

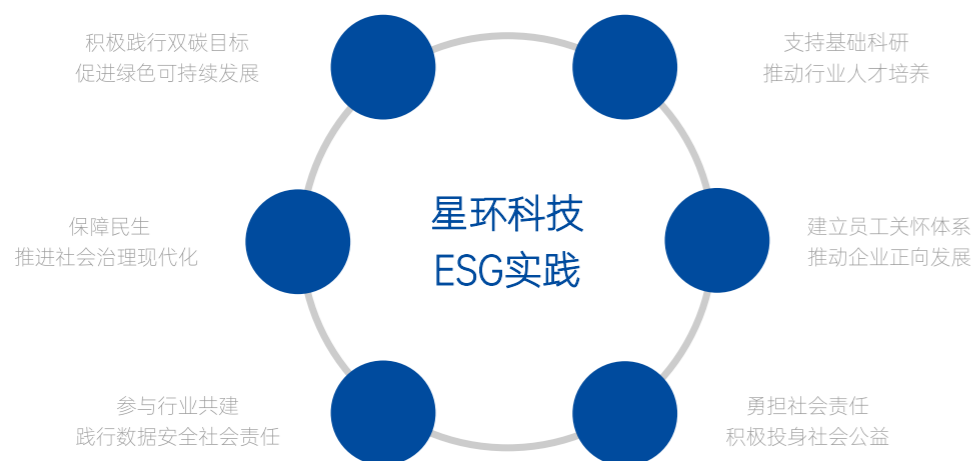
ESG（环境、社会与治理）已成为全球创业、创新者的通用语言，以及企业发展的内生需求，启明创投推出“ESG聚焦”系列报告，旨在深入挖掘启明创投和投资企业的战略和实践，全面并深入展现其在ESG领域的进展和成就。

## 星环科技：构建可持续数据世界

星环科技（688031.SH）致力于打造企业级大数据基础软件，围绕数据的集成、存储、治理、建模、分析、挖掘和流通等数据全生命周期提供基础软件与服务。目前公司产品已经在十几个行业应用落地，拥有超过1400家终端用户。

作为一家有着高度社会责任感和使命感的企业，星环科技始终在以技术创新为社会可持续发展提供助力，并履行企业ESG职责，通过为开发者提供前沿、高性能、可信任、易上手的智能分析工具，聚合生态之力提升数字管碳、减碳创新能力支撑，促进经济绿色高质量发展。

### ESG实践



#### 积极践行双碳目标，促进绿色可持续发展

星环科技积极响应双碳号召，打造碳排放监测服务平台解决方案，为政府、企业、团体、个人提供双碳服务。

为促进绿色可持续发展，2022年星环科技作为唯一一家受邀参加成功展示的中国企业，亮相奥兰多Gartner 2022年数据与分析峰会。星环科技基于其一站式智能分析工具Sophon，展示了如何改善联合国对G20发展中国家能源可持续发展目标的数据分析和建模过程。

由于工业化进程、气候危机及能源结构不均衡等多方面因素，全球的能源危机也日益显现。为了探索出更加行之有效的解决方案，星环科技使用大数据、机器学习和人工智能技术，围绕联合国可持续发展目标，使用AI技术对G20国家的能源可持续发展目标的实现建言献策。

在星环科技的数据科学平台画布中，用户可以通过分析联合国及世界银行的全球各地区历年数据，研究ESG因素如何影响能源可持续发展目标，并建议可以做出哪些努力提升可持续发展的目标表现。

此外，星环科技始终在以技术创新为社会可持续能源发展提供助力。基于星环大数据平台TDH构建的智能配用电大数据应用系统，结合电力公司生产需求及政府社会应用需求，开展数据分析研究和业务应用开发，为推动配用电发展，实现以客户为中心的电力核心价值，有效配置清洁电力资源，推动我国能源结构绿色转型。

同时星环科技还为航司优化飞行线路，每年节省燃油数千万吨；为长江中下游气象预测提供自动化建模和智能监测预警平台；加入“云边协同·双碳绿色能源大生态”，聚合生态之力提升数字管碳、减碳创新能力支撑，促进经济绿色高质量发展等。

