



## 点燃绿色星火



——引导公众参与绿色行动的中国解决方案

### **Kindling the Green Sparks**

Chinese Solutions for Engaging the Public in Green Actions



阿塞拜疆·巴库 Baku, Azerbaijan

2024年11月 November, 2024

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# 开篇 PREFACE

形成公众行动的绿色风潮 FOSTERING A GREEN WAVE OF PUBLIC ACTIONS





### 低碳行动,请跟我来

■ 曾红鹰 牛态环境部官传教育中心副主任

中国古代的儒家圣贤荀子在《劝学》中讲道:"不积跬步,无以至千里;不积小流,无以成江海"。 在应对气候变化这场关乎人类生死攸关的未来命运的行动中,虽然,一个人的作用显得有些 微不足道。然而,如果将每个人绿色行动的涓涓细流汇聚起来,践行绿色低碳生活方式,必将汇 聚成我们人类的巨大绿色能量。

绿色生活方式与公众的衣食住行用息息相关,意义重大。联合国政府间气候变化专门委员会(IPCC)发布的第六次评估报告的综合报告《气候变化 2023》指出,需求侧的行为改变,包括公众采用低碳生活方式,全球可减少 40% ~ 70% 的碳排放。公众不仅仅是环境保护的受益者,同时也是环境治理的重要践行者和传播者。联合国积极倡导每个人采取行动,保护自然,应对气候变化,珍爱地球家园;建议公众加强节能与改变家庭能源结构,选择绿色出行,在购买商品方面采取减少、再利用、修理、回收方式,多吃蔬菜,减少食物浪费等行为方式。

中国政府高度重视经济社会全面绿色低碳转型。近年来,陆续推出了包括《中共中央 国务院关于完整准确全面贯彻新发展理念做好碳达峰碳中和工作的意见》《2030年前碳达峰行动方案》《绿色生活创建行动总体方案》《促进绿色消费实施方案》《中共中央 国务院关于加快经济社会发展全面绿色转型的意见》等一系列政策文件,提出在消费各领域全周期全链条全体系深度融入绿色理念,倡导绿色低碳生活方式,开展绿色低碳全民行动,形成人人、事事、时时、处处崇尚生态文明的社会氛围。

勤俭节约自古以来就被中国公众视为美德。"谁知盘中餐,粒粒皆辛苦"几乎是每个中国人孩提时代就能背诵的诗句,节俭的种子从小就已在中国孩子心中生根发芽,融入中国人的日常生活。在应对气候变化的今天,中国公众有着较为强烈的绿色行动意愿。据相关报告的统计<sup>1</sup>,中国 2/3 的年轻人认为低碳与个人生活相关性强,73.8%的消费者会在日常生活中优先选择绿色、环保的产品或品牌,68.9%的消费者表示接受绿色产品的价格高于普通商品。绿色、低碳、可持续的生

活方式,正在逐步成为中国公众的新风尚和潮流。

近年来,在自上而下的政策引导和自下而上的新风尚引领下,中国涌现出一批引导公众积极参与绿色低碳行动的优秀解决方案。一些机构特别是先锋企业在积极引导公众参与绿色行动方面进行了大量卓有成效的探索,涌现出一批有创意、有价值的解决方案。例如,国网江西电力联合江西省能源局发起的"智·享节电"活动,通过创新机制引导城市居民节电,聚沙成塔构建起一座"虚拟电厂";蚂蚁集团发起的蚂蚁森林项目,以数字化方式唤醒社会公众的环保意识并促进生态保护行动;武汉碳普惠管理有限公司、腾讯 SSV 联合推出面向武汉市民的低碳生活平台"武碳江湖"小程序,运用数字化技术赋能碳普惠机制;闲置交易平台闲鱼推出"绿色打卡"项目,通过"赋能循环经济+绿色积分机制"模式,调动大量公众积极参与闲置物品的交易与回收;国网黄岩供电公司携手浙江省台州市黄岩区政府推出"居民节能降耗消费券"活动,通过电费节省和消费券奖励的双重激励,带动居民主动节能降耗;移动出行平台滴滴发起拼车激励计划和"碳元气"项目,有效地引导公众绿色低碳出行;本地生活平台饿了么创新"e点碳"消费者碳账户,引导上亿消费者形成绿色点餐小习惯;等等。

在 COP29 期间,由可持续发展经济导刊、"金钥匙——面向 SDG 的中国行动"、全球可持续消费倡议组织编写并发布的《点燃绿色星火——引导公众参与绿色行动的中国解决方案》,旨在通过深度剖析上述创新解决方案,从机制设计与创新、应用场景与成效价值、经验启示与国际推广价值等维度展开研究与分析,为世界贡献来自中国的气候行动经验与方案启发。

"雪崩时没有一片雪花是无辜的。"

应对气候变化,每个人都应置身其中,同舟共济。公众的低碳行动和绿色生活,将是为"沸腾"地球降温的关键力量。让我们共同引导公众迈向绿色低碳生活,应对气候变化,一起向未来, 共建美丽清洁世界!

<sup>1 《</sup>中国年轻人低碳生活白皮书 2023》《2023 中国消费趋势报告》





#### Join Me in Low-Carbon Actions

Zeng Hongying, Deputy Director General of Center for Environmental Education & Communications of Ministry of Ecology and Environment, China

In his classic work *Exhortation to Learning*, the ancient Confucian sage Xunzi wrote, "A journey of one thousand miles can never be made without the accumulation of every single step; an ocean can never be vast without the contribution of every single stream and brook."

In the urgent fight against climate change—a battle that holds the fate of humanity in the balance—the individual contribution may seem insignificant. Yet, if everyone commits to a green, low-carbon lifestyle, their collective efforts will generate an immense green force for humankind.

The green lifestyle is closely related to the public's daily necessities and holds great significance. *The AR6 Synthesis Report: Climate Change 2023*, released by the Intergovernmental Panel on Climate Change (IPCC), indicates that behavior changes on the demand side, such as the adoption of low-carbon lifestyles by the public, have the potential to reduce global carbon emissions by approximately 40% to 70%. The public is not only the beneficiary of environmental protection but also a key actor and messenger in environmental governance. Therefore, the United Nations encourages everyone to take action to protect nature, combat climate change, and care for our planet. It advises the public to enhance energy conservation, switch to cleaner household energy sources, choose sustainable transportation mode, reduce consumption, and extend the life of consumer goods through reuse, maintenance, and recycling. Additionally, it advocates for increasing vegetable intake while minimizing food waste.

The Chinese government prioritizes a comprehensive transition to a green, low-carbon society and economy. In recent years, a series of policy documents have been released, including the *Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy*, the *Action Plan for Carbon Dioxide Peaking Before 2030*, the *Overall Plan for Promoting Green Living*, the *Implementation Plan for Promoting Green Consumption*, and the *Guiding Opinions of the State Council on Accelerating the Establishment of a Sound Economic System with Green, Low-carbon and Circular Development*. These initiatives propose the deep integration of green principles across all consumption fields, advocating for a green lifestyle and mobilizing society to participate in ecological civilization construction, thus fostering a social atmosphere that everyone values ecological integrity and commits to a green lifestyle in every aspect of everyday life.

