Goldcard foundation, together with Guizhou Gas Hongji foundation, donated 800,000 yuan to this public welfare action to provide free treatment for the children.



金卡智能公益基金会携手
贵州燃气鸿济基金会
捐赠 **80** 万元



金卡智能集团积极响应乡村振兴战略 Goldcard Smart Group actively respond to rural revitalization strategy



金卡智能集团、金卡智能公益基金会
联合青岛能源华润燃气有限公司

为山东省青岛市平度市明村镇**5**个乡村



捐赠价值**15**万元的书籍、文体用品和
办公设备



成立**5**个乡村振兴文化活动中心



2019年9月，金卡智能集团、金卡智能公益基金会联合青岛能源华润燃气有限公司为山东省青岛市平度市明村镇的5个乡村，捐献了价值15万元的书籍、文体用品和办公设备，成立了5个乡村振兴文化活动中心。本次活动响应了党的十九大乡村振兴战略，乡村振兴，文化先行，改善了帮扶村的阅读环境，帮助引导村民多读书、读好书，为乡村文化建设起到了积极的推动作用。

In September 2019, Goldcard Smart Group, Goldcard public welfare foundation and Qingdao Energy China Resources Gas donated 150,000 yuan worth of books, stationery, sport appliances and office equipment to five villages in Mingcun-town, Pingdu, Qingdao, to set up five cultural activity centers for rural revitalization project. This activity responds to the government's rural revitalization strategy, which first start with culture awareness. This action improves the reading environment of the village, helps guide the villagers to read more books and read good books, and has played a positive role in promoting the rural cultural building.

金卡智能集团设立东南大学金卡智能奖励基金 Goldcard Smart Group set up Goldcard Smart Prize Fund in Southeast University



2019年，金卡智能集团、金卡智能公益基金会向东南大学捐赠60万元设立金卡智能奖励基金，用于定向奖励东南大学品学兼优的全日制在校生，以及业绩突出的管理人员和教师，共同促进东南大学加快一流大学和一流学科的建设，实现高等教育内涵式发展，践行“教育强国”理念。

In 2019, Goldcard Smart Group and Goldcard Smart Group Public Welfare Foundation donated 600,000 yuan to Southeast University to set up a Goldcard Smart Prize fund, to award excellent



金卡智能集团、金卡智能公益基金会
向东南大学

捐赠**60**万元设立金卡智能奖励基金

full-time students, and the outstanding performance management personnel and teachers of the university. It aims to jointly promote Southeast University in the construction of first-class university and first-class disciplines, to realize the intrinsic development of higher education in China and contribute to a more powerful country.

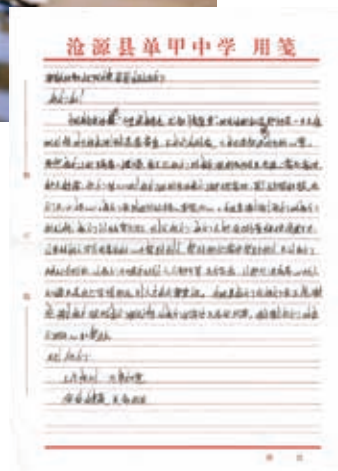


天信暖冬行动为偏远山区儿童送去关怀

Tancy "warm winter" project delivers care to children in remote mountain area

2019年12月，天信仪表收到了来自千里之外云南省临沧县单甲中学孩子们的手写感谢信，以此表达他们对天信仪表“暖冬行动”的感谢之情。单甲中学的孩子们在感谢信中提到：虽然我们之间隔着一堵墙，看不见你们给我们送的东西合不合适，喜不喜欢，舒不舒服。你们放心吧！我们收到这些礼物心里很开心。在这里谢谢你们给我们的礼物。我们以后会努力学习，回报你们；我们会把爱的力量继续传递下去，让更多的人学会用善良的心去帮助别人，帮助需要帮助的人，不让他们被社会贬低。在这里，我们向你们表示感谢，感谢你们给我们的礼物。让我们的身体不再受风寒，谢谢你们对我们的关心和帮助！

In December 2019, Tancy Instrument received handwritten thank-you letters from children thousands of miles away in Shanjia Middle School in Lincang, Yunnan Province, to express their gratitude for Tancy's "warm winter action". In their letters, the children said: "Although there was a distance between us, you could not see whether the things you sent us were suitable or not, whether we liked them or not. Don't worry! We are very happy to receive these gifts. Thank you for the gift. We will study hard in the future as a repay to you. We will continue to pass on the power of love, so that more people learn to use a kind heart to help others, help people in need, not letting them be degraded by society. Here, we thank you for the gift you gave us. Let our body no longer suffer from the cold. Thank you for your care and help!"



