

长电科技水资源管理政策

JCET Water Resources Management Policy

水是半导体制造的基础,也是长电科技研发和制造过程的关键部分。作为芯片封装行业的领先者,长电科技一直全身心投入于水资源保护,致力于降低用水需求、减少废水排放和有效地管理水资源。

Water is the foundation of semiconductor production and a key part of JCET development and manufacturing process. As a leader in the chip packaging industry, JCET has been committed to water resource protection, lowering water demand, reducing wastewater discharge and effectively managing water resources.

随着气候变化、水环境污染和市场不断增长的水需求加剧了世界各地水资源的紧张,公司面临的水资源压力越来越大。所以,长电科技意识到充分利用水资源和减少水环境污染,对公司核心业务、供应商和社区都至关重要。

With climate change, water pollution and growing market water demand intensifying the tension of water resources around the world, company is facing increasing pressure on water resources. Therefore, JCET realized that making full use of water resources and reducing water pollution are crucial to its core business, suppliers and communities.

1、目的 Purpose

为了更好地应对潜在的风险和挑战,长电科技使用世界资源研究所(WRI)的水风险评估工具(Water Risk Filter),识别各生产厂区所在地区的用水状况和风险等级,确定潜在或存在水压力的地区:

In order to better respond to potential risks and challenges, JCET uses the Water Risk Filter tool of WRI to identify the water use status and risk level of the regions where the production plants are located, and determine the regions with potential or existing water pressure:

- (1) 水源水质问题:公司厂区分别位于长江流域、淮河流域、黄海和马来半岛流域,面临着不同程度的水资源短缺或水质差的问题。同时,随着地区经济的快速发展和人口的高度集聚,各地区水源水质将影响着公司未来生存能力和生产效率。
 - Water supply quality issue: JCET factories are located in basins of the Yangtze River, the Huai River, the Yellow Sea and the Malay Peninsula, which are facing with water shortage or poor water quality problems with varying degrees. Meanwhile, with the rapid development of regional economy and the high concentration of population, the water quality of water sources will affect the company's future viability and production efficiency.
- (2) 气候变化对水资源的影响:随着气候变化引起的极端天气事件频发,导致暴雨、洪涝等发生频率上升,不可避免地给公司水资源管理工作带来挑战和压力。
 - Impact of climate change on water resources: with the frequent occurrence of extreme weather events caused by climate change, the frequency of rainstorm, flood and other events increases, inevitably brings challenges and pressures to the company's water resources management work.
- (3) 自身用水需求:在持续扩大产能过程中,随着未来越来越多用水取水涉及业务,公司用水需求持续提升,易面临或加剧水资源短缺、流域污染的风险。
 - Self-use water demand: in the process of continuous expansion of production capacity with more and more businesses involving water intake and water use, the company's water demand will keep increasing, which is easy at or exacerbate the risk of water shortage and basin pollution.



基于此,公司将根据风险评估结果制定相应的计划。

Based on this, JCET will make corresponding plans according to the risk assessment results.

此外,公司每年制定和跟踪自己的废水回用率目标,力争到 2030 年超过 25%(以 2020 年为基准年)。为实现这一目标,公司将降低生产用水需求、减少废水排放,有效地管理水资源,并联合多方力量搭建沟通与合作平台。

Moreover, company sets and tracks the wastewater reuse rate target every year, and striving to exceed 25% by 2030 (taking 2020 as the base year). To achieve this goal, company will lower demand for production water, reduce wastewater discharge, effectively manage water resources and jointly build a communication and cooperation platform with multiple forces.

2、范围和适用对象 Scope and Applicable Objects

本政策适用于公司各生产厂区,包含:

- 江苏长电科技份有限公司(集成电路D3);
- 江阴长电先进封装有限公司;
- 星科金朋半导体(江阴)有限公司;
- 长电科技(宿迁)有限公司;
- 长电科技(滁州)有限公司;
- 星科金朋有限公司(新加坡);
- 星科金朋韩国有限公司;
- 长电科技星科金朋韩国有限公司。

This policy is applicable to all factories of JCET, including

- JCET D3 (JiangYin);
- JCET Advanced Packaging Co. Ltd (JCAP);
- STATS ChipPAC Semiconductor (JiangYin) Co. Ltd (JSCC);
- JCET D8 (SuQian);
- JCET D9 (ChuZhou);
- STATS ChipPAC Pte. Ltd (SCS);
- STATS ChipPAC Korea Ltd (SCK);
- JCET STATS ChipPAC Korea Ltd (JSCK).

