



2024 | 可持续投资能力建设联盟 湖州绿色金融案例 TOGETHER FOR FINANCING GREEN

守一方绿水青山 创广阔可持续未来

Guarding the Lucid Waters and Lush Mountains Committed to a Sustainable Future

6月



湖州绿色金融
与可持续发展研究院
HUZHOU GREEN FINANCE INSTITUTE

CONTENTS

目录

A	绿色金融支持产业转型升级	01
	Part I. Using Green Finance to Support Industrial Transformation and Upgrading	
	绿色建筑：以大东吴建筑科技有限公司为例 Sustainable Architecture: Dadongwu Construction Science & Technology Co., Ltd.	02
	绿色能源：以天能集团为例 Green Battery Production: Tianneng Group	07
	绿色园区：以中节能（湖州）节能环保产业园为例 Green Industrial Park: Eco-Industrial Park by China Energy Conservation and Environmental Protection Group (CECEP Huzhou)	14

B	绿色金融支持生态修复及价值转化	19
	Part II. Using Green Finance to Support Ecological Restoration for a Nature-Positive Future	
	生物多样性保护：以下渚湖国家湿地公园为例 Ecological Restoration to Sustain Biodiversity and Natural Capital: Xiazhu Lake National Wetland Park	20
	矿坑修复：以“深蓝一号”为例 Post-Mining Landscape Revitalization: Deep Blue X	27
	竹林生态产品价值实现：以“以竹代塑”为例 Innovative Bamboo Utilization: “Bamboo as a Substitute for Plastic” Initiative	32

C	金融机构的创新实践	38
	Part III. Innovative Practices by Financial Institutions	
	小微碳效平台：以长兴农商银行为例 Carbon Efficiency Platform: Changxing Rural Commercial Bank	39
	碳中和银行：以中国银行湖州市分行安吉昌硕支行为例 Carbon Neutral Bank: Bank of China (Anji Changshuo Sub-Branch in Huzhou)	44

第一部分：

绿色金融支持产业转型升级

**Part I. Using Green
Finance to Support
Industrial Transformation
and Upgrading**



绿色金融支持绿色建筑: Sustainable Architecture:

以大东吴建筑科技有限公司为例

Dadongwu Construction Science & Technology Co., Ltd.

HIGHLIGHTS

2022年,中国建筑业在全国能源消耗和碳排放中的占比分别达到45.8%和51.2%,做好建筑领域的节能改造将对实现碳中和目标贡献巨大。通过引入绿色基本建设项目贷款、银团模式下的绿色厂房按揭贷款,以及基于区块链的应收款融资平台,绿色金融工具助力大东吴建筑科技有限公司(以下简称“大东吴”)从传统建造业向绿色装配式转型。

In 2022, China's construction industry was responsible for 45.8% of the country's energy use and 51.2% of its carbon emissions. Therefore, improving energy efficiency in this sector is essential to achieving carbon neutrality in China. Green finance has supported the shift from traditional to green prefabricated construction through the introduction of green infrastructure project loans, syndicated mortgage loans for green factories, and blockchain-based receivable financing platforms.

CASE

大东吴位于湖州市南浔区,占地面积657.7亩,总投资额超30亿元。公司业务基本覆盖了从研发-材料-生产-建造-装饰-服务的整个绿色建筑产业链,其中,绿色装配式建筑是其核心业务。

Dadongwu Construction Science & Technology Co., Ltd. is based in Nanxun District, Huzhou. It spans 657.7 acres with a total investment of over RMB3

billion. The company operates across the entire green building industrial chain, encompassing R&D, materials, production, construction, decoration, and services, with its core business being green prefabricated buildings.

2018年,大东吴斥资32.55亿元,在南浔区打造了近700亩的集成产业基地,并投入6亿多元研发经费设立技术研发中心,专注于绿色装配式建筑产品体系(GAB)的研发。该体系采用预制造策略,在受控环境下预制建筑组件,随后运输至工地进行快速组装,整合了“设计-预制-装配-维护”全链条,实现了建筑的模块化、标准化和集成化发展。同时,大东吴积极推进数字化转型。通过云计算、大数据等技术加强了生产、供应链、施工环节的透明度与协同性并提升了决策效率。此外,深入应用建筑信息模型(BIM)技术于施工过程,以达到更精准、更环保的建造效果。

In 2018, Dadongwu invested RMB3,255 million to establish an integrated industrial base of close to 466,666 square meters in Nanxun District. An additional RMB600 million was allocated for R&D to develop the Green Assembled Building (GAB) system. This system employs prefabrication strategies, where building components are manufactured in controlled environments before being transported to construction sites for quick assembly. This approach integrates the entire chain from design to maintenance, encouraging modularization, standardization, and integration in construction.

Furthermore, Dadongwu is undergoing a digital transformation, using cloud computing and big data to enhance transparency and coordination in production, supply chain, and construction processes, thus improving decision-making efficiency. The extensive use of Building Information Modeling (BIM) technology during the construction process ensures more accurate and environmentally friendly building outcomes.

HOW

作为湖州本土企业,大东吴受益于多项政策支持与帮扶。自2020年3月湖州成为中国首个绿色建筑和绿色金融协同发展试点城市以来,湖州市出台了一系列政策,以激发绿色建筑在供给端、消费端、产业端的活力。例如,《关于加快绿色建筑提质发展的意见》鼓励金融机构对使用住房公积金贷款购买新建绿色建筑住房的贷款

额度最高上浮10%；被纳入政府采购目录的绿色建材企业，在现行的绿色贷款贴息、担保费率补助等绿色金融支持政策基础上，再上浮10%的优惠。此外，湖州市还编制了《绿色建筑项目贷款实施规范》，在保持建筑业贷款规模平稳的情况下，加大对绿色建筑信贷的支持，并设立专项资金培育从事绿色建筑的企业。

As a local enterprise in Huzhou, Dadongwu has greatly benefited from a series of policy support. Since Huzhou was designated as China's first pilot city for the integrated development of green buildings and green finance in March 2020, the city has implemented numerous policies to stimulate the vitality in the supply, consumption, and industrial sectors. For instance, Huzhou encourages financial institutions to increase the borrowing limit by up to 10% for those using loans issued from the housing provident fund to purchase new green housing. These institutions are also encouraged to offer an extra 10% discount on top of existing subsidies on interest and guarantee fees for green loans to sustainable building materials companies listed in the government procurement catalogue. To further support green building, Huzhou has developed policy documents to increase lending to green building companies and set up special funds for such enterprises, while keeping the overall lending level to the construction sector stable.

得益于良好的政策动员环境，兴业银行、浦发银行、浙商银行、湖州银行等多家银行对大东吴的绿色转型进行了支持：

As a result of the policy-enabling environment, several banks have supported Dadongwu's green transformation:

- 浦发银行湖州分行提供了具有差异化利率的绿色基本建设项目贷款助力产业基地一期项目工程建造；

The Huzhou branch of Shanghai Pudong Development Bank offered lower interest rates for green infrastructure project loans, supporting the Phase I construction of the industrial base.

- 兴业银行湖州分行与湖州银行通过银团模式提供绿色厂房按揭贷款，不仅分散了风险，也为大东吴提供了更大规模的资金支持，确保了产业基地三期项目的顺利实施；

The Huzhou branches of Industrial Bank and Bank of Huzhou offered syndicated mortgage loans for green factories. This not only spread the risks but also provided financial support on a larger scale, contributing to the completion of the base's third phase.

- 浙商银行湖州分行通过盘活应收账款，提供区块链应收款融资降低公司融资成本，间接助力产业基地的项目建设。

The Huzhou branch of Zhejiang Commercial Bank facilitated receivables and offered blockchain receivable financing to lower the company's financing costs.



IMPACTS

虽然初期投资较大，但高度集成化能够大幅降低能耗、减少人工和资源浪费、缩短项目周期，长期来看有助于降低建筑建造成本。大东吴2021年累计承接业务达到66亿元，其中传统建筑部门42亿元，装配式建筑部门24亿元，装配式建筑的业务承接量占到36%，转型效果已初步显现。

Despite the high initial cost, Dadongwu's efforts to significantly reduce energy consumption, minimize labor and resource waste, and shorten project cycles through high levels of integration would lower the cost of building construction in the long term. In 2021, Dadongwu's total business undertaking amounted to RMB6.6 billion, with RMB4.2 billion in traditional construction and RMB2.4 billion in prefabricated buildings. Prefabricated construction accounted for 36% of the business, showing the initial effects of Dadongwu's transformation.

与传统建造方式相比，装配式建筑在生产、管理和节能降耗方面具有优势：

Compared with traditional construction methods, prefabricated buildings have several advantages in production, management, and energy conservation:

- 提高建造效率，缩短工期50%，减少用工量70%，降低施工过程中的能耗与物耗；

These include improved construction efficiency, halving project duration and cutting labor by 70%, and decreased energy and material consumption during construction.

- 减轻对环境的影响, 施工现场湿作业减少90%, 噪音、粉尘污染分别降低70%与90%, 建筑垃圾减少近90%, 材料可循环利用率提高至70%;

They also reduce the environmental impact by reducing on-site wet work by 90%, noise and dust pollution by 70% and 90% respectively, and construction waste by nearly 90%.

- 根据相关标准评估, 采用GAB体系生产的建筑可达到绿色建筑二星标准和装配式建筑3A级。这意味着这些建筑更加节能, 能够显著降低能源消耗。

Additionally, they have a material recycling rate of up to 70%. In terms of energy conservation, buildings constructed using the GAB system can meet the two-star standard for green buildings and the three-star standard for prefabricated buildings.

绿色金融支持绿色能源: Green Battery Production:

以天能集团为例

Tianneng Group

HIGHLIGHTS

新能源电池的应用是实现全球能源转型和应对气候变化的关键。面对铅酸电池回收加工和铅蓄电池生产转型的需求,天能集团(以下简称“天能”)在绿色金融支持下,逐步打造出绿色智造产业链和循环经济生态圈。

The application of green batteries is essential to achieving global energy transition and addressing climate change. In response to the recycling and transformation needs of lead-acid batteries, green finance offers a suite of financial instruments to Tianneng Group to establish a sustainable smart manufacturing supply chain and foster a circular economy ecosystem.