#### 保障民生，推进社会治理现代化

星环科技积极响应国家“新基建”的号召，以产品驱动企业数字化发展，用技术突破行业壁垒，探索更为迫切的应用场景需求，从“城市+数字化”走向“数字化城市”，为构建智慧城市提供更多的可能性。

目前，星环科技在政府、金融、交通、电力、能源等智慧城市建设、城市级大数据中心建设等项目中提供技术支持，加速企业数字化转型，推动中国智慧城市建设的不断发展。通过智慧政务数字底座为政府数字化转型建设提供计算、存储、算法等基础能力支撑，归集业务数据，优化业务流程，治理出有价值的的数据资源，进行专题分析沉淀数据资产，服务部门之间数据共享与业务协同，服务领导决策与政策制定，服务公众、企业便捷办事。

公司产品已被多个部委或省市机关部门使用，助力构建数字化政府，提升治理效率。比如星环科技基于数据云平台TDC为建设上海市数据资源平台提供了底层支撑，将70多个委办局以及16个区县业务库的结构化和非结构化数据进行归集，构建三级数据共享交换体系，保障数据安全，支撑“一网通办”等数据服务能力。

此外，根据不同场景和需求，提供了基础软件及技术支持，实现诸如“中高考成绩查询”、“精准扶贫”、“精准地址库”等应用。通过技术改善和产品服务，让人民共享科技发展成果，打造智慧共享、和睦共治的新型智慧生活。

#### 参与行业共建，践行数据安全社会责任

在坚持自主研发、深耕技术创新的同时，星环科技也积极参与行业共建，与行业伙伴一道持续推进大数据标准化工作，积极将守护数据与信息安全的社会责任融入企业的使命和发展理念之中。

星环科技参编《数据治理标准化白皮书》，并对重点标准化领域和方向阐明观点。此前，星环科技已经参与了包括国家标准化管理委员会-《信息技术 大数据分析系统功能要求》、大数据技术标准推进委员会-《云原生数据湖技术要求与测试方法》等多项国家、行业、团体标准的制定。通过对数据安全、用户隐私等问题重视和呼吁，进一步加强企业与用户、监管机构之间的信任关系，不断助力大数据产业高质量发展，实现更长期的社会价值。

#### 支持基础科研，推动行业人才培养

星环科技一直致力于大数据技术的创新以及大数据技术人员的培养，为了降低用户学习和使用大数据技术的门槛和成本，普及大数据技术，星环科技推出了大数据基础平台——TDH社区版，致力于为企业用户、高校师生、科研机构以及其他专业开发人员提供更轻量、更简单、更易用的数据分析开发环境。高校师生和科研人员等可以免费使用TDH社区版，应用于学习、教学、科研等场景，实现上百亿条数据的管理分析。

星环科技坚持培养专业的销售售前人员及建立配套的产品部署、方案设计及技术服务的实施团队。自成立以来，公司大数据人工智能人才生态体系已经累计培训开发者超过4万人，为超过2200家企业提供培训，累计发出超过10000份认证证书。此外，公司已与北京大学、南京大学、复旦大学、新加坡理工学院、英特尔等联合共建大数据/人工智能实验室、技术创新实验室，通过与高等院校合作，推动行业基础科研进步和产学研深度融合。

#### 建立员工关怀体系，推动企业正向发展

在现代企业管理中，员工关怀体系是构建和维护良好企业文化的重要组成部分。星环科技深知人才是企业发展的核心力量，为了加强对员工的激励作用，提升员工忠诚度和向心力，打造企业凝聚力，并推动企业正向发展，星环科技人力资源部特别设计了一套全面的员工关怀体系，涵盖各个方面，以确保员工在工作与生活中得到全方位的支持和关注。

为打造星环科技的研发氛围，公司在国家法定年假的基础上扩容和完善了法定福利，设置了福利年假制度，同时为员工提供补充公积金和补充商业保险；此外，星环科技尤为重视员工安居生活保障，协助员工进行落户、居住证积分、政府安居补贴、重点人才补贴申请等。