对于长电科技的合作伙伴、供应商和其他利益相关方,公司将竭力通过合同、行为准则等形式促使第三方遵守与本政策一致的水管理要求和标准。

For the partners, suppliers and other stakeholders of JCET, company will strive to promote the third party to comply with the water management requirements and standards consistent with this policy through contracts, codes of conduct and other forms.



3、水资源管理组织架构 Water Resources Management Organization

公司ESG委员会在管理层的支持下,统筹管理公司包括水资源在内的环境相关工作,监督公司水资源管理政策、措施制定与目标进度,确保其与本公司的战略方向一致。

ESG委员会下设的节能&减碳工作小组在环境战略规划与目标的指引下,开展与推进水资源相关的落地工作,确保水资源管理符合可持续水管理联盟(AWS)的标准,并向管理层汇报水资源管理工作实况。

EHS总部将根据公司内部制度文件《水资源管理制度》每年对各厂的水资源管理情况进行审查,并根据需要进行更新。

ESG Committee of JCET with the support of the management, coordinates and manages the environmental related work including water resources management, and supervises the formulation of water resources management policies and measures as well as the progress toward goals, to ensure that they are consistent with the JCET's strategic direction.

Energy Saving & Carbon Reduction Team under the ESG Committee carries out and promotes the implementation work related to water resources under the guidance of the environmental strategic planning and goals, to ensure that water resources management meets the standards of Alliance for Sustainable Water Stewardship (AWS), and reports the actual status to the management.

The JCET EHS will review the water resources management of each plant every year according to the company's internal system document Water Resources Management Rule, and update it as needed.

4、重点工作与举措 Key Work and Measures

为更好地实现水资源可持续利用,为让利益相关方能够关注和参与水资源管理工作,长电科技尽心尽力号召员工、供应商和社区减少自身行为对水资源的影响,尊重各方用水的权利。

In order to better realize the sustainable use of water resources and enable stakeholders to pay attention to and participate in water resources management, company makes effort to call on employees, suppliers and communities to reduce the impact of their own actions on water resources and respect the rights of all parties to water use.

(1) 生产和运营 Production and Operation

公司直接用水主要来源于生产业务和日常运营。公司监测各厂区当地水足迹,定期统计并监督各场所设施的用水排水情况,积极探索节约用水的新技术、新方法。

The direct water use mainly comes from production business and daily operation. The company monitors the local water footprint of each plant, regularly counts and supervises the water use and drainage of facilities in each site, and actively explores new technologies and methods for water conservation.

■ 取水 Water Intake

公司取水主要来自市政供水。考虑到水资源对各厂区所在地区内的社区和生态系统同样重要,公司会结合各工厂的用水情况,评估用水需求的合理性,确保取水不影响当地水资源和用水安全。同时,公司把重点放在水风险较高的地区,定期对取水进行净化处理和水质监测,减少取水风险。

Company mainly takes water from municipal water supply. Considering that water resources are equally important to communities and ecosystems where each factory is located. Company will assess the rationality of water demand in combination with the water use situation of each plant to ensure that water intake does not affect local water



resources and water safety. At the same time, company focuses on areas with high risk of water pollution, and regularly conducts purification treatment and water quality monitoring for water intake to reduce water intake risks.

■ 排水 Water Discharge

公司废水主要来源于工业废水和生活污水,工业废水主要为重金属废水和磨划废水,经处理后达标排放。中国厂区产生的废水进入厂内的污水处理站进行处理后达到《电镀行业污染物排放标准》(GB21900-2008)和《城镇污水处理厂污染物排放标准》(GB18918-2002)规定的标准后再排入市政污水管网。海外厂区日常生产经营中也认真执行当地环保相关法律法规,建设了废水处理设施,安装了水质在线检测系统,废水排放浓度指标和政府环保部门联网。

The wastewater of JCET mainly comes from industrial wastewater and domestic wastewater. The industrial wastewater mainly consistent of heavy metal and grinding wastewater, which are discharged up to standard after treatment. The wastewater generated in the Chinese factories is discharged into the municipal sewage pipe network after being treated in the internal WWTP, which meets the standards specified in the Discharge Standard of Pollutants for Electroplating Industry (GB21900-2008) and the Discharge Standard of Pollutants for Urban Sewage Treatment Plants (GB18918-2002). For overseas factories, in the daily production and operation, local laws and regulations related to environmental protection have also been carefully implemented, and wastewater treatment facilities have been built, online water quality detection systems have been installed, and the concentration indicators of wastewater discharge have been connected with the government related institution.