CASE

天能所在的长兴县因电池产业闻名,所产蓄电池占到国内市场份额的65%以上。但是,传统铅蓄电池的生产过程污染严重,长兴县一度被列入“全国重金属污染重点防控区”。天能是长兴电池产业的龙头企业,在90年代末也经历了粗放式的发展阶段,产品单一且能耗较大。在业务结构转型升级初见成效后,天能业绩逐步扭亏为盈。通过开展绿色智造行动和布局绿色低碳产业,天能成功实现从生产源头到末端管理的全过程“绿色化”,已蜕变为全球知名的绿色能源系统方案供应商。

Tianneng is based in Changxing County, which is known for its battery industry. Over 65% of the country's storage batteries are produced here. However, the

high pollution from traditional lead-acid battery production once made Changxing a crucial area for heavy metal pollution control in China. In the late 1990s, Tianneng, a leading company in the local battery industry, was also in the stage of inefficient development, with single product and high energy consumption. The initial success of business structure transformation and upgrading was a significant reason for Tianneng's changing from loss-making to profit-making later on. By implementing green intelligent manufacturing actions and entering the green low-carbon industry, Tianneng successfully achieved the comprehensive “greening” of its production, from supply to end products, transforming into a globally renowned green energy system solution provider.

在绿色智造方面,天能采取了以下三大举措:

In green and intelligent manufacturing, Tianneng has taken three significant measures:

- **全生命周期绿色管理:** 在产品研发阶段全面引入绿色设计理念,减少产品在全生命周期对环境的影响;

Entire Lifecycle Green Management: Green design concepts are fully introduced at the product development stage to reduce environmental impact throughout the product lifecycle.

- **生产过程智能化改造:** 在制造环节,推进大规模智能化改造来提高生产效率和减少资源消耗,包括使用机器人代替人工、设备互联互通、以及升级自动化生产线等;

Intelligent Transformation of the Production Process: In manufacturing, large-scale intelligent transformation is implemented to improve production efficiency and reduce resource consumption, including using robots instead of manual labor, interconnecting equipment, and upgrading automated production lines.

- **绿色供应链管理:** 在供应链端,依托全流程最优智慧模型,推动质量和环保信息的实施监控、测量与信息化传输,有效地从“末端治理”转向“全过程防控”。

Green Supply Chain Management: In the supply chain, the company relies

on the optimal innovative model for the whole process to promote the implementation, monitoring, measurement, and transmission of quality and environmental information, effectively shifting from “control at the end” to “comprehensive process control.”

在布局绿色低碳产业方面,天能专注于以下三大领域:

In the development of green and low-carbon industries, Tianneng focuses on three main areas:

- **智慧储能:**搭建综合能源数字服务平台,涵盖数据感知、边缘处理到智慧应用,提供一体化智慧能源解决方案,提升能源利用效率;

Smart Energy Storage: Tianneng has built an integrated energy digital service platform including data sensing, edge processing, and smart applications to provide integrated smart solutions to wind and solar storage projects and improve energy efficiency.

- **发展氢燃料电池产业:**推动氢燃料电池核心技术突破,研发石墨板电堆和大功率金属板电堆等氢燃料电池产品,加速氢燃料电池技术的产业化和商业化;

Hydrogen Fuel Cells: By creating a series of hydrogen fuel cell products, including graphite and high-power metal plate stacks, Tianneng has accelerated the industrialization and commercialization of hydrogen fuel cell technology.

- **动力电池循环利用:**开发铅蛋平台,实现废旧铅酸电池的高效回收和无害化处理,目前废旧铅酸电池回收利用率已达到99%。

Power Battery Recycling Industry: Tianneng developed a digital platform for the efficient recycling and treatment of used lead-acid batteries, currently achieving a 99% recycling rate of used lead-acid batteries.

HOW

湖州市积极运用绿色金融政策及工具,撬动市场力量推动铅蓄电池产业转型,为天能改革注入动力。湖州市专门出台了《关于金融支持长兴县铅酸蓄电池企业专

项整治和转型升级的指导意见》、《铅酸蓄电池行业专项整治扶持政策》、《铅酸蓄电池行业专项整治困难企业员工分流扶持政策》等一系列专项扶持政策,从税收、土地、规费、设备投入等方面进行扶持和激励。金融机构依据这一系列政策,为天能提供了强有力的资金支持:

The city of Huzhou has actively used green financial policies and tools to leverage market forces to promote the transformation of the lead-acid battery industry, creating momentum for Tianneng's reform. Huzhou has issued a series of particular support policies, including the "Guiding Opinions on Financial Support for Special Rectification, and Transformation and Upgrading of Lead-acid Battery Enterprises in Changxing County," the "Special Rectification and Support Policies for Lead-acid Battery Industry," and the "Special Rectification for Lead-acid Battery Industry and Support Policy for Staff Transfer at Enterprises Facing Difficulty," providing support and incentives in taxation, land, fees, and equipment investment. Based on these policies, financial institutions provided strong funding support to Tianneng:

- 华夏银行湖州分行为天能发放2亿元的中期贷款,专项用于铅酸电池回收加工,增加不可再生资源的回收利用,减少铅污染。

The Huzhou branch of Hua Xia Bank issued a medium-term loan of RMB200 million to Tianneng, specifically for lead-acid battery recycling and processing, increasing the recycling of non-renewable resources and reducing lead pollution.

- 农业银行湖州分行为天能授信项目贷款3亿元,用于蓄电池项目绿色生产发展,授信固定资产贷款3亿元用于废旧电池回收和循环经济发展。

The Huzhou branch of the Agricultural Bank of China provided a project loan credit of RMB300 million for Tianneng, used for green production development of battery projects, and a fixed asset loan of RMB300 million for recycling used batteries and developing the circular economy.

- 为打造循环经济生态圈,工商银行湖州分行为天能提供流动贷款3亿元。

To create a circular economy ecosystem, the Huzhou branch of the Industrial

and Commercial Bank of China provided a working capital loan of RMB300 million to Tianneng.

为确保绿色转型的有效推进，湖州的金融机构还构建了环保与信贷联动机制，将企业环境风险纳入信贷的全流程管理，贷前实行“环保一票否决制”，贷后执行“环保负面清单”，结合环境监管等信息对企业进行环境风险贷后评估，及时调整授信政策。

To ensure the effective promotion of the green transformation, Huzhou's financial institutions have also established an environmental protection and credit linkage mechanism, incorporating corporations' environmental risks into the entire process of credit management, implementing an “environmental veto system” before loan issuance and executing an “environmental negative list” after loan issuance, incorporating environmental supervision information in follow-up evaluation of companies' environmental risks and timely adjusting credit policies.

保险业在风险管理方面也发挥了创新作用，在全国首创“保险+服务+监管+信贷”环境污染责任保险模式，将保费的50%用于环境风险体检，检测企业环境风险隐患，企业如不整改或整改不达标，将受到银行信贷的联合惩戒，即减少贷款额度、提高贷款利率、甚至拒绝贷款等，实现风险防范前移。

The insurance industry has also played an innovative role in risk management, pioneering the “insurance + service + supervision + credit” environmental pollution liability insurance model nationwide, using 50% of the premium for environmental risk health checks to detect hidden environmental risks among businesses. If a company fails to make changes or does not meet the standards of rectification, it would be subject to a series of punishment in bank credit, facing reductions in borrowing limit, increases in loan interest rate, or even rejections of lending. This achieves risk prevention in advance.

IMPACTS

锚定绿色主赛道后，经过30余年的发展，天能已跻身中国企业500强，拥有遍布七个省份的20个生产基地和近3万名员工。天能成功建设全国首个电网侧储能电

站——雉城储能电站，以及全球单体最大的智慧储能项目——“和平共储”等一系列标杆项目，市场效益良好。

After deciding to focus on sustainable business, Tianneng now ranks among the top 500 Chinese enterprises after more than 30 years of development, with 20 production bases in seven provinces and nearly 30,000 employees. It successfully built the first grid-side energy storage power station in China, the Zhicheng Energy Storage Power Station, and the world's largest single smart energy storage project, "Peaceful Shared Storage," as well as other benchmark projects, achieving good market benefits.

在循环经济与资源高效利用方面，天能实现了70%的水重复利用率，100%的废水循环率，以及98%的金属回收率。废气中铅含量降至 $0.25\text{mg}/\text{m}^3$ ，远低于 $0.7\text{mg}/\text{m}^3$ 的国家标准。在绿色动力方面，2023年，天能集团的绿色动力电池出货量约为5.01亿只，提供了超过8397.22万KVAh的绿色动力，助力低碳出行。此外，在节能减排方面，天能电池每年售出货量可实现二氧化碳减排22665万吨，全生命周期内节约石油1142.3亿升，相当于5089万吨原油，充分体现了“电替油”战略的环境效益。

In terms of circular economy and efficient resource utilization, Tianneng has achieved a 70% water reuse rate, 100% wastewater recycling, and 98% metal recycling. The lead content in waste gases has been reduced to $0.25\text{mg}/\text{m}^3$, far below the national standard of $0.7\text{mg}/\text{m}^3$. In terms of green power, Tianneng Group's 2023 green power battery shipments were approximately 501 million units, providing over 83.97 million KVAh in green power, contributing to low-carbon travel. Additionally, in terms of energy saving and emission reduction, the volume of batteries sold by Tianneng each year can achieve a carbon dioxide reduction of 226,665,000 tons, equivalent to 50.89 million tons of crude oil, fully reflecting the environmental benefits of the "electric substitution for oil" strategy.