Frugality has long been regarded as a virtue in Chinese culture. "Who knew that each grain of rice on your plate comes from a farmer's toil?" This line, known to nearly every Chinese person from childhood, deeply embeds the value of frugality in our hearts and integrates it into our daily lives. As we confront climate change, the Chinese public demonstrates a strong willingness to take green action. Reports indicate that among young people in China, approximately two out of three believe that low carbon is closely

related to their personal lives, with 73.8% of consumers prioritizing green and eco-friendly products in their daily lives and 68.9% accepting that green products may cost more than conventional goods. The green, low-carbon, and sustainable lifestyle is gradually becoming a new trend among the Chinese public.

Under the guidance of top-down policies and bottom-up social trends, numerous innovative solutions have emerged in China to engage the public in green, low-carbon actions. Various organizations, particularly pioneering enterprises, have significantly promoted public participation in these initiatives, yielding creative and valuable solutions. For instance, the State Grid Jiangxi Electric Power Company, in collaboration with the Energy Bureau of Jiangxi Province, launched the "Smart Energy Saving" initiative to guide urban residents in saving electricity and build a "virtual power plant"; Ant Group's Alipay Ant Forest project uses digital means to raise environmental awareness and encourage ecological protection actions; Wuhan Municipal Ecology and Environment Bureau, Wuhan Carbon Pratt&Whitney Management Co., Ltd. and Tencent SSV jointly launched the lowcarbon living platform "Wutan Jianghu" mini-program, empowering carbon-inclusive mechanisms with digital technology; Xianyu, Alibaba's leading second-hand trading platform, introduced the "Green Check-In" project, activating public engagement in the trade and recycling of idle goods through a model combining circular economy and green point systems; the State Grid Huangyan Power Supply Company, along with the local government, initiated the "Resident Energy Saving Coupons" program, promoting energy conservation through a dual incentive mechanism of reduced electricity bills and reward coupons; Didi, a ride-sharing platform, introduced carpooling incentives and the "Carbon Vitality" project to effectively guide the public toward green travel; and Ele.me, a local life platform, innovated with the "e-point carbon" consumer carbon account, encouraging millions of consumers to adopt green dining habits, among other initiatives.

During COP29, the publication titled *Igniting the Green Spark: Guiding Public Participation in Green Actions—Chinese Solutions*, developed by China Sustainability Tribune, "GoldenKey—SDG Solutions," and the Global Sustainable Consumption Initiative, aims to analyze these innovative solutions in depth, examining their mechanism design and innovation, application scenarios and effectiveness, experiential insights, and international promotion value, contributing China's climate action experiences and insights to the world.

As "no snowflake in an avalanche feels responsible." In addressing climate change, everyone should be involved, united in shared effort. The public's low-carbon actions and green lifestyles will be crucial in cooling our "boiling" planet. Let us join together to guide people toward a green, low-carbon life, to confront climate change, and to move forward into a beautiful and clean future!

<sup>1</sup> White Paper on Low-carbon Life of Chinese Youth 2023, China Consumption Trends Report 2023





# 方案 SOLUTION

来自中国的解决方案 SOLUTIONS FROM CHINA





#### 解决方案来自

蚂蚁集团

## 蚂蚁森林: 数字化助力公众参与,实现多重生态价值



#### 一、行动概述

蚂蚁森林是由蚂蚁集团发起倡导绿色低碳生活方式,并作为主要捐资方支持生态建设的公益项目,发起于2016年。用户日常生活中的低碳行为经过本人授权,依据专业机构提供的碳减排方法学计算,可在蚂蚁森林里获得相应数额的"绿色能量"奖励。"绿色能量"积累到一定数量,可用来申请由蚂蚁集团等企业捐赠的资金,用于支持公益组织和专业机构在各地执行的植树造林和生态保护工作。蚂蚁森林项目通过生态类公益活动创造"看得见的绿色",并以此激励社会公众践行低碳生活,通过减少碳排放创造"看不见的绿色"。

#### 二、机制设计与创新

蚂蚁森林通过数字化的方式,链接生产端、消费端、 社会价值端,使其互为激励互相促进,形成正向补益。"倡 导低碳减排"是根本目标,"保护修复生态"是激励手段, 这两端形成"互为激励"的公益模式,在"生态项目实 施地"和"绿色低碳场景端"产出双重价值,为助力"双 碳"目标和各地生态文明建设贡献力量。

蚂蚁森林从用户生活场景入手,挖掘衣食住行购中的各种低碳场景,由专业机构对于每个场景识别出其碳排放基准线,作为"绿色能量"的发放参考依据;依托数字化支付平台支付宝及其开放平台,广泛触达提供绿色产品和服务的各行业商家,识别和量化用户的日常低碳行为及其减碳效益,通过发放"绿色能量"进行奖励;

将参与生态公益项目作为激励措施,并构建了一套"绿色能量"兑换体系——用户所消耗的"绿色能量"等于每株造林树种或单位面积保护地的碳汇量,实现减碳与固碳的双重价值。通过具有趣味性、社交互动性的产品设计,赢得用户喜爱和持续参与,在潜移默化中引导公众参与绿色低碳行动,助力生态修复和保护。

2024年9月,蚂蚁集团与中环联合认证中心一起发布"蚂蚁森林环境友好商品"评价体系,联合80多家首批入驻品牌,发布全国首个绿色消费平台"森林集市"。消费者可通过该平台学习绿色消费知识、浏览选购"环境友好商品",获得来自蚂蚁森林的"绿色能量"奖励,进而带动和激励公众更多地选择对环境友好的商品和服务,促进了绿色消费。

#### 三、场景应用与价值成效

目前接入蚂蚁森林可产生"绿色能量"的低碳场景超过60种,已有各行业的600多家企业品牌加入。实施8年来,蚂蚁森林见证了超过7亿用户的低碳生活,累计产生"绿色能量"3768万吨。在生态修复方面,蚂蚁森林已在13个省份种下超5.48亿棵树,种植总面积580万亩。其中,九成以上的树种在了"三北"工程三大标志性战役地区,助力当地的荒漠化治理和防沙治沙工作。在生物多样性保护方面,蚂蚁森林已在16个省份参与共建34个公益保护地,面积超过4900平方公里。因为通过数字化方式唤醒社会公众的环保意识并促进生态保护行动所

取得的成效,蚂蚁森林连续获得联合国环保领域最高奖项"地球卫士奖"与应对气候变化领域最高奖项"灯塔奖"。

#### 四、经验与启示

蚂蚁森林通过数字化平台激励公众参与低碳生活, 在推动生态修复和生物多样性保护的同时,带动和促进 了绿色消费。该项引导公众参与绿色行动的解决方案, 提供了以下四点经验。