在人才培养方面，星环科技投入大量资源，结合战略发展规划与员工个人发展需求，按员工类型、部门、专业技能，充分运用内外部培训资源的培养体系，已经形成了一套科学、系统、专业的人才培养体系。针对全体员工，星环科技提供专项课程定制、星环认证、外部培训资源引入、资质考证、日常培训、公司业务实战课程等培养方案。针对应届生及新员工，星环科技设立了“星无限”应届生集训营、Buddy带教培养方案、线上线下公司业务培训，帮助新同学适应公司文化。针对核心和骨干员工，公司设置了星舰工作室和星舰指挥官训练营，提升员工的专业能力和领导力。

#### 勇担社会责任，积极投身社会公益

星环科技一直将社会责任感与企业理念相结合。2023年8月，星环科技创始人兼CEO孙元浩带领同事积极参与上海虹梅街道彩虹公益周活动，与区内需要帮助的弱势群体结对帮扶。充分发挥企业社会责任，保护弱势群体，支持慈善事业，用实际行动传递关爱与力量。

## 观点

### #如何理解ESG#

星环科技一直致力于推动科技创新和发展，同时也非常注重企业社会责任的履行。

我们认为，一家企业不仅要追求经济效益，更应当关注社会和环境的可持续发展，注重公司的长期发展和可持续性，为人类和社会的进步贡献力量。

我们将秉承ESG理念，推动更多应用场景落地，实现多领域、多行业融合发展，致力于成为一家可信赖、可持续发展的公司，为社会和股东创造更大的价值。

——星环科技创始人兼CEO孙元浩



### #投资人说#

星环科技是我在启明创投投资的第一个企业软件项目。在过去的9年时间，我们见证了星环科技不断深耕技术创新、打磨产品，成为大数据基础软件行业的引领者，助力中国社会的数字化转型。

星环科技的社会责任感不仅体现在公益慈善，更在于通过产品和业务创新，履行对员工、客户、行业、环境及社会发展的责任感，在绿色环保、社会治理、节能提效等议题上开展了创新探索，为整个行业健康发展起到了示范与带头作用。

——启明创投合伙人叶冠泰



### #员工心声#

星环科技作为国产基础软件的代表，在生活中的各个领域都在发挥作用，作为湖北人，我可以很骄傲地和爸妈说，他们在随州老家的医疗体系中享受到的这些便捷，底层都是星环科技在支撑。

我们在上海有一网通办，不再需要带着厚厚的复印材料去办理需求，只要扫一下码就可以办理业务，不仅方便，也实现了节能低碳，这些便民服务的背后，都有星环科技的底层支撑，作为星环科技的一份子，我觉得很骄傲。

——星环科技员工小许

### #用户心声#

因人力监控难以时刻覆盖，工地常常被安全事故隐患大及安全管理难度大的问题所困扰。基于Sophon AutoCV构建的统一视频分析平台，提供前置智能AI模型实现工地生产的安全监测和防护。智慧工地安全监测系统实现了现场实时安全隐患排查、人员动态监控、作业防护预警等功能，可快速提高应急响应速度和事件处置速度；此外，帮助工地从被动监控向主动监控迈进，实现事前预警-事中检测-事后规范管理全流程监控，弥补传统方法和技术在监管中的缺陷。

——新加坡建屋发展局

基于星环大数据基础平台TDH我们建设了大数据挖掘体系，支撑了瞬息万变的高频交易场景，提高了交易行为监控智能化程度，业务响应效率大幅提升，其中营销场景触达千万级；有效阻断风险欺诈攻击160万次；99.6%信贷业务实现机器审批。

——某银行客户

## 案例

### 星环科技携手国家超级计算中心开发海洋价值，保护生物多样性

海洋环境观测在海洋探测中起着至关重要的作用。随着信息技术的指数增长及海洋观测手段的日益发展，海洋科学已正式进入大数据时代。

某超算中心由国家科技部批准成立，是从事智能计算和信息处理技术研究及计算服务的综合性研究中心。为了支持国家海洋强国战略，对海量海洋数据进行及时、准确的质量控制，该超算中心需要利用超算中心资源，以海洋领域+大数据+人工智能+物联网，面向海洋研究人员，如海仪所、海洋所、海岸带所等研究机构人员，提供针对海洋业务的一站式数据存储、数据管理、模型构建和应用开发的大数据平台及工具，以实现海洋观测数据的异常检测。