天能和其所在的新川村进行了将近20年的"村企共建"，通过技能培训、资金支持、就业支撑等途径，引导村民参与到村级资源开发和配套服务企业的创业中。目前已经解决了新川村及周边村5000多人的就业问题，新川村近三分之二的村民都在从事与天能集团相关的工作，展现了企业社会责任与乡村振兴战略的深度融合。

Tianneng and its base in Xinchuan Village have carried out nearly 20 years of “co-building of village and enterprises,” guiding villagers to participate in village resource development and supporting service entrepreneurship by providing skills training, financial support, and employment support. This has solved the employment issue of more than 5,000 people in Xinchuan Village and surrounding villages. Nearly two-thirds of the villagers in Xinchuan Village are engaged in work related to Tianneng Group, demonstrating the deep integration of corporate social responsibility and rural revitalization strategy.

绿色金融支持绿色园区： Green Industrial Park:

以中节能(湖州)节能环保产业园为例

Eco-Industrial Park by China Energy Conservation
and Environmental Protection
Group (CECEP Huzhou)

HIGHLIGHTS

中节能(湖州)节能环保产业园(以下简称“产业园”)是湖州市首个绿色建筑示范园和节能环保产业集聚平台。通过应用外墙保温、绿色照明、屋顶光伏等绿色建筑技术,中节能在湖州打造近零碳产业园区,助力园区内小微企业转型升级。融资担保、加速贷款审批流程、优惠贷款等绿色金融工具,在园区建设、企业入园、配套经营等环节为打造绿色园区提供支持与便利。

The CECEP (Huzhou) Energy Conservation and Environmental Protection Industrial Park is Huzhou's first sustainable architecture demonstration site and a hub for energy conservation and eco-friendly industries. By applying green building technologies, CECEP has created a near-zero carbon industrial park in Huzhou, facilitating the transformation and upgrading of SMEs. Green finance supports the park by offering green finance tools such as financing guarantees, expedited loan approvals, and preferential loans, providing support for park construction, business attraction, and supporting operations.

CASE

小微企业是湖州社会发展的重要引擎,但长期面临着污染程度高、聚集度低、融资难、生存能力相对脆弱等问题,尽管具有减排潜力,却面临转型困境。中节能

作为一家主业为节能减排、环境保护的中央企业，在湖州建设了产业园，通过以下措施，有效促进了当地节能环保产业的高效聚集和转型升级：

Small and micro enterprises are vital to Huzhou's economy but struggle with issues of pollution, low-cluster, difficulty in financing, and low survival rates. To address these issues, CECEP, which is a centrally-administered state-owned enterprise focusing on energy conservation, emission reduction and environmental protection, built the eco-industrial park in Huzhou. The park facilitates the efficient aggregation and transformation of local industries through initiatives:

- **打造绿建园区：**园区综合采用外墙保温系统、绿色照明系统、屋顶光伏发电系统、雨水回收系统等多项绿建技术，加强园区内各环节能源互补效应，有效控制园区整体能耗与碳排放。

Green Buildings: The park utilizes multiple green building technologies, including external wall insulation, energy-efficient lighting, rooftop photovoltaics, and rainwater recycling systems, to enhance energy complementarity and effectively control overall energy consumption and carbon emissions.

- **导入绿色产业：**优先引入技术含量高的节能环保、新能源、新材料等优质科创型企业，并为符合准入条件的企业提供政策指导、税收优惠、融资渠道拓展、科研孵化等支持服务。

Green Industry Introduction: It prioritizes the attraction of high-tech companies focusing on energy conservation and environmental protection, new energy, and new materials, and provides policy guidance, tax incentives, expanded financing channels, and research and development (R&D) incubation support for qualified enterprises.

- **绿色智慧运营：**园区通过能源管理系统实现能耗前置监控，再利用智慧化手段优化园区的能源使用方式来管理企业单位能耗。能耗超标企业如不整改，将被要求搬离园区。同时，园区使用智能调度系统优化园区内外的物流和交通流线，提高运输效率，减少碳排放。此外，园区还建立了环境监测系统，定期检测空气质量、水质等指标，及时发现并处理环境污染问题，保障园区环境安全。

Smart Operations: The park's energy management system uses smart technology to forecast and optimize energy usage. Enterprises must meet energy consumption standards or face corrective measures, including relocation from the park for failing to do so. The park employs an intelligent dispatch system to enhance logistics and transportation efficiency, reducing carbon emissions. Additionally, it features an environmental monitoring system to conduct regular air and water quality checks, enabling prompt pollution management.

HOW

为推动小微企业园区的建设，浙江省、湖州市、吴兴区相继出台了《关于加快小微企业园高质量发展的实施意见》、《关于进一步加强小微企业园建设和管理的指导意见》、《湖州市推动制造业高质量赶超发展实施意见》、《吴兴区实施小微企业园区建设管理“标准房”制度指导意见》等多项政策，为园区的建设和管理提供了良好的政策动员环境。

To promote the construction of parks to host small and micro businesses, Zhejiang Province, Huzhou City, and Wuxing District have issued policies such as the “Implementation Opinions on to Accelerate the High-Quality Development of Small and Micro Enterprise Parks,” “Guiding Opinions on Further Strengthening the Construction and Management of Small and Micro Enterprise Parks,” “Implementation Opinions on Promoting High-quality Development of Manufacturing Industry in Huzhou City,” “The Implementation of Small and Micro Enterprise Park Construction Management ‘Standard Room’ System Guidance in Wuxing District,” providing a good policy enabling environment for park construction and management.

在政策激励下，多家银行通过融资担保、加速贷款审批流程、优惠贷款等方式，在园区建设、企业入园、配套经营等环节为打造绿色园区提供支持与便利：

With these policy incentives, various banks have facilitated the development of the green park by providing financing guarantees, fast-tracking loan approvals, and preferential loans for park construction, business attraction, and operational support.

- **在园区建设期间**, 中国银行提供2.5亿信用额, 实际提供1.4亿开发贷款, 及时保障了园区建设的资金投入。

During park construction, the Bank of China provided a credit line of RMB250 million, issuing RMB140 million in development loans and ensuring timely capital input for construction.

- **在企业入园期间**, 多家银行机构提高对有关项目的审批效率, 缩短了企业贷款的审批发放时限, 合作银行包括农行、中行、浙商银行、湖州银行等, 共提供按揭贷款2亿元。

During the business attraction period, several banks, including Agricultural Bank of China, Bank of China, China Zheshang Bank, and Bank of Huzhou, increased project approval efficiency, shortening the loan approval time and providing RMB200 million mortgage loans.

- **在园区运营期间**, 园区积极开展“金融服务专题讲座”及“银企对接会”等活动, 为企业提供最低3.5%的融资利率, 截止目前园区共为企业完成约1.5亿元的融资, 综合利率低于5%。上述举措降低了企业的融资成本, 解决小微企业融资难、融资贵的问题。此外, 银行机构更为园区内企业提供了结算、授信、财富管理等专业化、综合化的金融服务, 满足了园区企业不同发展阶段的金融需求。

Once the park began operation, it held “financial service seminars” and “bank-enterprise matchmaking meetings”, offering financing rates as low as 3.5% to companies. The park has facilitated around RMB150 million in enterprise financing at an overall rate of under 5%, easing financing issues for small and micro enterprises. Banks have also provided specialized and comprehensive financial services, including settlement, credit, and wealth management, to support enterprises at different stages of development.

IMPACTS

自投运以来, 园区凭借其良好环境吸引了众多先进技术和优势企业聚集, 形成集

群效应，不仅推动了产业发展，也为地方经济发展、产业转型升级做出了贡献。截至目前，园区已成功引入企业50余家，节能环保、机械装备、工业科技等环保产业占比80%以上。这些企业包括汉纳新材料、恒动环境、永汇水处理等行业佼佼者，园区年产值达到6.4亿元。同时，园区的建设和运营创造了大量工作岗位，为当地居民提供了就业机会。

The park has attracted advanced technology and formed a cluster effect by gathering top-tier enterprises. This promotes industrial development and contributes to the local economic growth and transformation. Over 50 enterprises, with more than 80% specializing in energy conservation and environmental protection, machinery and equipment, and industrial technology, have set up operations in the park. The park's annual output value has reached RMB640 million. Also, the park's construction and operation have created a large number of job opportunities for local residents.

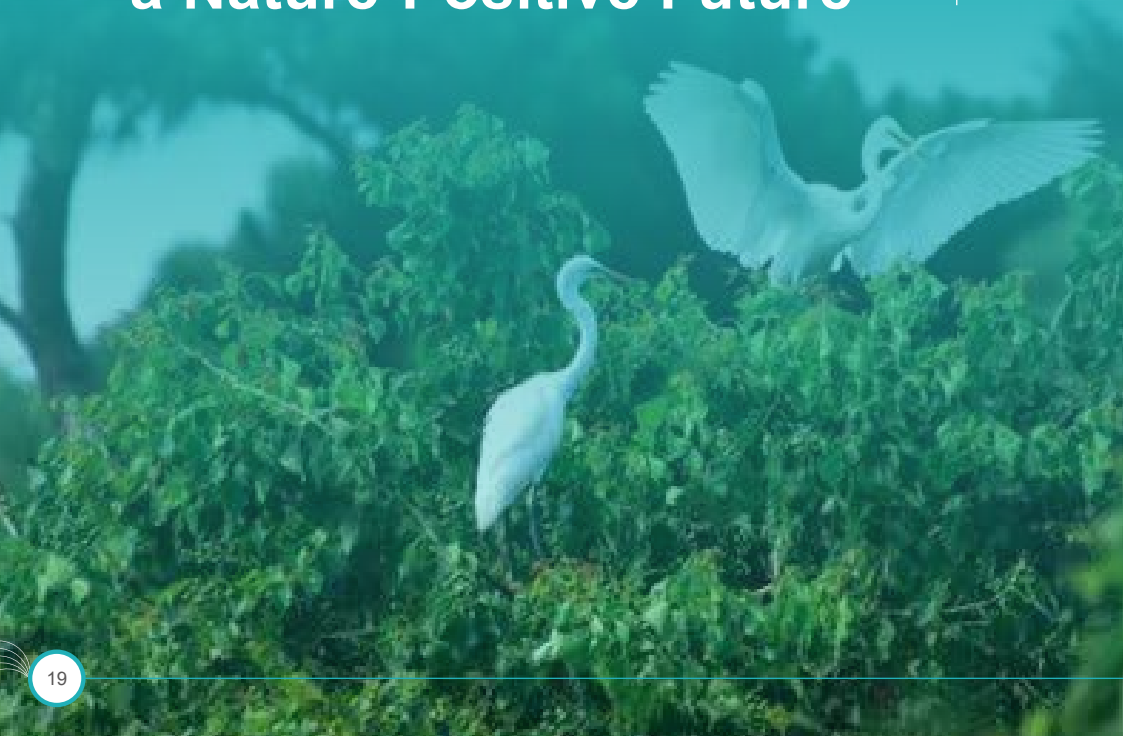
通过建筑节能、可再生能源发电与绿化碳汇等综合技术措施，目前园区碳中和率已达80%左右。这一成就不仅引领了湖州地区节能环保产业的升级，还具有显著的低碳示范推广效应，吸引了各地政府、国内外专家学者行业同仁前来参观考察。

Through comprehensive technologies such as building energy conservation, renewable energy, and green carbon sinks, the carbon neutrality rate of the park has reached approximately 80%. Its low-carbon demonstration effect is significant and has promoted the upgrading of Huzhou's energy conservation and environmental protection industry, attracting government officials, domestic and foreign experts, and industry peers to visit and study.