量化行动,基于减碳方法学量化公众行动的碳减排效益,将绿色低碳行动记录在账户里,通过"绿色能量" 奖励用户的绿色行动。

创新激励,构建"绿色能量"兑换体系,通过将"绿色能量"转化成实际的生态保护行动,实现减碳与固碳的双重价值,用生态公益价值激励持续的绿色行动。



**互动设计**,通过产品设计增加使用过程中的趣味性和社交互动性,增强了用户的参与度和持续性,让有意义的事情更有趣。

**开放探索,**发布"蚂蚁森林环境友好商品"评价体系,激励公众选择对环境友好的商品和服务,从倡导绿色生活到促进绿色消费。

#### 五、国际推广价值

蚂蚁森林以其创新的数字化公益模式,成功激发上 亿用户的环保行动,为全球可持续发展提供了可借鉴的 中国智慧,具有以下国际推广价值。

第一,数字化公益模式,通过数字化手段量化个人低碳行为,将虚拟的"绿色能量"转化为实际的植树行动,为全球提供了如何利用科技手段激发公众参与环保积极性的样板。

第二,跨领域合作与标准制定,与专业机构合作开发量化公众低碳行为减排量的方法学体系,为碳减排行动提供了科学评估工具,也为国际社会提供了跨领域推动环境治理的范例。

第三,绿色消费与生活方式的推广,通过激励机制引导用户选择绿色产品和服务,推动了绿色消费的普及,为全球推动可持续生活方式提供了可行路径。

第四,趣味性与社交化促进环保行动普及,通过趣味性和社交互动性的产品设计,提高了公众参与环保的积极性,这一策略对于全球环保教育和行动推广具有重要借鉴意义。







## Ant Forest: Enhancing Public Participation and Delivering Multiple Ecological Benefits Through Digitalization

#### I. Overview of Actions

Ant Forest is a public welfare project launched by Ant Group in 2016 to advocate green and low-carbon lifestyles and support ecological progress as a major donor. Users may receive the corresponding amount of "green energy" in Ant Forest, calculated under their authorization according to the carbon emission reduction methodologies provided by professional institutions, as rewards for low-carbon behaviors in their daily lives. When running up to a certain amount, "green energy" can be used to apply for the funds donated by Ant Group and other enterprises to support non-profit organizations and professional institutions in afforestation and ecological conservation. The Ant Forest project creates "visible green" through ecological public welfare activities, and in this way inspires the public to live a more low-carbon life and create "invisible green" by reducing carbon emissions.

#### II. Mechanism Design and Innovation

Ant Forest connects production, consumption and social value in a digital way, so that they can inspire and promote each other to produce positive results. "Advocating low-carbon emission reduction" is the fundamental goal, and "protecting and restoring ecosystems" is a means of inspiration. The two form a public welfare model of "mutual inspiration", which delivers dual benefits in "ecological project sites" and "green and low-carbon scenarios" and contributes to the "dual carbon" goals and ecological conservation in different regions.

Beginning with users' daily lives, Ant Forest digs into various low-carbon scenarios in terms of food, clothing, shelter, transportation and shopping, and has professional

institutions identify the carbon emission baseline in each scenario as the basis for allocating "green energy". Based on the digital payment platform Alipay and its open platform, Ant Forest reaches a wide range of merchants providing green products and services in different sectors. identifies and quantifies users' daily low-carbon behaviors and their carbon reduction benefits, and reward them with "green energy". By incentivizing users with participation in ecological public welfare projects and having in place a "green energy" exchange system, in which the "green energy" consumed by a user equals the carbon sequestered by each tree or unit area of protected land, Ant Forest delivers dual benefits, namely carbon reduction and carbon sequestration. Through interesting and socially interactive product design, Ant Forest has gained popularity and continued involvement among users, imperceptibly guiding the public to participate in green and low-carbon actions and contributing to ecological protection and restoration.

In September 2024, Ant Group and China Environmental United Certification Center (CEC) jointly released the "Ant Forest Environmentally-Friendly Commodities" evaluation system, and China's first green consumption platform "Forest Market" with the first group of more than 80 brands joining it. Consumers can learn about green energy, browse and buy "environmentally-friendly commodities" on the platform, and receive a "green energy" reward from Ant Forest, which in turn drives and inspires the public to choose environmentally-friendly commodities and services more often, thus promoting green consumption.

#### III. Application Scenarios, Results and Value

Currently, there are more than 60 low-carbon

scenarios that can generate "green energy" in Ant Forest, and more than 600 enterprises and brands from various industries have joined Ant Forest. Over the past 8 years, Ant Forest has witnessed the low-carbon life of more than 700 million users, generating a total of 37.68 million tonnes of "green energy". In terms of ecological restoration, Ant Forest has planted more than 548 million trees in 13 provinces, covering a land area of 3866 km2. Of these trees, more than 90% have been planted where the three iconic battles in the "Three-North" Project take place to assist in local effort to prevent and control desertification. In terms of biodiversity conservation, Ant Forest has participated in the construction of 34 civil protected areas in 16 provinces, covering a land area of over 4.900 square kilometers. Ant Forest has won a "Champions of the Earth" award, the UN's highest environmental honor, and a "Momentum for Change Lighthouse Activity" winner, the UN's top honor in the field of climate change response, in succession for its achievements in arousing the public awareness of environmental protection and promoting ecological protection actions in a digital manner.

#### IV. Experience and Inspiration

Inspiring public participation in low-carbon life via a digital platform, Ant Forest has driven and boosted green consumption while promoting ecological restoration and biodiversity conservation. Here are four key takeaways from the solution, which has led to public participation in green actions:

**Quantification of actions.** Carbon emission reduction benefits from public actions are quantified based on carbon reduction methodologies, and green and low-carbon actions are recorded in users' accounts and rewarded with "green energy".

Innovation in incentives. A "green energy" exchange system has been established, which enables Ant Forest to deliver dual benefits of carbon reduction and carbon sequestration by turning "green energy" into ecological protection actions, and inspire sustained green actions using ecological public welfare value.

**Interactive design.** The product design has increased

the fun and social interaction in the process of use, and enhanced user participation and its continuity, making meaningful things more interesting.

**Open exploration.** The "Ant Forest Environmentally-Friendly Commodities" evaluation system has been released to inspire the public to choose environmentally-friendly commodities and services, shifting from advocating green lifestyles to promoting green consumption.

#### V. International Promotion Value

Through its innovative digital public welfare model, Ant Forest has successfully inspired green actions among hundreds of millions of users, and provided Chinese wisdom that can be borrowed to promote global sustainable development. The project is of the following international promotion value.

Firstly, creating a digital public welfare model.

Individual low-carbon behaviors are quantified through digital means to turn virtual "green energy" into physical tree-planting actions, providing a model for the world on how to leverage the power of technology to inspire public participation in environmental protection.

Secondly, encouraging cross-sector cooperation and standard setting. By cooperating with professional institutions, Ant Forest has established a system of methodologies to quantify carbon emission reductions brought about by public low-carbon behaviors, providing a scientific evaluation tool for actions to reduce carbon emissions and setting an example of cross-sector environmental governance for the international community.

Thirdly, promoting green consumption and lifestyles.

Through the incentive mechanism, Ant Forest guides users to choose green products and services, promoting the popularization of green consumption and providing a feasible pathway for driving sustainable lifestyles globally.

Fourthly, offering interesting and interactive design that can accelerate the popularization of environmental actions. Through interesting and interactive product design, Ant Forest has enhanced public enthusiasm for participation in environmental protection. This strategy is of significant exemplary significance for the global promotion of environmental education and actions.