■ 水管理 Water Management

公司致力于降低自身运营的水资源需求,提升水资源综合使用效益,主要包括:

Company is committed to lowering water demand of its own operation and improving the comprehensive utilization efficiency of water resources, mainly including:

- 遵循当地环境法律法规和政策中与水相关的要求、适用标准和许可;
 - Comply with water related requirements, applicable standards and permits in local environmental laws, regulations and policies;
- 加强给水排水系统管理、节水管理、管网维护;
 - Strengthen the management of water supply and drainage, water saving management and pipe network maintenance;
- 打造环境友好的生产流程,引入先进的清洁生产技术,减少耗水资源消耗量;
 - Create environment-friendly production processes, introduce advanced cleaner production technologies, and reduce water consumption;
- 积极开展和投资节水项目,采用节水基础设施,鼓励废水的重复利用和循环利用;
 - Actively carry out and invest in water-saving projects, adopt water-saving infrastructure, and encourage the reuse and recycling of wastewater;
- 为员工提供环保相关培训,鼓励员工为水资源管理做出贡献。
 - Provide environmental protection related training for employees and encourage them to contribute to water resource management.

(2) 供应商 Supplier

公司遵循责任商业联盟(RBA)统一的行为准则,包括针对供应商的环保责任标准。为此,公司开展水压力评估并结合各工厂的用水情况,来指引和倡导供应链的负责任用水,主要包括:



Company follows the uniform code of conduct of the Responsible Business Alliance (RBA), including the environmental responsibility standards for suppliers. For this purpose, the company conducts water pressure assessment and combines the water use situation of each factory to guide and advocate responsible water use in the supply chain, mainly including:

■ 要求构成本公司产品组成部分的物料供应商需获得 ISO14001 最新版环境管理体系的认证,并确保采取 恰当的环境控制保证废水的合规排放,满足供应商调整的要求;

It is required that the material suppliers that form part of the products should obtain the certification of the latest version of ISO 14001 Environmental Management System, and ensure proper environmental control measures has been taken for compliance of discharge water.

■ 要求公司核心供应商评估并报告他们的水风险与足迹, EHS 总部识别处于水风险较高地区的核心供应商;

Require the core suppliers to evaluate and disclose their water risks and water footprint, the corporate EHS identifies core suppliers in areas with high water risks;

■ 鼓励供应商形成顶层的环境保护战略、政策和流程,并制定用水节水目标;

Encourage suppliers to form top-level environmental protection strategies, policies and processes, and develop water use and water-saving goals;

■ 与供应商合作,开展环保信息交流和咨询。

Cooperate with suppliers to carry out environmental information communication and consultation.

(3) 社区 Community

公司通过官网、公开报告等渠道披露环境信息,与各厂区当地社区和其他利益相关方建立联系。未来,公司持续提升环境信息的透明度,公开在水资源管理方面的进展,主要包括:

Company discloses environmental information through official websites, public reports and other channels, and establishes contacts with local communities and other stakeholders in each factory. In the future, company will continue to improve the transparency of environmental information and publicize its progress in water resources management, mainly including:

■ 使用权威工具和标准评估公司与水相关的风险和机遇,并制定应对措施减轻水风险;

Use authoritative tools and standards to assess the company's water related risks and opportunities, and develop countermeasures to mitigate water risks;

■ 定期监测并公开水足迹,包括取水排水数据、节水数据;

Regularly monitor and disclose the water footprint, including water intake and drainage data and water saving data;

■ 定期关注并收集当地水资源相关信息,并加强与当地社区利益相关方的交流;

Regularly pay attention to and collect information about local water resources, and strengthen communication with local community stakeholders;

■ 支持当地节水活动、项目和倡议,联合多方支持当地水资源管理、水环境修复等工作。

Support local water-saving activities, projects and initiatives, and jointly support local water resources management, water environment restoration and other work.



4、审核与更新 Review and Update

长电科技会定期审核此政策,在有需要的情况下将进行更新,并核准发布。

JCET will regularly review this policy, update it if necessary and approve its release.