B

第二部分： 绿色金融支持生态修复 及价值转化

Part II. Using Green
Finance to Support
Ecological Restoration for
a Nature-Positive Future



绿色金融支持生物多样性保护： Ecological Restoration to Sustain Biodiversity and Natural Capital:

以下渚湖国家湿地公园为例

Xiazhu Lake National Wetland Park



HIGHLIGHTS

通过探索政府主导与市场机制并行的生态补偿机制、开发与湿地碳汇挂钩的绿色信贷和指数保险等绿色金融产品、以及推广“生态绿币”吸引社区参与等创新实践，下渚湖国家湿地公园不仅修复了原本受损的湿地环境，实现了农户转型共富，还激发了社会公众参与生态保护的热情，是一次金融与自然的良性互动。

By integrating government-led and market-driven ecological compensation mechanism, developing green financial products tied to wetland carbon sinks, and using “biodiversity credits” calculated with the Gross Environmental Product (GEP) measurement to engage the community, Xiazhu Lake National Wetland Park has revitalized its ecosystem, fostered farmer prosperity and public engagement in ecological protection. This initiative showcases the synergetic relationship between finance and ecological preservation.



CASE

下渚湖国家湿地公园位于湖州市德清县城东南，是江南最大的天然湿地和世界濒危物种朱鹮的栖息地。湿地内分布着535种植物和119种濒危动物，生物多样性丰富。然而，该地区一度因农业养殖和农家乐经济的无序发展遭受严重的环境退化。农户粗放与高密度的青虾养殖模式加上养殖尾水直接排放，导致周边水域富营养化，大量湿地功能基本丧失，生物多样性也面临风险。

Xiazhu Lake National Wetland Park, located southeast of Deqing County in Huzhou, is the largest natural wetland in areas south of the Yangtze River and home to the endangered Crested Ibis. The wetland is home to 535 plant species and 119 endangered plants, supporting rich biodiversity. However, the area suffered severe environmental degradation due to unregulated agricultural farming and agritourism. Crayfish farming and effluent discharge led to the eutrophication of nearby waters, significant loss of wetland functions, and risks to biodiversity.

在此背景下，德清县综合施策开展生态修复与产业转型。政府首先制定了一系列保护政策与制度，包括发布“五水共治”工作考核办法深化河湖治理和推行林长制加大对物种的保护力度。同时，政府还通过定期巡查和代表监督来及时干预潜在的破坏行为。此外，为确保生态保护措施的有效实施，政府还细化部门职责明确湿地管理的主体责任，并通过征租方式获取土地使用权明确土地权属。

Against this backdrop, Deqing County adopted a comprehensive approach to ecological restoration and industrial transformation. The government firstly formulated a series of protection policies, including the “Co-governance of Five Waters” work assessment method to deepen river and lake governance, the promotion of the forest chief scheme to strengthen species protection, regular patrols and supervision to intervene with potential destructive activities promptly, clarifying departmental responsibilities and obtaining land use rights through renting to ensure effective implementation of ecological protection measures.

为根治生态问题，德清县在农业面源实行源头截污并开展生态修复工程。该县全面禁止湿地红线范围内的农业养殖活动，并集体搬迁水产村。生态修复工程则涵盖了水系沟通、清淤疏浚、生态护岸、闸坝修缮等措施，创新性地建立了环湖10万平方米的水下森林，利用大型沉水植物群落吸收水体污染物。

To address the root causes of environmental problems, Deqing County implemented source pollution control in agricultural areas and conducted ecological restoration projects. It banned all agricultural farming activities within the wetland redline zones and collectively relocated the aquaculture villages. The ecological restoration project included waterway communication, desilting,

ecological bank protection, and dam repair measures. It also established a 100,000-square-meter underwater forest around the lake to absorb water pollutants.

德清县还推动青虾养殖业的绿色转型。通过采用生态混养、“水精灵”青虾早繁等技术,开发研究改善水质的生物制剂、打造湿地生态农业养殖模式,使用“四池三/二坝式”模式对水产养殖尾水进行多级处理等举措,有效改善了下渚湖的产业环境。

Additionally, Deqing County also promoted the transition of the crayfish farming industry. By adopting techniques such as ecological polyculture and early breeding of prawns using, developing biological agents to improve water quality, creating wetland ecological agricultural farming models, and employing a model of “Four (Decontamination) Tanks and Three (Filtration) Dams” to provide multi-stage treatment of aquaculture effluents, effectively improving the industry environment.

HOW

《德清县国民经济和社会发展第十四个五年规划和二〇三五年远景目标纲要》的制定为实施下渚湖湿地生态修复工程并开展生物多样性保护提供了政策保障。中央政府的补助资金也为生态修复工程提供了重要支持。同时,湖州的金融管理部门也积极争取央行碳减排政策工具的支持。

The formulation of Deqing County's “Outline of the 14th Five-Year Plan (2021-2025) for Economic and Social Development and Vision 2035” provided policy support for implementing the Ecological Restoration Project of Xiazhu Lake Wetland and biodiversity protection. Central government subsidies also provided crucial support for the ecological restoration project. Meanwhile, Huzhou's financial management departments actively sought the support from People's Bank of China's Carbon-Reduction Supporting Tool.

在此基础上,德清县探索出湿地生态补偿机制,来应对长效管理、转型增收和村民经济效益下降等方面的挑战。一方面,德清县基于GEP平台评估的湿地碳汇价值,通过财政转移支付的方式每年落实700余万元对湿地行政村进行奖补,实现了域

内发展经济的行政村向生态保护村的直接补偿。另一方面，通过“两山银行”管理湿地资源，推动湿地碳汇交易平台的建设，开启碳汇收储交易，引导高能耗企业购买碳汇指标，逐步开放碳汇市场。利用市场机制拓宽湿地生态补偿资金渠道。

Building on this, Deqing County explored an ecological compensation mechanism for wetlands to deal with challenges in long-term management, transition income growth, and declining economic benefits for villagers. Based on evaluations of the wetland's carbon sink value using the Gross Ecosystem Product (GEP) platform, over RMB7 million is allocated annually as fiscal transfer payments to villages that prioritize ecological protection over economic growth. The county also managed wetland resources through the “Trading Platform for Green Mountains Transforming into Golden Mountains” to promote the construction of a wetland carbon sink trading platform and initiate carbon sink collection and storage trading. This encouraged high energy-consuming enterprises to purchase carbon sink credits, gradually opening the carbon sink market and expanding funding channels for wetland ecological compensation.

在良好的动员环境下，绿色金融产品的推出为湿地生态保护和碳汇产业的发展提供了支持：

In this enabling policy environment, the launch of green financial products provided support for wetland ecological protection and the carbon sink industry:

- **湿地碳汇共富贷**：湖州银行针对“退渔还湿”政策执行初期农户面临的经济压力的专项产品。依据农户湿地碳汇量等因素提供专属授信额度和优惠利率，为农户转型种植业提供资金援助。

“Wetland Carbon Sink Common Prosperity Loan”: A specialized product offered by the Bank of Huzhou to address the economic pressure on farmers during the initial implementation of the “Fishponds-to-Wetland Conversion” policy. This provided dedicated credit lines and preferential interest rates based on the farmers' wetland carbon sink volume to support their transition to crop farming.

- **“PTD”闭环体系**：德清农商银行为促进湿地价值货币化和湿地碳汇产业的形成

创立的体系。

"PTD" closed-loop system: A system created by the Deqing Rural Commercial Bank to promote the monetization of wetland value and the formation of the wetland carbon sink industry.

1. 针对碳汇生产 (Production) 端——村集体和村民，分别推出“湿地碳汇无忧贷”和“湿地碳汇共富贷”用来支持湿地生态修复和农户经营转型；

Production (P): Village collectives and farmers can access the “Wetland Carbon Sink Worry-Free Loan” and “Wetland Carbon Sink Common Prosperity Loan” to fund ecological restoration and their business transitions.

2. 针对收储交易 (Transaction) 端，推出“湿地碳汇两山贷”用于支持碳汇收储、资源整合等环节推进；

Transaction (T): The bank launched the “Wetland Carbon Sink and Green Mountains Transforming into Golden Mountains Loan” to support carbon sink storage and resource integration.

3. 在企业需求 (Demand) 端——高碳企业，推出“转型企业碳汇贷”，为购买碳汇的高碳企业低碳转型提供优惠利率资金。由此形成闭合的内循环资金链。

Demand (D): High-carbon enterprises are provided the “Carbon Sink Loan for Enterprises Seeking Transformation”, which offers preferential interest rates and enables them to purchase carbon sinks to make their low-carbon transitions, thus creating a self-sustaining internal fund chain.