#### 解决方案来自

国网江西省电力有限公司

## 居民"智·享节电"模式—— 点滴生活中的全民节电降碳行动



#### 一、行动背景与概述

气候变化是人类共同面临的重大危机和严峻挑战。 2000年以来,江西省的升温速率达平均每10年上升0.4℃, 年高温日数和高温强度均呈现显著上升趋势。2023年7月, 江西省平均气温30.3℃,较历年同期偏高1.4℃;2024年9月上旬,江西省平均最高气温较常年同期高4.9℃, 为1961年以来历史同期最高;受持续晴热高温少雨天气 影响,2024年全省最高用电负荷已6次创新高,较2023年增幅达10.3%。

在用电尖峰时段,居民节约用电意义重大,一方面可以降低电网负荷,减少工业限产压力;另一方面也可节省电力设施建设投资,节约资源,提高用能效率。为此,国网江西省电力有限公司(以下简称国网江西电力)联合江西省能源局发起"智·享节电"居民节约用电享红包活动,根据电网负荷情况向居民发出节电邀约,通过节电奖励红包的方式,大规模引导超2100万户次居民在社会重要时段、电网高峰时刻错峰用电、节约用电,形成江西特色的全民节电模式。

#### 二、机制设计与创新

国网江西电力首创以"智·享节电"微信小程序为载体的千万级居民用户荷网互动平台,以电网负荷风险预判为指针,采用每节约1度电即可获得2元电费红包的激励机制,鼓励居民在电力紧张时段减少用电,深度挖掘居民节电潜力,让单户居民节约的微小电量聚沙成塔,在用电尖峰时刻降低电网负荷,既保障了全社会平稳用电,也大大节省了非用电尖峰时刻用不上的电网扩容投

资。奖励资金来源于尖峰时刻工业用电的电费溢价所形成的资金池,有效平衡保经济运行、惠民生福祉,优化了全社会的电力资源配置。

项目实施依托智能电表实时采集的电能数据,通过 集活动报名、节电邀约、成效查询、红包领取、节电方 式指引等功能于一体的"智·享节电"微信小程序,为用 户提供直观的节电量、减碳量,即时发放电费红包奖励, 大大增强了居民的参与积极性和成就感。

#### 三、场景应用与价值成效

"智·享节电"模式的应用场景主要集中在城市居民用电领域和用电高峰季节、时段。通过引导和指导居民改变用电行为,减少不必要的能耗,实现了显著的节电减排效果,有效缓解全社会用电压力。在江西省发展和改革委员会、江西省机关事务管理局、江西省能源局、国网江西电力的联合倡导和推动下,已累计开展 24 次居民节电活动,参与家庭户次达 2100 万,累计节电 1970 万度,直接减少碳排放量 1.9 万吨,间接支撑工业生产效益超 3 亿元,



所节约的电量相当于构建了一座可日内响应 60 万千瓦的居民"虚拟电厂",不仅有效保障用电高峰时刻的电力供应安全平稳有序,还节约了电网建设投资超 28 亿元。

该行动还通过各类节电科普活动,宣传家电节能知识、用电技巧,引导居民家庭智慧、科学、经济用电,已在江西省形成"日常生活节约用电、用电高峰科学节电"的新风尚。

#### 四、经验与启示

"智·享节电"模式有效释放居民节能潜力,高效配置电力资源,保障了经济社会用电需求,节约了电网建设投资。该项引导公众参与绿色行动的解决方案,带来以下四点启示。

以数智化技术为基础: 基于 HPLC 智能电表每 15 分钟获取居民用电数据,能够准确统计节约电力电量数据;基于微信小程序,精准对接节电邀约与居民响应,提高了覆盖面、针对性和有效性。

高势能推广协同即时激励:项目得到江西省政府相关部门支持和推广,自上而下推动节电风尚;微信小程序即时反馈节电量、减碳量、电费红包奖励,自下而上地激发居民参与热情。

**巧妙挖潜实现聚沙成塔**:聚焦用电高峰时段,巧妙设计"邀约—应答—激励"机制,引导居民集中节电,将看似不起眼的分散节电量汇聚成"虚拟电厂",节约巨额电网建设成本。

溢价资金发挥调节作用:以用电尖峰时刻的工业电 费溢价补贴居民节电成果,有效平衡电网负荷,既保障



经济运行,又惠及民生福祉,优化了电力资源配置。

#### 五、国际推广价值

"智·享节电"模式将居民家庭的节电行为转化为助力经济社会环境协调发展的绿色行动,为城市社区应对气候变化开辟新路径,在国际上具有广泛的推广价值。

第一,打造数字化节电平台,利用智能电表、微信小程序等数字化工具,实现居民用电数据实时采集与智能分析,提高节电活动的参与度和效率,为全球城市提供节电新视角。

第二,设计激励性节电机制,通过用电尖峰时段电费溢价形成资金池,以电费红包奖励激励居民节电,有效降低电网负荷,此机制可被各国城市借鉴以平衡电力供需。

第三,聚沙成塔构建虚拟电厂,汇聚分散的居民节电行为,打造了一种新型"虚拟电厂"响应模式,为国际社会提供节约电力基础设施投资的新思路。









# Residents' "Smart Power Saving" Mode - Community-wide Actions on Saving Electricity and Reducing Carbon in Everyday Life

#### I. Background and Overview of Actions

Climate change is a major crisis and severe challenge facing humanity. Since 2000, the annual average temperature in Jiangxi Province has been rising at a rate of 0.40°C per decade, and both the number of high temperature days and the heat intensity there have been ascending notably. In July 2023, the average temperature in Jiangxi Province was 30.3°C, 1.4°C higher than the same period in previous years. In early September 2024, the average maximum temperature in Jiangxi Province was 4.9°C higher than that in the same period of the year, which was the highest since 1961. Affected by continuous high temperature with little rain, the province's maximum electricity load in 2024 has reached a new high for six times, an increase of 10.3% compared with 2023.

Residential power saving is of great significance during peak hours of power consumption. On the one hand, it can reduce grid load and take the pressure off industrial production limits: on the other hand, it can reduce investment in the development of power facilities, save resources and increase energy efficiency. Given this, State Grid Jiangxi Electric Power Co., Ltd. (hereinafter referred to as State Grid Jiangxi Electric Power), jointly with the Energy Administration of Jiangxi Province, launched the "Smart Sharing Power Saving" campaign with red packets sent to residents who save electricity. By sending a power saving invitation to residents according to grid load and giving red packets for power saving, the project guided more than 21 million households to use off-peak power and save electricity during socially important times and peak hours of power consumption. It has become a universal power saving model with Jiangxi's characteristics.

#### II. Mechanism Design and Innovation

State Grid Jiangxi Electric Power initiated a loadgrid interactive platform involving tens of millions of residential users based on the WeChat mini program "Smart Sharing Power Saving". Under the guidance of grid load risk prediction, and by adopting an incentive mechanism of giving a 2-yuan red packet for every kWh of electricity saved, the project encouraged residents to reduce power consumption during peak hours, and tapped residents' potential for power saving. Every little bit of electricity saved by a single household counts, which could reduce grid load during peak hours, both guaranteeing society-wide stable power consumption and saving much investment in grid capacity expansion that is unnecessary during non-peak hours. The incentives come from the capital pool of premiums for industrial power consumption during peak hours, which have effectively balanced grid load to safeguard economic operation and improve people's well-being, and optimized the society-wide power resource allocation.