但在数据化转型过程中，超算中心面临数据成果难以产出价值、海洋资源识别难度高、海洋数据质控挑战大等难题。例如在对海洋资源尤其以鱼类为代表的生物资源开发探测过程中，必须对各种品种鱼类进行识别，但鱼类体形各异，大小不一，识别起来较为复杂，而且同一类鱼的不同品种通常具有相似的外形、尺寸以及纹理等特征，很有可能会出现误判而导致严重的经济损失。

针对超算中心当前的痛点与需求，星环科技充分发挥自身产品优势，通过构建统一的海洋大数据中心，打破数据孤岛，实现了数据互联互通，在保持原有功能持续运作的情况下，建立了全流程管控的数据中心，改变了数据质量差、数量少、分散的情况，将数据持续转化为对外提供的定制化产品。最终结合大数据开发平台及分析工具支持产、学、研、用各方在线进行协同创新，促进人类和自然可持续发展，保护海洋生物多样性。

例如基于星环大数据平台的海洋信息技术，能快速有效地对海洋生态监控区的指标参数进行整合与优化。利用遥感与声学数据，对海洋底栖生物的生物群落和物种分布进行监测，为海洋生态保护提供科学参考。利用海洋水色遥感探测如叶绿素、悬浮物、黄色物质、污染物等信息，对海洋水质监测和近岸水体污染预警具有重要意义。

## 荣誉



中国公益节 2017年度责任品牌奖

电力行业边缘计算优秀实践奖

绿色计算产业联盟 行业解决方案示范案例

IDC数字政府百强榜

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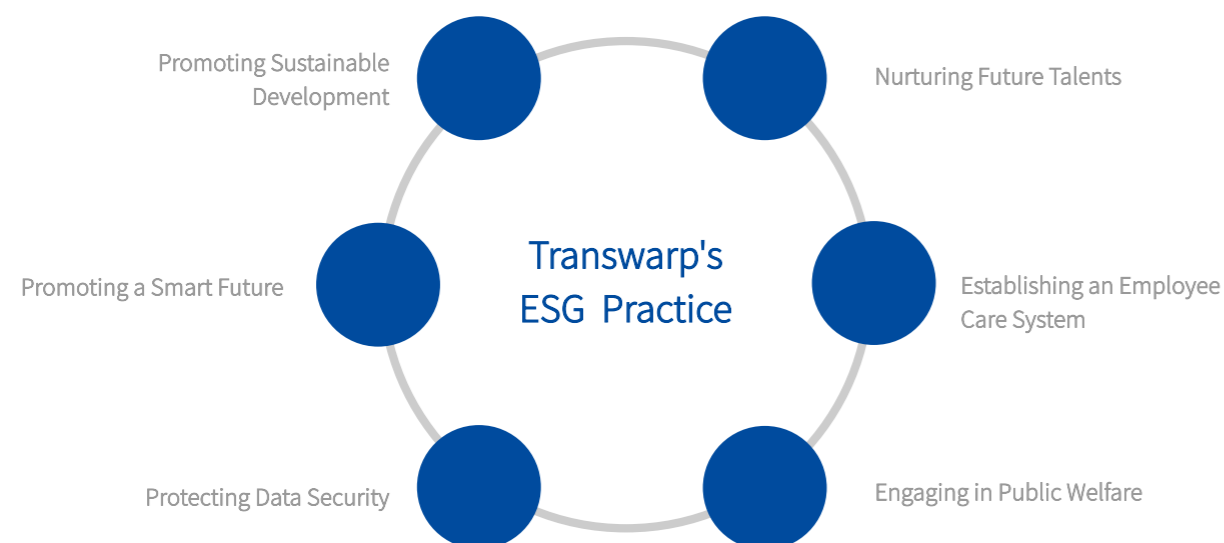
With ESG (Environmental, Social and Governance) becoming the common language of global entrepreneurs and innovators, as well as the inherent need for corporate development, Qiming Venture Partners launches the **ESG Spotlight** series to delve into the strategies and practices of Qiming and our portfolio companies, highlighting progress and achievements in the ESG space.

## Transwarp Building a Sustainable Data World

Transwarp (SHSE: 688031) is committed to developing enterprise-level big data software, providing fundamental software and services around the entire data life cycle, including integration, storage, governance, modeling, analysis, mining, and circulation. Currently, the company's products have been applied in more than a dozen industries with over 1,400 end users.