- **湿地碳汇指数保险:** 平安保险湖州分公司为湿地碳汇项目推出风险保障产品。通过应用卫星遥感技术参与湿地保护监控，该产品一方面保障自然灾害造成的湿地碳汇损失，承担灾后湿地碳汇资源救助、碳源清除、生态保护修复等费用支出；另一方面，对于超额达成碳汇目标的结余部分予以奖励性赔偿。从事湿地生产经营的农民、湿地生产经营组织、从事湿地碳汇的生产经营组织、企事业单位、国家机关均可作为投保人。

Wetland Carbon Sink Index Insurance: A risk protection product introduced by The Huzhou branch of Ping An Insurance for wetland carbon sink projects, which uses satellite technology to monitor and protect wetland carbon sinks against natural disaster damages. This insurance covers post-disaster recovery costs, carbon source removal, and ecological restoration. It also rewards policyholders if their carbon sink achievements exceed the targets. Policyholders can range from farmers and organizations to enterprises, public institutions, and government bodies involved in wetland carbon sink projects.

此外，德清县在碳普惠方面做了进一步创新。在强化金融机构在实现自身节能减排的同时，积极推动其以碳中和为导向向湿地购买碳汇指标。同时，创新推出“生态绿币”，它是利用GEP核算体系来量化生物多样性保护价值，并据此发行的信用单位。将村民的环保行为（如回收垃圾）转化为“绿币”充值到数字平台账户内，用于兑换生活用品和日常消费，增加公众参与积极性。

Furthermore, Deqing County made innovations in carbon inclusion. Financial institutions are encouraged to purchase wetland carbon sink credits, while working on reducing their own energy consumption and carbon emissions. “Biodiversity credits” calculated with GEP were introduced, and villagers' environmental behaviors, such as recycling waste, were converted into these biodiversity credits, which are credited to their digital platform accounts and can be redeemed for household items and daily consumption, increasing the public's enthusiasm to participate.

IMPACTS

下渚湖湿地公园目前年均接待游客120万人，有效促进了旅游业发展与增收。2023年初，366吨湿地碳汇通以57.38元/吨的价格成交，成为湖州市首个数字化线上交易的碳普惠自愿减排项目。

Xiazhu Lake Wetland Park receives 1.2 million visitors annually, promoting tourism development and income growth. In early 2023, 366 tons of wetland carbon sinks were traded at RMB57.38/ton, becoming Huzhou's first online digital carbon inclusion project for voluntary emission reduction.

经过多年治理和修复,下渚湖湿地景观体系、生态系统、生物多样性得到有效改善,水质从劣 V 类稳定在 II - III 类,800 多种动植物在这此繁衍生息。湿地碳汇增加和生态补偿机制的建立,对延缓气候变化具有积极作用,2021 全年净固碳量达到 1.7 万吨。

After years of management and restoration efforts, the wetland has seen significant improvement in its landscape, ecology, and biodiversity. Water quality has been enhanced from class V to class II-III. Now, the area supports over 800 flora and fauna species. The increase in wetland carbon sinks and the establishment of ecological compensation mechanisms have a positive impact on climate change mitigation, achieving a net carbon sequestration of 17,000 tons in 2021.

良好的水生态和生态养殖模式,成为了村民致富增收的主要增长点。生态绿币等创新机制增加了公众参与,为实现人与自然和谐共处提供借鉴。

Eco-friendly farming and water conservation are essential for villagers' income growth. Initiatives like biodiversity credit boost public involvement and offer a model for achieving harmony between humans and nature.

绿色金融支持矿坑修复: Revitalizing Post-Mining Landscape:

以“深蓝一号”为例

"Deep Blue X" Project

HIGHLIGHTS

“深蓝一号”的生态修复及价值转化体现出“四大亮点”。一是产权整合机制，通过政府主导的大规模产权整合，有效解决了修复项目中常见的责任分散难题，为生态修复和资源转化提供了清晰的权责框架。二是合作经营模式，创新的“集体+公司+农户”合作模式，平衡了各方利益，激活了社会资本。三是创新绿色金融产品“生态修复贷”，展现了绿色金融在推动生态修复项目中的灵活性和有效性。四是返乡青年将生态修复与现代消费趋势相结合，为资源化区域转型提供了新的想象空间。

There are four highlights with regard to the ecological restoration and value transformation of "Deep Blue X".

1. Property Integration Mechanism: Large-scale government-led property integration effectively addresses dispersed responsibilities in restoration projects, providing a clear framework for ecological restoration and resource conversion.

2. Cooperative Business Model: The innovative “collective + company + farmer” cooperation model balances the interests of all parties, activating social capital.

3. Innovative Green Financial Product “Ecological Restoration Loan”: This product showcases the flexibility and effectiveness of green finance in driving ecological restoration projects.

4. Return of Young People Combines Ecological Restoration with Modern Consumption Trends: It provides new possibilities for transforming resource-based regions.

CASE

“深蓝一号”是一家户外咖啡店，位于安吉县梅溪镇红庙村。这家咖啡店原址是一处废弃矿坑，面积达300余亩，残垣废墟、安全隐患、卫生不佳等问题一直困扰当地居民。然而，因停产后的天然蓄水形成心形湖泊，配上深幽湛蓝的湖水和峭拔冷峻的岩石，2020年，该处矿坑在自媒体平台迅速走红。

"Deep Blue X" is an outdoor café in Hongmiao Village, Meixi Town, Anji County. It used to be a 50-acre abandoned mine pit. Problems such as the abandoned ruins, safety hazards, and poor sanitation that had been troubling residents. But the pit gained popularity on social media platforms in 2020, with the heart-shaped lake that formed in it from rain water and its striking deep blue color.

尽管拥有良好的生态禀赋和网红流量，矿坑生态修复及价值转化的过程也并非坦途。红庙村原本是以种植为主的农业村，多主体和复杂的产权关系使开展生态修复和安全维护时的责任难以落实。加上修复工程体量大、周期长，需要大量的运营资金投入，且投资回报和政府补助具有不确定性，企业不愿倾斜资源。

Despite its good ecological potential and online popularity, the ecological restoration of the mine pit in Hongmiao Village faced obstacles due to the complex stakeholder and property relationships. The extensiveness and long-term nature of the project demanded significant investment, and deterred by uncertainties in return and government subsidy, businesses were not willing to get involved.

在此背景下，红庙村联合10余名大学生创业团队共同开启“深蓝计划”：

In this context, Hongmiao Village partnered with an entrepreneurial team of more than 10 university students to launch the "Deep Blue Plan":

- **产权整合与基础设施建设**：梅溪镇政府斥资4000多万，用于解决分散在不同主体中的矿权问题。通过整合产权，为生态修复和后续开发扫除法律障碍。同时，政府加快基础设施建设，为开发利用提供前提条件。

Property Integration and Infrastructure Construction: The government of Meixi Town allocated over RMB40 million to consolidate mining rights and remove the legal barriers to ecological restoration and the development that follows. It also fast-tracked infrastructure projects to get the conditions ready for future development.

- **创新“集体+公司+农户”的经营模式:**项目采取“两入股三收益”的运行模式。村民和村集体以资金和资源的形式入股,占比49%,村民可以以拿租金、挣薪金、分股金的形式获得收入。公司和创业团队占股51%,负责项目运营。

Innovative "Collective + Company + Farmer" Business Model: The project utilized a “Two Investments and Three Returns” model, where villagers and the village collective invested in 49% of the stake, thus receiving income in the form of rent, wages, and dividends, while the company, i.e. the entrepreneurial team, held a 51% stake, and managed the project.

- **产业升级与创新体验:**创业团队的成员多为返乡青年,他们深刻理解年轻人的消费习惯,融合矿坑天然场景,以咖啡作为载体贩卖风景。通过打造特色体验场景,如“黄金打卡位”和专业摄像服务,在社交媒体上吸引游客前往打卡。

Industry Upgrading and Innovative Experiences: The entrepreneurial team is mainly made up of young individuals returning to their hometown and are familiar with the consumption habits of young people. They innovatively merged the natural mine setting with the coffee offerings to market the picturesque scenery. They developed appealing experiences such as “optimal photo spots” and offered professional photography service, drawing tourists to visit and take photos.

HOW

安吉农商银行按照生态导向型发展(EOD)模式从资金端切入,通过免担保的纯信用方式,以生态保护和环境治理为基础,向红庙经济合作社授信700万元;以特色产业运营为支撑,向深蓝集团授信1090万元。如今,安吉农商银行已累计投放“生

态修复贷”39笔超5000万元，帮助包括“深蓝计划”在内的13处废弃矿坑、废旧厂房修复整治和转化。

Following the Ecological-Oriented Development (EOD) model, Anji Rural Commercial Bank provided funding through unsecured pure credit methods. It offered RMB7 million credit to the Hongmiao Economic Cooperative for ecological protection and environmental governance. It offered RMB10.9 million credit to the Deep Blue Group for characteristic industry operations. To date, Anji Rural Commercial Bank has issued 39 “Ecological Restoration Loans” totaling over RMB50 million, supporting the restoration and transformation of 13 abandoned mines and old factories, including the “Deep Blue Plan.”

以生态为导向的开发模式 (Ecology-Oriented Development, EOD)

以生态为导向的开发模式 (Ecology-Oriented Development, EOD) 是指以生态保护和环境治理为基础，进行特色产业运营和区域综合开发的发展模式。它通过产业链延伸、联合经营、组合开发等方式，推动公益性较强、收益性较差的生态环境治理项目与收益较好的关联产业有效融合，将生态环境治理带来的经济价值内部化。目前，EOD模式已逐渐成为中国生态环境治理和绿色产业融合发展的主要模式。

BOX: The Ecology-Oriented Development (EOD) model focuses on ecological protection and environmental management, combining characteristic industries and comprehensive regional development. By extending industrial chains, promoting joint ventures, and integrating various initiatives, the EOD model merges public welfare-driven and less profitable ecological projects with more profitable industries, internalizing the economic value of environmental management. This model has become a key method in China for merging ecological governance with green industry development.