Based on real-time power data collected by smart meters, the project provided users with intuitive information on power savings and carbon emission reductions via the WeChat mini program "Smart Sharing Power Saving" that integrates functions such as signup, power saving invitation, results query, red packet collection, and guidance on ways to save electricity, and gave red packets for payment of electricity bills timely. This has greatly enhanced residents' enthusiasm for participation and sense of accomplishment.

#### III. Application Scenarios, Results and Value

The "Smart Sharing Power Saving" model focuses on application scenarios such as power consumption by urban residents and peak hours and season of power consumption. By guiding residents to change their power consumption behaviors and reduce unnecessary energy consumption, the project has led to significant power savings and emission reductions, and effectively alleviated the society-wide power consumption pressure. Jointly advocated and driven by Jiangxi Development and Reform Commission, Jiangxi Provincial Government Offices Administration, the Energy Administration of Jiangxi Province, and State Grid Jiangxi Electric Power, 24 residential power saving activities have been organized, involving 21 million households, saving 19.7 million kWh of electricity, directly reducing 19,000 tonnes of carbon emissions, and indirectly supporting more than 300 million yuan in industrial output. The resulting power savings are equivalent to a "virtual power plant" with a daily capacity of 600,000 kW for residents, not only effectively guaranteeing safe, stable and orderly power supply during peak hours, but also saving more than 2.8 billion yuan of investment in grid development.

Through various science popularization activities on power saving, the project also disseminated knowledge on energy saving for home appliances and power use tips to guide smart, scientific and economical power use in households, setting the fashion of saving electricity in daily life and doing so in a scientific manner during peak hours" in Jiangxi Province.

#### IV. Experience and Inspiration

The "Smart Sharing Power Saving" model has effectively unleashed residents' potential for energy saving, efficiently allocated power resources, satisfied the power demand of economic and social development, and saved investment in grid development. Here are four key takeaways from the solution, which has led to public participation in green actions:

#### Building on digital and intelligent technologies:

Based on HPLC smart meters, the project received residential power consumption data every 15 minutes, ensuring accurate statistics on power savings; based on the WeChat mini program, the project precisely matched power saving invitations with residents' responses, increasing the coverage, pertinence and effectiveness.

Synergizing high-profile promotions with immediate

**incentives:** The project was supported and promoted by the relevant departments of the provincial government, pushing the transition toward power saving in a top-down manner; the WeChat mini program provided instant feedback on power savings, carbon emission reductions, and red packets for payment of electricity bills, arousing residents' enthusiasm for participation in a bottom-up manner.

**Tapping potential tactfully to allow decentralized power savings to accumulate:** Focusing on peak hours of power consumption, an "invitation-response-incentive" mechanism was skillfully designed to guide centralized power saving among residents, thus pooling the seemingly unremarkable decentralized power savings into a "virtual power plant" to save a considerable amount of money on grid development.

Allowing premiums to play a regulating role:
Residents' power saving results were subsidized with
premiums for industrial power consumption during
peak hours, effectively balancing grid load to safeguard
economic operation and improve people's well-being, and
optimizing the allocation of power resources.

#### V. International Promotion Value

The "Smart Sharing Power Saving" model turns resident's power saving behaviors into green actions that contribute to coordinated development in the economic, social and environmental fields, blazing a new trail for urban response to climate change. It is of great international promotion value.

#### Firstly, building a digital power saving platform.

Digital tools such as smart meters and WeChat mini programs, which were used for real-time collection and intelligent analysis of residential power consumption data, have increased the participation and efficiency of the power saving campaign, providing a new perspective on power saving for cities around the world.

Secondly, designing an incentive power saving mechanism. The mechanism of establishing a capital pool of premiums for power consumption during peak hours as the source of red packets for power saving, which has effectively reduced grid load, can be borrowed by cities around the world in balancing power supply and demand.

Thirdly, building a virtual power plant, in which process every little bit of electricity counts. Decentralized residential power saving behaviors add up to a new "virtual power plant" response model, providing new insights for the international community to save investment in power infrastructure.

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解决方案来自 武汉碳普惠管理有限公司、腾讯 SSV 碳中和实验室

### "武碳江湖":

### 打造可持续低碳降碳生态体系





#### 一、行动背景与概述

碳普惠,即通过采用政策鼓励、商业奖励和减排量 交易相结合的方式正向引导和激励社会公众、中小微企 业践行低碳生活和主动降碳的减排机制。在统一大市场 建设和全国碳市场建立的背景下,通过试点碳普惠体系 建设发挥地方区域碳市场的"试验田"作用,对引导形 成绿色低碳生活方式、促进绿色消费具有示范意义。为此, 湖北省武汉市依托数字化技术手段,开发运营了全国首 个政府控碳、企业降碳、个人低碳"三位一体"的碳普 惠综合服务平台。

2023年6月,武汉碳普惠管理有限公司、腾讯 SSV 碳中和实验室联合推出面向武汉市民的低碳生活平 台——"武碳江湖"小程序。作为武汉碳普惠综合服务 平台的重要组成部分,"武碳江湖"运用数字化技术赋 能碳普惠机制,对居民日常生活场景中的低碳行为,如 乘坐公交地铁、节约用电等进行量化、赋值,有力推动 了居民生活方式的低碳化。

#### 二、机制设计与创新

用户在"武碳江湖"开通个人碳账户后,每当其实 施乘坐公交地铁、租用共享单车、购买二手物品等低碳 行为,即可获得碳普惠减排量,这些减排量可在"武碳 江湖"低碳商城兑换单车骑行券、便利店优惠券等"低 碳权益"。为便利用户和提升使用体验,"武碳江湖" 接入微信、支付宝两大应用程序,并实现了沉淀数据的



2023 年 12 月 8 日, "武碳江湖" 举办 "碳索江湖 - 东湖 (第二站)"绿色低碳宣教打卡活动

统一管理。

2024年9月,武汉市推出第二批个人碳普惠方法学, 扩展了"武碳江湖"的应用场景,实现将个人低碳行为 与互联网服务相结合,通过实时数据归集,核算并发放 碳普惠减排量。在绿色出行领域,经用户同意后,其低 碳行为数据由腾讯乘车码、滴滴等平台归集,转化为个 人碳账户的等值低碳权益,形成对低碳行为的激励。这 一举措提升了用户获得低碳出行奖励的便利性和价值感, 也激发了企业参与碳普惠体系建设的热情,扩充了碳普 惠减排量的获取渠道。

#### 三、场景应用与价值成效

"武碳江湖"聚焦居民日常生活场景中的低碳行为, 以碳普惠方法学为依据对相关行为的低碳贡献进行量化、 赋值、登记,计算并发放的碳普惠减排量可用于兑换低 碳权益、助力活动碳中和、在碳市场交易变现等,构建 起"方法学编制与公布—减排量开发与登记—碳市场交易 与履约"的闭环,打通了居民低碳行为参与区域碳市场 交易的渠道。截至 2024 年 10 月底,"武碳江湖"使用 人数逾71万,累计减碳2000余吨。