天信暖冬行动始于2014年，主要是解决职工家中舍离断的闲置衣物以及贫困山区和留守儿童冬衣御寒问题，同时根据校方和孩子们的需求提供一些不同的物资。随着长期的坚持和社会影响力的提升，该行动也得到了企业的重视和支持。

Tancy's warm winter campaign started in 2014, which mainly aimed at solving the problem of obsolete clothes disposed by employees and their families, and lack of winter clothes for poor mountainous areas and left-behind children, and later followed by organizers providing specific materials according to the needs of schools and children. With the long-term persistence and the promotion of social influence, the action has also been valued and supported by the Tancy management



3. 营造良好的社区关系

Build harmonious community relationship



图：金卡志愿者为社区小学开展素质拓展活动

Figure: Goldcard volunteers support community primary school pupil talent development programme



公司高度重视自身运营对社区的影响，积极参与社区志愿服务活动，努力带动当地社区共同发展，进而营造良好的社区关系。

The company pays great attention to the influence of its operation to the community, actively participates in community volunteer service activities, and strives to promote the common development of the local community, thus creating a good community relationship.

天信仪表集团坚持开展爱国拥军活动 Goldcard Smart Group actively respond to rural revitalization strategy



作为一家民营企业，天信仪表关注支持国防建设已十多年。自开展军民共建以来，天信为合掌岩部队捐赠财物累计三十余万元。此外，天信仪表真心助力退役军人就业，近年来已累计招收退役军人15人，在工作中充分发挥了退役转业军人之所长。2019年正值建国70周年之际，为增强国防意识，培养员工吃苦耐劳精神，天信仪表在合掌岩空军部队的支持下，组织开展了丰富多彩的军民共建活动，激发更多的员工了解国防、关心国防、支持国防的爱国情怀。

As a private enterprise, Tancy Instrument has been supporting the national defense construction for more than 10 years. Since the beginning of the joint army and civilian relationship building, Tancy has donated more than 300,000 yuan to the local army. In addition, Tancy sincerely supports the employment of veterans. In recent years it has recruited a total of 15 veterans, giving them opportunity to verify their strength in new job environment. The year 2019 is the 70th anniversary of the founding of the People's Republic of China. In order to enhance the awareness of national defense and cultivate the hard-working spirit of employees, Tancy Instrument, with the support of the local army, has organized a variety of army-civilian relation co-building activities to inspire more employees to understand, care about and support national defense cause.

天信仪表邀请百位社区老人同过重阳 Tancy entertains a hundred more senior citizens in traditional festival



2019年10月，天信仪表开展重阳为老敬老社区活动，邀请社区130多位70周岁以上的老人共享重阳宴。这些老人大多是空巢、独居老人，公司开展重阳敬老活动希望能够弘扬尊老爱老传统美德，倡导更多的年轻人尊老敬老，让老年人老有所依、老有所乐，在共建共享中推动社区建设。

In October 2019, Tancy Instrument carried out the Double Ninth Festival community activity for the elderly, inviting more than 130 people over the age of 70 to share the double ninth party. Most of these old people are empty-nesters and live alone. The company carries out this activity to respect the old, hoping to promote the Chinese traditional virtue of respecting and caring for the old, especially among young people, so that the old people eventually can have someone to rely on and some activity to enjoy, and promote community building in the process of cooperation and sharing.



展望2020

LOOKING FORWARD TO 2020

展望2020年，金卡智能集团将继续聚焦能源发展，携手生态合作伙伴共同打造数字化解决方案，也将继续强化可持续发展与公司战略发展的融合。公司将坚持履行对利益相关方的社会责任，将可持续发展理念融入经营实践，努力创造经济、社会、环境的综合价值最大化，助力实现可持续发展。

Looking forward to 2020, Goldcard Smart Group will continue to focus in energy domain, work with ecological partners to create digital solutions for the industry. It will continue to strengthen the integration of sustainable development with corporate strategic development. The company will persist in fulfilling its social responsibilities to stakeholders, integrate the concept of sustainable development into its business practices, and strive to maximize the overall economic, societal and environmental value to help achieve continuous development.

GoldCard 金卡智能
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报告指标索引

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