IMPACTS

“深蓝计划”的门票68元/张，目前每天平均客流量可达到2000人次，咖啡最多单天出杯量达8818杯，创造了国内咖啡馆的销售记录。运行至今，“深蓝计划”带来的营收超过2000万元，按照创业团队入股51%，村里以废弃矿坑、闲散房屋等入股占比49%的模式，红庙村已收到分红150万元，租金和薪金收入300余万元。

The "Deep Blue X" charges RMB68 per ticket and currently attracts an average of 2,000 visitors daily. The café set a national record by selling at its highest 8,818 cups of coffee in a single day. To date, the project has generated over RMB20 million in revenue. Under the model where the entrepreneurial team holds 51% of the shares, and the village collectively holds 49% with abandoned mines and idle houses. Hongmiao Village has received RMB1.5 million in dividends and rent and over RMB3 million in rent and wages.

通过推动生态环境治理项目，缓解了区域内相关地质灾害隐患、大气粉尘污染及水污染等较为严重的环境生态问题。废旧资源的改造还带动了百余名青年创业及咖啡餐饮、乡村休闲等旅游新业态快速发展，在提升当地吸引力的同时，吸纳了社会资源，一定程度上缓解了就业压力。村集体的收入会被用于村内基础设施的建设，比如修缮全村的道路、垃圾分类、建造图书馆美术馆等文化休闲场所，村民也可以通过入股和被允许免摊位费摆摊提升收入，有效实现了乡村振兴和村民共富。

The project has effectively reduced risks of geological disaster, and air and water pollution by promoting ecological and environmental governance. It has also transformed abandoned resources to fuel entrepreneurship among young people, leading to the rapid development of new tourism businesses such as coffee and catering, and rural entertainment. This transformation has made the area more attractive, helped utilize social resources, and eased the pressure in employment. The village collective's income will be used for infrastructure construction, such as road repairs, garbage classification, and building cultural and recreational facilities such as libraries and art galleries. Villagers can also increase their income by buying shares of the project or setting up stalls without booth fees, effectively achieving rural revitalization and shared prosperity for villagers.

绿色金融支持竹林生态 产品价值实现:

Financing Bamboo Utilization:

以“以竹代塑”为例

“Bamboo as a Substitute for Plastic” Initiative

HIGHLIGHTS

安吉积极推行“以竹代塑”行动,构建了从研发、生产到消费的全链条闭环体系。安吉农商银行通过专项信贷资金支持企业创新研发,利用政-企-银三方平台扩大线上与线下市场,推出“两山绿币”激励居民和商户选择绿色消费,形成了可持续的绿色经济模式。

Anji County has cultivated a robust green financial ecosystem to support the “Bamboo as a Substitute for Plastic” initiative across R&D, manufacturing, and consumer markets. Within this framework, green finance extends special-purpose loans to enterprises, fueling innovation. The collaborative platform among government, businesses, and financial institutions broadens online and offline market reach. Furthermore, biodiversity credits calculated using Gross Ecosystem Product (GEP) to encourage residents and merchants to embrace eco-friendly consumption habits.

CASE

当前,塑料污染问题已成为仅次于气候变化的全球第二大环境焦点问题,给全球可持续发展带来极大挑战。联合国环境规划署(UNEP)于2022年3月批准了一项

旨在终结塑料污染的历史性决议，各国承诺制定具有法律约束力的国际协议。竹子作为绿色、低碳、速生、可再生、可降解的生物质材料，在包装、建材等多个领域可直接替代部分不可生物降解的塑料制品。2022年11月，中国同国际竹藤组织共同发起“以竹代塑”倡议，在全球推动以竹子代替塑料产品的合作，为塑料污染问题提供了基于自然的东方解决方案。

Plastic pollution has become the second most significant global environmental issue after climate change, posing substantial challenges to sustainable development. The United Nations Environment Program (UNEP) adopted a resolution in March 2022 aimed at ending plastic pollution globally through a legally binding agreement. Due to its eco-friendly, renewable, and biodegradable qualities, bamboo can directly replace non-biodegradable plastic products in various fields such as packaging and construction materials. In response, the “Bamboo as a Substitute for Plastic” initiative was launched by China and the International Bamboo and Rattan Organization in November 2022 to encourage the use of bamboo products worldwide, offering a solution to plastic pollution.

安吉是著名的“中国竹乡”，有竹林101.1万亩，竹产业在全球具有重要的地位和影响力，全县竹产业总产值近200亿元。近年来，安吉积极将竹材用于建筑、装饰、家具、包装、纺织和一次性使用产品等领域，积极推广“以竹代塑”。在研发端，安吉县政府立项竹产业重点研发项目，突破从简单的竹餐具制造到提取竹纤维素和木质素打造竹膜袋、竹吸管的技术问题。在生产端，引进竹产业研究院，攻克制约竹材加工产业发展的难关。在消费端，重点聚焦行政、住餐、生活服务、重点产业配套等领域制定“以竹代塑”企业清单、产品清单，在多场景全面推广，加速市场渗透。

Anji, known as "China's Bamboo Town," has 166,549 acres of bamboo forests and the county's total bamboo industrial output is close to RMB20 billion. In recent years, Anji has actively applied bamboo in construction, decoration, furniture, packaging, textiles, and disposable products, promoting "Bamboo as a Substitution for Plastic." On the R&D side, the Anji County government initiated key bamboo industry research projects, progressing from simple bamboo tableware manufacturing to extracting bamboo cellulose and lignin to create bamboo film bags and bamboo straws. The bamboo industry research institute

was introduced to overcome challenges in bamboo processing during production. On the consumption side, the government focused on administrative, residential, service, and critical industrial sectors, creating a "Bamboo as a Substitution for Plastic" company list and product list to accelerate market penetration.

HOW

从2022年6月起,安吉先后出台《加快推动安吉县竹产业振兴发展的实施意见》《安吉县鼓励以竹代塑加快推进竹制品创新应用推广实施意见》《安吉县2023年“以竹代塑”工作方案》《安吉县以竹代塑新材料采购奖补办法》《安吉县2024年“以竹代塑”应用推广基地建设工作方案》等系列文件,每年投入2000万财政资金支持竹产业发展。在良好的政策动员环境下,安吉农商银行作为“以竹代塑”行动发挥了重要的金融支持作用:

Starting in June 2022, Anji County issued several policies, including the "Implementation Opinions on Accelerating the Revitalization and Development of Anji's Bamboo Industry," "Implementation Opinions on Encouraging Bamboo as a Substitute for Plastic and Promoting Bamboo Product Innovation," the "2023 Bamboo as a Substitute for Plastic Work Plan," and the "Bamboo as a Substitute for Plastic New Material Procurement Award and Subsidy Measures," and "2024 Bamboo as a Substitute for Plastic Application and Promotion Base Construction Plan." The county invests RMB20 million annually to support the development of the bamboo industry. Under this favorable policy environment, Anji Rural Commercial Bank played a crucial role in providing financial support to the "Bamboo as a Substitute for Plastic" initiative:

- 为推动竹产品生产企业加大科技研发力度,安吉农商银行每年单列3亿元专项信贷资金支持企业技术创新和产品迭代升级。并开通绿色信贷通道、给予利率优惠,鼓励企业扩大产能。

The bank allocates RMB300 million annually in special credit funds to support technological innovation and product upgrades for bamboo manufacturing

companies. It opened a green credit channel and offered preferential interest rates to encourage capacity expansion among manufacturers.

- 为助力重点领域“以竹代塑”推广应用,安吉农商银行与政府部门联合推出专项政策支持农贸市场绿色转型。同时,线上线下并进拓宽“以竹代塑”产品采购渠道。

The bank launched policies together with government departments to support the green transformation of farmers' markets and expanded online and offline procurement channels for "Bamboo as a Substitute for Plastic" products.

- 运用“两山绿币”补贴商户采购“以竹代塑”产品差价,降低商户经营成本。同时鼓励居民积累绿币兑换生活用品,促进绿色消费习惯的形成。

It used biodiversity credit calculated with GEP to subsidize merchants' procurement of "Bamboo as a Substitute for Plastic" products, reducing their operating costs, and encouraged residents to accumulate these green credits to exchange for daily goods, promoting green consumption habits.

安吉县为竹林碳汇提供了市场和交易机制,使竹林的生态价值得以货币化,为竹林的保护和经营提供了更多的经济激励。安吉上线了全国首个县级竹林碳汇收储交易平台和竹林碳汇数智应用,归集84万亩竹林资源推向市场,集中统一收储,规模化交易碳汇。再通过“运营平台+合作社+农户”的利益联结分配机制,平台公司将经营利润反哺给合作社,农民可以获得竹林保底收益,效益增值的60%分红及参与项目建设的工资收益,实现拿租金、分股金、挣薪金,村集体可以获得效益增值的40%分红,并对全体村民和困难群体进行二次分配或投入村民生工程。

Anji County established a market and trading mechanism for bamboo forest carbon sinks, monetizing the ecological value of bamboo forests and providing more economic incentives for bamboo forest protection and management. Anji County also launched the first county-level Bamboo Carbon Sink Collection, Storage and Trading Platform, and bamboo forest carbon credit digital application nationwide, aggregating 138,379 acres of bamboo resources for market trading. Platform companies reinvested operational profits into cooperatives through the "operation platform + cooperative + farmer" benefit-sharing mecha-

nism. Farmers could receive guaranteed returns from bamboo forests, a 60% share of value-added dividends, and wages from project participation, realizing income from rent, dividends, and wages. Village collectives received 40% of the value-added dividends to be used on community projects or carry out a secondary distribution to villagers and disadvantaged groups.