#### 四、经验与启示

"武碳江湖"依托大数据、AI、区块链等数字技术, 实现了居民低碳生活碳普惠减排量的在线登记、交易和 变现。该项引导公众参与绿色行动的解决方案,带来以

碳普惠方法学是依据。科学量化低碳贡献是碳普惠 机制建立的前提,权威方法学是低碳行为被计算、量化、



赋值的依据,成为打通个人碳普惠减排量进入碳市场交 易的关键一环。

托出色的海量数据处理能力,既实现了实时在线发放碳 普惠减排量,又实现了低碳减碳行为的正向激励。

**实现可持续运营是关键**。构建市场主体多元的低碳 降碳生态体系,激发了各参与方的减排动力和潜力;将 趣味化操作与市场化运作相结合,提升了碳普惠机制的

#### 五、国际推广价值

该项目的成功实践不仅为中国城市区域建设碳普惠 体系提供了有益的探索与示范,也为全球碳普惠机制的 创新提供了可复制、可借鉴的经验,具有在国际上广泛 推广的潜力。

第一,完善顶层制度设计,从建立区域碳普惠综合 服务平台到发布个人碳普惠方法学,一系列配套政策为 项目高效运转、碳普惠减排量进入碳交易市场实现闭环 提供了保障。

**第二,设立专业运营机构,**设立运营碳普惠的专业 公司承担平台开发运营相关职能,确保个人和企业的减 排量得以兑现。

共同参与的碳普惠生态,通过政策引导和市场激励,促 进绿色低碳生活方式的普及,为国际社会提供多方合作 的减排模式。









### "Wuhan Low-carbon Universe": Building a Sustainable Low-carbon Ecosystem

#### I. Background and Overview of Actions

Carbon inclusion is an emission reduction mechanism that guides and motivates the pubic and micro, small and medium-sized enterprises (MSMEs) to practice lowcarbon lifestyles and reduce carbon emissions through a combination of policy incentives, business rewards and emission reductions trading. As China has established its national carbon market and is working to build a large unified market, piloting the carbon inclusion system in local regional carbon markets, which allows them to serve as "testing grounds", is of exemplary significance for developing green and low-carbon lifestyles and promoting green consumption. To this end, Wuhan, the capital of Hubei Province, developed and put into operation China's first carbon inclusion integrated service platform featuring a trinity of carbon control by the government, carbon reduction by enterprises and low-carbon actions by individuals by leveraging the power of digital technologies.

In June 2023, Wuhan Carbon Inclusion and Tencent SSV Carbon Neutrality Lab jointly launched the WeChat mini program "Wuhan Low-carbon Universe", a low-carbon life platform for citizens of Wuhan. As an integral part of Wuhan's carbon inclusion integrated service platform, "Wuhan Low-carbon Universe" empowers the carbon inclusion mechanism with digital technologies, and quantifies and assigns values to residents' low-carbon behaviors in everyday life, such as taking a bus or metro train, and saving electricity, effectively pushing residents towards low-carbon lifestyles.

#### II. Mechanism Design and Innovation

After opening an individual carbon account on "Wuhan Low-carbon Universe", a user receives carbon inclusion emission reductions calculated according to methodologies approved by the local relevant department ("carbon inclusion emission reductions") when he/she adopts a low-carbon behavior, such as taking a bus or metro train, renting a shared bike and buying a second-hand item. These emission reductions can be exchanged for bike-riding vouchers, convenience store coupons and other "low-carbon benefits" at the low-carbon store on "Wuhan Low-carbon Universe". To provide convenience for users and improve user experience, "Wuhan Low-carbon Universe" is connected with WeChat and Alipay and has achieved unified management of the captured data.

In September 2024, Wuhan introduced the second group of individual carbon inclusion methodologies, expanding the application scenarios of "Wuhan Low-carbon Universe", combining individual low-carbon behaviors with Internet services, and calculating and issuing carbon inclusion emission reductions through real-time data collection. In the field of green transportation, with the consent of users, their low-carbon behavior data is collected by platforms such as Tencent Transit QR Code and Didi and then converted into the equivalent low-carbon benefits in their individual carbon accounts as incentives for low-carbon behaviors. This initiative has not only enhanced the convenience for users to obtain rewards for low-carbon transportation and their sense

of self-worth, but also inspired enterprises to participate in the development of the carbon inclusion system, and broadened the channels for obtaining carbon inclusion emission reductions.

#### III. Application Scenarios, Results and Value

"Wuhan Low-carbon Universe" focuses on residents' low-carbon behaviors in their daily lives. quantifying, and valuing and recording the low-carbon behaviors contribution, based on the carbon inclusion methodologies. The carbon inclusion emission reductions calculated and issued by the mini program can be exchanged for low-carbon benefits, or offset the carbon emissions for certain campaigns or be traded at the carbon market. It has also established a closed loop of "methodology formulation and publication - emission reductions development and registration - carbon market trading and compliance", providing an unobstructed channel for residents' low-carbon behaviors to participate in regional carbon market trading. By the end of October 2024, "Wuhan Low-carbon Universe" recorded more than 710,000 users and 2,000 tonnes of carbon emission reductions.

#### IV. Experience and Inspiration

Relying on digital technologies such as big data,
Al and blockchain, "Wuhan Low-carbon Universe" has
enabled online registration, trading and realization of
residents' carbon inclusion emission reductions as a result
of their low-carbon life. Here are three key takeaways from
the solution, which has led to public participation in green
actions:

#### Carbon inclusion methodologies are the basis.

Scientific quantification of low-carbon contribution is the prerequisite for the establishment of the carbon inclusion mechanism; authoritative methodologies are the basis on which low-carbon behaviors are calculated, quantified and assigned with values, and have become a key component of the effort to enable individual carbon inclusion emission reductions to be traded in the carbon market.

**Digital technologies are the pillar.** Digital technologies empower the carbon inclusion mechanism, enabling both

real-time online issuance of carbon inclusion emission reductions and incentives for low-carbon and carbonreducing behaviors given their excellent mass data processing capabilities.

Realizing sustainable operation is the key. A low-carbon ecosystem involving diversified market players has provided momentum for the participants to reduce emissions and unleashed their potential in this regard; the combination of interesting operations and market-oriented management has enhanced the sustainability of the carbon inclusion mechanism.

#### V. International Promotion Value

The successful practice of the project not only provides useful exploration and demonstration for the establishment of a carbon inclusion system in Chinese cities, but also offers replicable experience that can be borrowed in global carbon inclusion mechanism innovation. The project has the potential for extensive international promotion.

Firstly, improving top-level institutional design. From the establishment of a regional carbon inclusion integrated service platform to the publication of individual carbon inclusion methodologies, a raft of supporting policies have provided guarantee for the efficient operation of the project and the creation of a closed loop for carbon inclusion emission reductions to enter the carbon trading market.

Secondly, establishing a specialized operating agency. A specialized company has been set up for the operation of carbon inclusion, which assumes functions such as platform development and operation to ensure that emission reductions achieved by individuals and enterprises can be realized.

Thirdly, fostering multi-party collaboration to create synergy. A carbon inclusion ecosystem featuring government, business and individual participation has been established to increase the popularity of green and low-carbon lifestyles through policy guidance and market incentives, providing a model of emission reduction through multi-party collaboration for the international community.