Transwarp is committed to sustainable social development through technological innovation and has fulfilled its corporate **ESG responsibilities**. By providing cutting-edge, high-performance, trusted, and easy-to-use smart analysis tools for developers, Transwarp has taken actions to improve digital carbon management, carbon reduction innovation capabilities, promoting a green and high-quality economy.

### ➤ ESG Practice



#### ● Promoting Sustainable Development

In line with the commitment to the Dual Carbon goal, Transwarp has developed a carbon emission monitoring service platform solution that provides dual carbon services for governments, companies, social groups, and individuals.

Furthermore, in response to the global energy crisis caused by industrialization, climate crisis, uneven energy structure and other factors, Transwarp employs big data, machine learning, and AI technology to offer suggestions for implementing energy sustainable development goals for G20 countries in line with the UN Sustainable Development Goals. **In 2022, Transwarp was the only Chinese company invited to Show Floor Show Down at the Gartner 2022 Data and Analytics Summit in Orlando.** Using its one-stop smart analysis tool, Sophon, Transwarp demonstrated how to improve the data analysis and modeling process for achieving energy goals. **Transwarp's data science platform allows users to analyze global data from the UN and the World Bank, exploring how ESG factors affect energy sustainable development goals and the potential efforts that can be made.**

Transwarp's platform, TDH, empowers smart big data application systems for electricity distribution and usage, facilitating data analysis research and business applications based on the needs of companies and governments.

Transwarp has also supported optimizing airline flight routes to save millions of tons of fuel every year; automating modeling and intelligent monitoring and warning for meteorological forecasting of the Yangtze River; enhancing digital carbon management and innovative carbon reduction capabilities by joining the Dual Carbon Green Energy Ecology.

#### ● Promoting a Smart Future

Transwarp is actively contributing to the digitalization of enterprises and promoting the transition from "city + digital" to "digital city" to explore possibilities for future smart cities.

Currently, Transwarp provides technical support in building smart cities in government, finance, transportation, electric power, energy and other areas. By providing computing, storage, and other capabilities, Transwarp helps improve social governance efficiency by optimizing business processes, facilitating business collaboration, information collection and sharing, decision-making, and policymaking, etc.

#### ● Protecting Data Security

Transwarp has been working with industry partners to promote the standardization of the big data industry, integrating the social responsibility of safeguarding data and information security into the corporate mission.

For example, Transwarp participated in the "White Paper on Data Governance Standardization" and clarified its views on key standardization areas and directions. Previously, Transwarp has participated in a few national, industry, and community standards. Protecting data security helps strengthen the trust relationship between companies, users, and regulators and contributes to the long term development of the big data industry.

#### ● Nurturing Future Talents

To reduce the threshold and cost of learning data technology, Transwarp launched the TDH community version, providing enterprises, universities, research institutions, and other professional developers with a lighter, simpler, and more user-friendly data analysis and development environment. University teachers, students, and researchers can use the TDH community version for free to apply to learning, teaching, scientific research, and other scenarios.

Transwarp is also building strong teams of sales and pre-sales, product deployment, solution design, and technical services. Since its establishment, the company has trained more than 40,000 developers, provided training to more than 2,200 enterprises, and issued more than 10,000 certificates. In addition, Transwarp has jointly established laboratories with Peking University, Nanjing University, Fudan University, Nanyang Technological University, Intel, and other leading institutions. Through cooperation with educational institutions, the company promotes the integration of industry, academia, and research.

#### ● Establishing an Employee Care System

Transwarp designed a comprehensive employee care system to offer support in various aspects of work and life. **The company has expanded and improved the annual leave system, supplementary commercial insurance, housing subsidies, talent subsidies, and various benefits.**

In talent development, Transwarp combines company strategic development goals with the personal career needs of employees to form a systematic and customized training mechanism. All employees have access to a variety of specialized courses, certificates, external trainings, business practice sessions, etc. For fresh graduates, Transwarp offers training camp, mentoring program, business trainings. For core members with high potential, the company set up special workshops and programs to enhance their professional and leadership skills.