IMPACTS

2022年,安吉全县竹产业总产值约180亿元,以全国1.8%的竹产量创造了10%的竹业总产值,规模以上企业达37家,成功吸引一批竹产业龙头企业落户安吉,形成了竹制装饰材料、竹制日用品、竹笋食品等8大系列3000多种产品。同时,安吉与竹体验相关的民宿达730家,2023年接待游客人次达378.5万,经营收入达13.1亿元。此外,竹林碳汇完成2.5万吨的交易量,创收172万元,并向第19届亚运会无偿捐赠2.1万吨竹林碳汇,用于亚运会碳中和。

In 2022, Anji's total bamboo industrial output reached approximately RMB18 billion, contributing to 10% of the nation's total bamboo industrial output with just 1.8% of the country's bamboo production. Anji has 37 large-scale enterprises, attracting leading companies and creating over 3,000 products across eight major series, including decorative materials, daily necessities, and bamboo shoots. Additionally, Anji has 730 bamboo-themed homestays, attracting 3.785 million tourists in 2023 and generating RMB1.31 billion in revenue. Bamboo forest carbon credits saw a trading volume of 25,000 tons, generating RMB1.72 million, and donating 21,000 tons carbon credits to the 19th Asian Games for its carbon neutrality goals.

“以竹代塑”有效减少了对传统塑料的依赖,有助于减轻塑料废弃物对环境的危害,仅在2022年底实现酒店、民宿竹“六小件”覆盖就已累计实现垃圾减量2000余吨。

"Bamboo as a Substitute for Plastic" has significantly reduced plastic waste. By the end of 2022, just the use of the "six small items" made of bamboo in hotels and homestays alone reduced waste by over 2,000 tons.

竹产业的发展带动了种植、加工、设计、销售等多个环节,为当地居民提供了大量就业机会。农户通过将竹林资源和资产转化成股份参与其中,获得包括出租竹林资源的租金、竹业合作社的股份分红以及竹林经营管理的劳动报酬,平均每村的集体经营性年收入增长了约100万元,每户家庭的年收入平均增收1万元。此外,竹林碳汇首次交易收储金和后续每年增值净收益的80%,都会返还到村里,让村民共同受益。

The growth of the bamboo industry has created numerous job opportunities in planting, processing, design, and sales. Farmers leasing their bamboo resources and assets in exchange for shares received rent, dividends from bamboo industry cooperatives, and wages from bamboo forest management, increasing village collective operating income by about RMB1 million annually and household income by RMB10,000. Furthermore, 80% of the initial and annual incremental net income from bamboo forest carbon credits was returned to the village, benefiting villagers collectively.



第三部分： 金融机构的创新实践

Part III: Innovative Practices by Financial Institutions



企业小微碳效平台: Carbon Efficiency Platform for Businesses:

以长兴农商银行为例

Changxing Rural Commercial Bank

HIGHLIGHTS

长兴农商银行推出企业碳效平台，成为助力长兴县低碳转型的破冰之举。作为县域地方法人金融机构，该机构遵循“绿色+普惠”的原则，确保金融服务“无死角”覆盖到企业。长兴农商银行通过转型金融行业标准建设、碳效系统研发、碳效产品创新，赋能长兴纺织产业转型。

Changxing Rural Commercial Bank launched the Carbon Efficiency Platform for businesses, a pioneering initiative supporting Changxing County's low-carbon transition. As a county-level financial institution, it upholds the "green + inclusive" principle, ensuring that enterprises have equitable access to financial services. The bank drives the transformation of the textile industry in Changxing by setting transition finance standards, developing carbon efficiency metrics, and innovating carbon efficiency products.

CASE

为推进工业领域能耗双控，湖州市于2021年借助数字化工具精准测出企业碳排后形成“碳效码”，将该码等级作为信用资质，形成碳效金融产品，给予差异化融资授信和利率优惠。然而，该“碳效码”面临仅覆盖规模以上工业企业的限制。

In 2021, Huzhou City launched digital tools to monitor corporate carbon

emissions and create "carbon efficiency codes." Based on such codes, it provided differential financing and preferential interest rates to businesses. Initially, these codes were limited to large industrial businesses.

长兴作为湖州下属的重要区县之一，纺织业是其支柱产业，全域有3000多家企业，但规上企业仅304家，大部分都是家庭作坊式经营的小微企业，碳排强度较高，且在转型过程中往往更容易面临资金匮乏或资金来源渠道狭窄、缺乏人才与技术保障等挑战。

The textile industry is a pillar industry of Changxing County, a crucial area under Huzhou, with more than 3,000 enterprises, most of which are small and micro workshops with high carbon emissions. These enterprises typically face funding shortages, limited financing options, and have limited access to talents and technology.

2022年7月，长兴农商银行结合当地发展情况，打造了“小微碳效平台”，使规模以下的小微企业也可以获得相对应的碳效码，享受绿色生产带来的金融优惠。该行基于电力大数据等平台，监测区域、企业生产经营的用电、用气、用煤和用油等31项能耗数据，将其转换成碳排放量，再借鉴“工业碳效码”等级测算方法，搭建覆盖小微企业、个体工商户等多种市场主体的“小微碳效平台”。2023年，将湖州金融数据引擎、绿色贷款自动分类系统和企业ESG评价系统等接入平台，将原“小微碳效平台”迭代升级至“企业碳效平台”，可高效海量获取企业能耗、碳排放等数据，增加绿色贷款自动分类功能，实现企业ESG监测风险预警信息推送。

In July 2022, Changxing Rural Commercial Bank created the Carbon Efficiency Platform for small and micro enterprises, which extends the benefits of carbon efficiency codes to micro-enterprises. It leverages electricity data to track 31 energy consumption indicators, thereby facilitating green loans and providing ESG risk monitoring. In 2023, the Huzhou financial data engine, green loan classification system and corporate ESG evaluation system were incorporated into the platform, and the SME platform was upgraded to the Carbon Efficiency Platform for Businesses.

HOW

长兴农商银行获得了财政引导与市场指导

Changxing Rural Commercial Bank has received support in fiscal guidance and market fundamentals.

- **在政策方面**, 当地政府发挥财政资金引导效应, 出台绿色贷款贴息补助、风险补偿、试点奖励、转型金融地方标准建设等激励政策, 并参考其碳效码等指标表现, 定向提供政策支持, 如供地、降费、提高工业用地抵押率、出台小微园区集中优惠政策等。在此基础上, 建立反向惩戒, 将碳效指标纳入综合绩效评价, 强化结果运用, 实施差别化电价供给, 对碳效等级低的企业加征电价, 倒逼企业改造提升。

Policy Support: The local government leveraged fiscal funds to introduce incentives such as subsidies for green loan interest, risk compensation, pilot rewards, and the development of local standards for transition finance. Furthermore, they integrated carbon efficiency metrics into comprehensive performance evaluations. Tailored support was provided based on these metrics, including policies such as land supply, fee reductions, and higher loan-to-value ratio for industrial land mortgages. In addition, reverse penalties were implemented on this basis, such as variable electricity pricing to push enterprises toward improvement.

- **在市场层面**, 《纺织行业转型金融支持经济活动目录》为企业和长兴农商银行提供了识别和优先考虑关键减排领域的具体指导, 并给出衡量碳效和转型进度的一致性指标, 帮助长兴农商银行进行项目筛选和效益评估。此外, 该行推出的各项转型金融产品也具有良好的市场接受度和需求度, 为长兴农商银行转型金融业务的开展提供了坚实的市场基础。

Market Guidance: The "Taxonomy of Economic Activities for Transition Finance in Textile Industry" provided guidelines for identifying and prioritizing key emission reduction areas, helping the bank with project selection and impact assessment. Also, the bank's transformative financial products

received strong market demand, providing a robust foundation for its business development.

长兴农商银行提供了碳效产品创新、差异化利率、流程优化与风险管理等绿色金融产品与服务

Changxing Rural Commercial Bank also provides support in Product Innovation, Differential Interest Rates, Process Optimization, and Risk Management.

- **碳效产品创新:** 长兴农商银行推出了“能源碳效贷”、“小微碳效贷”以及“纺织转型贷”等金融产品,以企业的碳效等级为主要定价依据,结合期限、抵押方式等因素,给予差异化贷款利率鼓励企业降碳减排。

Product Innovation: The bank introduced "Energy Carbon Efficiency Loans," "Micro Carbon Efficiency Loans," and "Transition Loans for Textile Industry," pricing these products mainly based on enterprises' carbon efficiency levels, and using differentiated interest rates to incentivize emission reductions by businesses.

- **提供差异化利率机制、流程优化与风险管理:** 长兴农商银行将企业碳效等级纳入授信准入环节,并将评价结果应用至额度测算、利率定价等方面。企业可根据自身碳效等级和企业绿色程度认定,享受正常利率定价基础上最高下调60BP的利率优惠。此外,该行还进行了流程优化与贷后风险管理,动态调整金融服务方案。例如,对于纺织业转型企业,长兴农商银行将碳效表现纳入全流程管理,贷前调查阶段获取碳效等级、转型方案或规划、ESG表现等信息,评估企业转型意愿、能力和预期成效,贷中审查阶段核查ESG表现及负面清单等信息,贷后检查阶段关注ESG表现,按季监测碳排放变化情况及碳效等级的变动。

Differential Interest Rates, Process Optimization, and Risk Management: Carbon efficiency levels were incorporated into the credit approval process, affecting loan limits and interest rates. Enterprises could enjoy up to 60 basis points in discount based on their carbon efficiency level and green credentials. The bank optimized processes and enhanced post-loan risk management, dynamically adjusting its financial services. The bank integrated carbon

efficiency performance into all stages of loan management for the textile industry, from pre-loan investigation to post-loan monitoring.

IMPACTS

截至2024年5月末,长兴农商银行行为1316户能源碳效等级3级及以上的小微企业提供了68.71亿元的信贷资金,累计撬动企业技改资金投入超30亿元。这加速了长兴经济结构的绿色转型,同时通过实施差异化的利率优惠政策,以平均低于工业经济贷款32BP、最高再下调20BP的利率,有效降低了企业融资成本,缓解了小微企业转型的资金难题,在社会层面激发了市场活力。

As of May 2024, Changxing Rural Commercial Bank has provided RMB6.871 billion in lending to 1,316 small and micro enterprises with carbon efficiency ratings of 3 or above, spurring RMB3 billion in enterprise investment in technology upgrades. This accelerated the green transformation of Changxing's economic structure. Through differentiated interest rates, the bank addressed funding issues for small enterprises, boosting market activity.