#### 解决方案来自

杭州闲鱼信息技术有限公司

### 玩转闲鱼: 绿色打卡 循环减碳



#### 一、行动背景与概述

推行绿色低碳生活,已成为应对全球气候变化和资源短缺等严峻挑战的必然选择。闲置物品的流转能够有效避免新产品生产过程中造成的原料消耗与能源消耗,从而实现个人消费端的碳减排。据北京绿色交易所提供的测算标准,一件旧衣参与回收平均可减少 0.72 公斤的碳排放,购买一台闲置电脑平均可减少 162.64 公斤的碳排放。可见,旧物循环的减碳潜力巨大。

2024年,闲鱼于发起"绿色打卡"项目,倡议从消费端推动绿色低碳生活。该项目的核心在于调动更多公众个体,通过"赋能循环经济+绿色积分机制"模式,积极参与闲置物品的交易与回收,依托社区平台的影响力推动绿色行为,形成良好的社会示范效应,引领公众转向更加环保、低碳的生活方式。

#### 二、机制设计与创新

"绿色打卡"项目致力于推广绿色低碳生活方式,通过积分激励、社群建设、环保行为数据化等手段,引导公众交易闲置物品。闲鱼作为二手物品交易平台,设立了绿色积分激励机制,用户可通过在闲鱼购买闲置商品、参与环保行为等低碳任务,获得"绿色能量";发起旧物回收计划,建立完善的"线上预约—线下回收"机制,通过现金与"绿色能量"等奖励,鼓励用户将原本废弃或闲置的物品进行回收;与中国循环经济协会、北京绿色交易所等专业机构合作推出减碳测算功能,让闲鱼上每一次闲置物



品交易的减碳价值可量化、可感知;在闲鱼搭建绿色社区,鼓励用户通过话题打卡,记录闲置交易、绿色出行、减塑挑战等环保行为,形成具有带动性和感染力的绿色行动社区氛围,使绿色低碳理念深入人心。此外,闲鱼以出资方式将平台积累的"绿色能量",转化成给公益机构的捐赠,支持高原地区儿童的光伏包和荒漠地区的梭梭树等公益项目,实现了"个人环保+公益助力"的创新结合,使用户的绿色低碳行为增加公益价值。

#### 三、场景应用与价值成效

"绿色打卡"项目致力于推动线上闲置交易与低碳社交两大场景,旨在构建资源高效循环、环境友好的社会。 线上交易场景,倡导用户积极参与闲置物品交易,通过 促进旧物再利用来实现资源的有效回收。截至目前,平 台已累计指献 10.22 亿绿色能量,单日预约上门回收服 务的人数超过 98,000 人次;每月因闲置交易减少的碳排放量达到 64 万吨。低碳社交场景,"绿色打卡"项目鼓励参与者记录并分享自己日常生活中践行的各种环保行动,养成环保习惯。据统计,绿色频道累计覆盖 2560 万人,超过 130 万名用户以图文形式展示其"绿色足迹",有效地促进了绿色低碳生活理念的传播。

#### 四、经验与启示

该项目巧妙地引导用户参与闲置物品循环利用,通过 数字技术与社区运营,为构建循环经济与低碳社会贡献了 力量。该项引导公众参与绿色行动的解决方案,带来以下 四点启示。

**注重环保效益的即时反馈**。通过减碳量测算功能,使参与者能够直观地看到每一次交易所贡献的环境效益,加深了公众对绿色消费的认识。



**注重挖掘大数据价值**。通过算法模型优化,平台得以 大幅提升闲置物资流转效率,交易效率的提升,反过来又吸 引了更多人参与二手商品交易,促进了环保行动的正循环。

**注重提升激励和减少阻力。**公益驱动结合现金奖励的方式激发了公众对环保行动的热情,简易便捷的预约取件服务降低了用户参与门槛,有效提升了公众交易闲置物品的参与度。

**注重绿色行为的社交属性**。通过绿色频道和社区运营,以社交属性极强的"打卡"方式,扩大绿色理念传播范围,带动更多用户加入绿色低碳的行列。

#### 五、国际推广价值

该项目既促进了循环经济发展,又达到了减少大量 碳排放的目的,还充分挖掘了绿色消费的潜力,为推动 循环经济的发展提供了强有力的支持,对于促进循环经 济具有重要意义和国际推广价值。

第一,创新多维度激励方式: 以绿色积分和现金回报作为奖励,有效激发用户参与热情,"个人环保+公益助力"增强了闲置交易的社会价值,提升了公众参与积极性。

第二,建立多层次反馈机制:利用减碳测算功能与绿色打卡社区,更直观地展示环保成效,有效增强绿色低碳理念的传播,形成良好的社会示范带动效应。

第三,利用数据技术提高效率:基于数字技术持续 优化算法模型,有效提高闲置物资流转效率,从而吸引 更多人参与闲置物品交易,持续扩大影响,形成良性循环。









## Rocking the Idle Fish: Green Check-Ins and Circular Carbon Reduction

#### I. Background and Overview of Actions

Promoting a green, low-carbon lifestyle has become essential in tackling severe global challenges such as climate change and resource shortages. The circulation of idle goods can effectively reduce the raw material and energy consumption associated with the production of new products, achieving carbon reduction on the consumer side. According to standards provided by the China Beijing Green Exchange, recycling an old piece of clothing can reduce carbon emissions by an average of 0.72 kg, while purchasing a used computer can save around 162.64 kg of emissions. Thus, the potential for carbon reduction in reusing items is substantial.

In 2024, Idle Fish launched the "Green Check-In" initiative to encourage green, low-carbon lifestyles starting from consumer behavior. This project aims to mobilize more public individuals through a model of "empowering the circular economy + green points mechanism," encouraging people to participate in the exchange and recycling of idle items. Leveraging the influence of a community platform, this initiative fosters a positive social demonstration effect, guiding the public toward a more eco-friendly, low-carbon lifestyle.

#### II. Mechanism Design and Innovation

The "Green Check-In" initiative aims to promote green, low-carbon lifestyles through incentives, community

building, and data-driven environmental actions that encourage public participation in trading idle goods. As a secondhand goods platform, Idle Fish established a green points incentive system where users earn "green energy" by purchasing secondhand items on the platform and engaging in low-carbon actions. Recycling Program: The platform launched an old-item recycling program with a seamless "online booking-offline recycling" process, where users are rewarded with cash and green energy to encourage recycling items that might otherwise go unused. Carbon Reduction Calculation: Collaborating with professional organizations like the China Association of Circular Economy and the China Beijing Green Exchange, Idle Fish introduced a carbon reduction calculation feature, enabling users to see measurable carbon savings for each secondhand transaction on the platform. Community Engagement: Idle Fish also created a green community, encouraging users to check in with green actions, such as secondhand trading, eco-friendly commuting, and plastic reduction challenges. This vibrant community fosters awareness and enthusiasm for green lifestyles. Public Welfare Contribution: Idle Fish converts accumulated "green energy" points into donations to public welfare projects, such as providing photovoltaic backpacks for children in high-altitude regions and supporting desert areas with saxaul trees. This blend of personal environmental action and public

welfare significantly enhances the social value of green behavior.

#### III. Application Scenarios, Results and Value

The "Green Check-In" initiative is focused on promoting both online idle transactions and low-carbon social engagement to create a high-efficiency, circular, environmentally friendly society. Online Transaction Scenario: Users are encouraged to participate actively in the circulation of idle items, promoting resource recycling through reuse. To date, the platform has donated over 1.022 billion green energy points, with more than 98,000 daily appointments for on-site recycling and 640,000 tons of carbon emissions saved each month through secondhand transactions. Low-Carbon Social Scenario: The project invites participants to document and share their green practices in daily life, building a habit of environmentally friendly behavior. The green channel now covers 25.6 million users, with over 1.3 million users sharing their "green footprints" through photos and text, effectively promoting green, low-carbon lifestyles.