#### ● Engaging in Public Welfare

In August 2023, Transwarp's Founder and CEO Sun Yuanhao led the team to participate in the Rainbow Public Welfare Week in Shanghai. The company fully commits to the social responsibility of protecting vulnerable groups, supporting charity work through practical actions.

## > Words

### #CEO Says#

#### #How to Understand ESG#

Transwarp has always been committed to promoting technological innovation and development, while paying great attention to fulfilling corporate social responsibility. We believe that a company should not only pursue business revenue but also focus on the society and the environment, realize long-term development and sustainability, and contribute to humanity and society. We will uphold the ESG values and apply them in real-life scenarios while integrating different fields and industries and strive to become a trustworthy and sustainable company that creates greater value for our shareholders and society.

**Sun Yuanhao**  
Founder and CEO of Transwarp



### #Qiming Says#

Transwarp is the first enterprise software company I invested in at Qiming Venture Partners. Over the past 9 years, we have witnessed the company continuously deepening its technological innovation and improving its products, becoming an industry leader and contributing to China's digitization. Transwarp's sense of social responsibility is not only reflected in their public welfare and charity initiatives but also in fulfilling its commitment to employees, customers, industry, environment, and society through product and business innovation. The company keeps exploring innovative solutions to environmental protection, social governance, energy conservation and efficiency, and has set a great example in the industry.

**Kuantai Yeh**  
Partner at Qiming Venture Partners



### #Employee Says#

As a native, I can proudly say to my parents that all these conveniences they enjoy in the healthcare system in our hometown of Suizhou are supported by Transwarp. In Shanghai, we no longer need to bring a thick copy of materials and can just scan the code for government services, thanks to the underlying support by Transwarp. I am very proud to be part of it as a Transwarp employee.

**Xiao Xu**  
Transwarp Employee

### #User Says#

Due to the limitations of human monitoring, there are often potential safety challenges on construction sites. The video analysis platform built on Transwarp's Sophon AutoCV provides pre-set smart AI models to realize safety monitoring and protection. The smart construction site safety monitoring system can achieve real-time on-site safety investigation, monitoring, operation warning, etc., which can help improve the emergency response speed; in addition, it helps the construction site improve active monitoring of pre-warning - mid-inspection - after-action standardized management, which can make up for the shortcomings of the traditional methodology and technology.

#### Singapore Housing and Development Board

We have built a big data mining system based on TDH to support the ever-changing high-frequency transaction scenarios, improving transaction behavior monitoring and the efficiency of business response, with marketing scenarios reaching 10 million; effectively blocking the risk of fraudulent attacks for 1.6 million times; and achieving machine approval of 99.6% of the credit business.

**XX Bank**

## > Case

### Transwarp Acts to Protect Marine Biodiversity

Marine environmental observation plays a crucial role in ocean exploration. With the exponential growth of information technology and development of marine observation tools, marine science has officially entered the big data era.

A national supercomputing center aims to timely and accurate quality control of massive ocean data and provide a one-stop platform and tools such as data storage, management, model building, and application development to marine researchers and institutions.

However, this center encountered challenges in transforming data results, identifying marine resources, and quality control of marine data. For example, fish have different shapes and sizes, which makes it complicated to identify them, potentially leading to economic losses.

In response to the pain points and needs, **Transwarp has built a unified marine big data center to connect isolated data points and improve data quality.** Marine information technology based on Transwarp platform can quickly and effectively integrate and optimize the indicator parameters of marine ecological monitoring zones. Remote sensing and acoustic data are utilized to monitor the biological communities and species distribution of marine benthic organisms, providing scientific references for marine ecological protection. The use of remote sensing to detect information such as chlorophyll, suspended solids, yellow substances, and pollutants is of great significance for marine water quality monitoring and early warning of pollution in near-shore water bodies.

## > Awards



China Charity Festival  
Responsible Brand of the Year

CAICT 中国信通院 CCNIS EC READY

电力行业边缘计算  
优秀实践奖

Edge Computing Outstanding  
Practice Award in Power Industry



OpenGCC

Green Computing  
Industry Alliance  
Industry Solution  
Demonstration Case



IDC  
Top 100 Digital  
Governance

\*All information contained in the report is based on interviews, publicly available information or other information provided by the company. This report should not be considered as a statement or forecast of company performance, nor does it constitute any investment advice.