得益于绿色信贷的推广,长兴农商银行推动企业单位产值碳排放量下降约0.026吨/万元,根据能源碳效测算和金融杠杆作用判断,该县预计今年单位产值碳排放量将下降近5%。该碳效管理机制精准引导资金流向低碳领域,形成了金融支持环境向好型项目的良好示范效应。

Its green credit initiative has also led to a 0.026-ton reduction in carbon emissions per RMB10,000 of output, with a projected 5% overall decrease in the county's carbon emissions per output unit this year. This approach showcases the strategic role of financial support in fostering low-carbon projects.

碳中和银行: Carbon Neutral Bank:

以中国银行湖州市分行安吉昌硕支行为例

Bank of China, Huzhou Branch, Anji Changshuo
Sub-Branch

HIGHLIGHTS

中国银行湖州市分行安吉昌硕支行(以下简称“昌硕支行”)从加大绿色信贷支持力度和绿色运营两方面打造碳中和银行。具体来说,以提升绿色信贷占比、严控绿色信贷不良率提升绿色金融服务能力;以节能改造、智慧能源系统建设、绿色办公运营等方式实现网点低碳运营。

The Bank of China's Anji Changshuo Sub-Branch in Huzhou (hereinafter "Changshuo Branch") has become a carbon-neutral bank by providing green credit support and practicing low-carbon operations. The branch enhances its green finance services by boosting green credit as a percentage of overall credit and managing green loans' non-performing ratio. At the same time, the branch achieves low-carbon operations via energy-saving updates, smart energy systems, and green office initiatives.

CASE

银行业是推进全球可持续发展和气候变化治理的主要参与者和贡献者。为响应双碳目标,兼在绿色金融行业素有比较好的基础,昌硕支行经过两年在网点低碳运营和降低资产碳强度方面的努力,成功在2021年8月15日正式成为中行系统内首家实现“碳中和”的绿色智慧网点。

The banking industry is crucial in global sustainable development and climate governance. To align with China's dual carbon goals and already having a solid foundation in green finance, Changshuo Branch dedicated two years to low-carbon operations and reducing the carbon intensity of its assets. On August 15, 2021, it officially became the first green smart branch in the Bank of China system to achieve carbon neutrality.

在网点低碳运营方面，昌硕支行全面采用绿色建材与可再生能源，例如安装屋顶光伏电站，年发电量超过2万千瓦时，有效减少化石能源依赖。同时引入智慧能源管理系统，智能化控制空调、照明等设备，大幅降低能耗。在使用可再生能源的基础上，通过参与碳汇林建设、购买绿色电力凭证、参与碳市场交易等方式抵消机构剩余的碳排放。

In the area of low-carbon operations, Changshuo Branch has adopted green building materials and renewable energy solutions. This includes rooftop photovoltaic power stations generating over 20,000 kWh annually and an intelligent energy management system to reduce energy consumption. The branch also offsets its carbon emissions through participation in forest carbon sink projects, purchasing green power certificates, and engaging in carbon market trading.

在降低金融资产碳强度方面，昌硕支行在碳金融信贷规模、审批流程、资金定价、风险管理、绩效考核、产品服务、信息披露等七个领域探索具备适配性的碳金融管理与服务机制，包括单列信贷规模优先满足低碳项目融资需求、设置绿色信贷审批快速通道、实行差异化资金定价、设定专门风险管理指标、实施绿色绩效考核、建立碳中和相关环境信息披露机制等。并全面梳理投融资业务所涉及的企业碳排放，将信贷规模、审批时效、利率定价等关键资源优先向绿色低碳领域倾斜，依托金融工具积极推动企业逐步降低自身碳排放量。

To reduce the carbon intensity of its financial assets, Changshuo Branch has implemented measures including prioritizing funding for low-carbon projects, expediting approval processes for green credit, implementing differential fund pricing, setting specific risk management indicators, conducting green performance assessments, and creating mechanisms for disclosing carbon neutrali-

ty-related environmental information. The branch has also reviewed the carbon emissions of enterprises involved in its investment and financing businesses, and allocates resources towards green, low-carbon fields. It also leverages financial tools to encourage enterprises to reduce their carbon emissions gradually.

HOW

在建设碳中和银行的进程中，昌硕支行获得了来自政策、监管、上级行等不同条线的支持。

In building a carbon-neutral bank, Changshuo Branch has received support in policy, regulation, and from superior banks.

- **政策指导**: 2021年，中国银行发布了《中国银行网点绿色建设规范》，包含网点建设基础规范及绿色金融示范点建设规范。湖州市随后也于2022年5月发布了全国首个《“碳中和”银行“28·58”远景规划》与《区域性“碳中和”银行建设指南》，为包括昌硕支行在内的当地银行提供了具体的实施路径和标准，涵盖了如何减少碳排放、开展绿色金融业务、实施碳足迹管理、以及如何实现自身运营和投融资活动的碳中和等内容。

Policy Guidance, In 2021, Bank of China issued the "Green Construction Standards for Bank of China Branches," including basic standards for branch construction and green finance demonstration sites. In May 2022, Huzhou City released the "Carbon Neutral Bank '28·58' Vision Plan" and "Regional Carbon Neutral Bank Construction Guidelines," including specific paths and standards for local banks like Changshuo Branch. These guidelines cover how to reduce carbon emissions, develop green finance business, implement carbon footprint management, and achieve carbon neutrality in the banks' operations and investment activities. carbon neutrality in operations and investment activities.

- **监管放宽**: 监管机构通过税收优惠、资金补贴、绿色信贷规模的优先安排、监管度

的放宽等进行助力。

Regulatory Relaxation,Regulatory bodies have supported these efforts through tax incentives, funding subsidies, priority allocation of green credit scales, and regulatory easing.

- **上级行给予内部资源和策略支持：**中国银行总行和湖州分行作为上级行也给予了支持，包括专项绿色信贷额度的划拨、优先审批通道的开设、绿色金融产品服务创新指导、风险管理技术的输入、以及绿色金融人才的培训等。

Support from Superior Banks: The Bank of China headquarters and Huzhou Branch provided support by allocating green credit quotas, establishing priority approval channels, providing guidance in green financial product innovation, offering risk management input, and training green finance talents.

作为金融机构，支行以提升绿色信贷占比，严控绿色信贷不良率提升绿色金融服务能力。

Meanwhile, as a financial institution, Changshuo Branch aims to increase green credit as a proportion of all loans, and control non-performing loan ratio among green loans to improve its ability in providing green financial services.

- **提升绿色信贷占比：**昌硕支行主动融入地方绿色发展，将信贷规模、审批时效、利率定价等关键资源优先向绿色低碳领域倾斜，为网点单列专项绿色信贷规模，优先满足低碳、绿色项目客户的融资需求。此外，推出“工业碳汇 贷”、“绿色白茶贷”、“竹乡共富贷”等一系列结合当地特色产业的创新信贷产品，通过绿色银团贷款、绿色债券等融资方式，为安吉竹林碳汇等绿色项目提供资金支持。

Increasing Green Credit Proportion: The branch actively integrates into the local green development, prioritizing essential resources such as a larger credit scale, higher approval efficiency, and more attractive interest rate pricing in the green, low-carbon area. It has allocated special green credit, prioritizing the financing needs of clients with low-carbon and green projects.

In addition, the branch has launched innovative credit products for local characteristic industries, such as the "Industrial Carbon Sink Loan," "Green Loans for White Tea," and "Bamboo Township Mutual Wealth Loan" to provide financial support for green projects. It offers financial support for green projects such as the Anji Bamboo Carbon Sink through syndicated loans, bonds, and other financing methods.

- **控制绿色信贷不良率：**昌硕支行为绿色信贷设置了较高的不良贷款容忍度，允许绿色信贷不良率略高于一般对公信贷，减轻了绿色项目初期的风险顾虑，同时通过经济资本成本奖励、专项奖励等绩效考核机制增强员工发放绿色信贷的积极性。

Controlling Non-Performing Loan Ratio of Green Loans: Changshuo Branch has set a high tolerance for non-performing ratio of green loans, allowing it to be slightly higher than that of general corporate loans, thus alleviating concerns over risks at the initial stage of green projects. It also increases employees' motivation to issue green loans through performance appraisal mechanisms such as economic capital cost incentives and special bonuses.

IMPACTS

截至2024年5月末，昌硕支行的绿色信贷余额达到52.92亿元，占其全部贷款比例超70%，有效驱动了其信贷资产的绿色转型与高质量增长。通过投资城市更新、生态旅游和绿色科技型产业，助力了安吉经济的绿色升级。

As of the end of May 2024, the green credit balance of Changshuo Branch reached RMB5.292 billion, accounting for over 70% of the bank's total loans and effectively the driving green transformation and high-quality growth of its credit assets. By investing in urban renewal, eco-tourism, and green technology industries, the branch has contributed to the green upgrading of Anji's economy.

作为首家“碳中和”智慧网点，昌硕支行为其他金融机构提供了创新示范，提升了公众的绿色意识与参与。通过“绿色白茶贷”带动的白茶产业形成了超过30亿元的农业

全产业链, 为全县36万农民人均增收8800余元。

As the first carbon-neutral smart branch, Changshuo Branch has provided an innovative model for other financial institutions and increased public awareness and participation in green initiatives. The "Green Loans for White Tea" initiative has fostered an agricultural industry chain worth over RMB3 billion, increasing the average income of the 360,000 farmers in the county by more than RMB8,800.



CASI

可持续投资能力建设联盟

湖州绿色金融案例



湖州绿色金融

与可持续发展研究院

HUZHOU GREEN FINANCE INSTITUTE

中国浙江省湖州市吴兴区长兴路258号湖州日报二期主楼12层1205室

Room1205, Floor 12, Building Huzhou Daily II, No.258, Changxing Road,Wuxing District, Huzhou City,
Zhejiang Province, China.

www.hzgf.org.cn

info@hzgf.org.cn