#### IV. Experience and Inspiration

This project has effectively guided users to participate in the circulation of idle goods, contributing to the construction of a circular and low-carbon society through digital technology and community operations. Here are four key takeaways from the solution, which has led to public participation in green actions:

#### Focusing on instant environmental feedback.

By offering a carbon reduction calculation feature, participants can see the environmental benefits of each transaction, reinforcing their awareness of green consumption.

**Leveraging the value of big data.** With optimized algorithm models, the platform significantly boosts the efficiency of idle goods circulation, attracting more users

to participate in secondhand trading and fostering a positive cycle of environmental action.

#### Enhancing motivation and reducing barriers.

Combining public welfare with cash rewards has sparked public enthusiasm for environmental action, while the simple, convenient pickup service lowers the barrier to participation, increasing public's engagement in trading idle goods.

#### Highlighting the social nature of green behavior.

Through the green channel and community engagement, the check-in feature's strong social component extends the reach of green concepts and inspires more users to join the low-carbon movement.

#### V. International Promotion Value

This project promotes the development of a circular economy, achieves the goal of reducing carbon emission, fully tapping into the potential of green consumption. It provides powerful support for the circular economy and holds significant value for promoting circular economy and international promotion:

**Firstly, providing innovative, multi-dimensional incentives:** By using green points and cash rewards as incentives, the project effectively stimulates user participation, while combining "personal environmental action + public welfare" enhances the social value of idle transactions and raises public enthusiasm.

Secondly, establishing a multi-layered feedback mechanism: The carbon calculation feature and green check-in community visibly showcase the environmental impact, strengthening the spread of low-carbon principles and fostering a positive social demonstration effect.

Thirdly, using data technology to improve efficiency: Leveraging digital technology to continuously optimize algorithm models, the platform improves the circulation efficiency of idle goods, attracting more users to join in trading idle items and expanding its influence.





#### 解决方案来自

国网台州市黄岩区供电公司

## 消费券创新, 激发居民主动节能新路径



#### 一、行动背景与概述

联合国秘书长古特雷斯指出:"全球变暖的时代已经结束,全球沸腾的时代已然到来。"近年来,中国夏季平均气温和高温天气数量均呈现上升趋势。2023年夏季,浙江省台州市全社会最高用电负荷较上一年增长4.7%;2024年,台州市夏季最大全社会负荷需求预计达900多万千瓦。若夏季出现持续高温极端天气、外来电受阻等情况,可能出现用电缺口。

在此背景下,国网台州市黄岩区供电公司(以下简称国网黄岩供电公司)携手黄岩区政府,于 2023 年共同推出了"居民节能降耗消费券"活动,消费券发放与家庭节能深度绑定,通过电费节省和消费券奖励的双重激励,推动居民主动参与节能降耗,引导居民养成文明健康绿色低碳的生活风尚,助力碳达峰、碳中和目标的实现。

#### 二、机制设计与创新

"居民节能降耗消费券"活动在机制设计上,聚焦城市居民家庭的用电量,凡是报名参与活动的居民家庭,其月度电费较上一年同期降幅在5%以上,即可领取节能负荷补贴,补贴金额为当月电费同比下降金额,即"节约1元电费,补贴1元消费券"。节能降耗省电费即可获得消费券,这种双重激励模式极大地激发了居民的节能积极性,这一精巧的设计也解决了如何将绿色行动量化为节能效果并形成正向激励的问题,让居民绿色行动能够及时得到正反馈。

为确保活动得以成功实施和推广,国网黄岩供电公司作为整个活动的策划方,首先,积极携手黄岩区政府出台了居民节能负荷补贴政策,并由政府设立消费券补贴资金池,解决了激励资金的来源问题。其次,国网黄岩供电公司凭借自身的技术和数据优势,自主研发居民参与活动的小程序,设计统一报名平台,并依托"浙电云"平台和用数环境平台构建居民用电数据画像模型,通过数据比对,向符合条件的用户及时发放消费券,领取的消费券可在3000余户商户线下消费时使用。最后,国网黄岩供电公司争取到台州市黄岩区融媒体中心、台州银行股份有限公司的支持,几方共同面向全市居民尤其是家庭用户推广这项活动,既推广了活动,也营造了绿色行动社会氛围。



2024 年 "节能大作战 等你来挑战" 居民节能降耗消费券 补贴宣贯现场

#### 三、场景应用与价值成效

该解决方案的应用场景主要集中在居民用电领域和用电高峰季节、时段,通过引导居民高效低碳生活,减少了不必要的能耗,实现了显著的减排效果,有效缓解了全社会的用电压力。按照每户平均压降50元电费计算,活动已累计发放消费券500万元,实现迎峰度夏期间平均2万千瓦居民负荷压降,相当于降低了温室气体排放9970吨当量,有效缓解高峰期黄岩区域电力供需压力,不仅对环境有益,也对经济和社会有积极的影响。

#### 四、经验与启示

居民节能降耗消费券充分发挥了政府政策性资金的 杠杆撬动作用,释放居民绿色节能消费潜力,有效带动 公众积极参与绿色低碳生活方式,并形成新型绿色消费 模式。该项引导公众参与绿色行动的解决方案,带来以 下三点启示。

经济激励是动力。消费券作为经济激励手段,以电费的节约为奖励的量化标准,形成了及时的正反馈机制,有效激发了居民的节能降耗积极性和动力。

数据监测是基础。通过智能电表等技术手段实时监测居民用电情况,为政策调整和活动优化提供了数据支持,确保精准施策,提高了政策的针对性和有效性。

**多方协同是关键**。项目的成功离不开政企银媒商的紧密协作,共同构建了从节能行为到消费奖励的活动机制,形成了良好的互动和协同效应,保障了活动的可行性和影响力。



#### 五、国际推广价值

该项目的成功实践不仅为中国自身的发展提供了有力支撑,也为全球应对气候变化和可持续发展提供了有益的参考和借鉴,在国际上具有广泛的推广价值。

第一,创新激励机制,消费券与节约电费相挂钩的 形式,形成了有效的双重经济激励,形成了对居民绿色 行为的引导,可供其他国家和地区借鉴。

第二,政策与市场结合,国网黄岩供电公司与黄岩区政府的合作展示了政府政策与市场激励相结合的强大凝聚力,这种政府引导、市场运作的节能减排新路径,具有借鉴意义。

第三,应用技术与数据,通过 APP 与大数据的研发和应用,能够精准识别节能家庭并发放消费券,提高了节能行动的可追踪性和可衡量性,相关技术手段与方式可供国际借鉴。

第四,多方协同模式,该活动成功地整合了政府、 企业、媒体等多方资源,形成了以应对气候变化为纽带 的伙伴关系,可供其他国家参考,以推动气候变化的全 球行动。









### Stimulating a New Pathway to Save Energy among Residents Through Consumer Voucher Innovations

#### I. Background and Overview of Actions

"The era of global warning has ended; the era of global boiling has arrived," United Nations Secretary-General Antonio Guterres said. In recent years, both the average temperature and the number of high temperature days in summer have been on the rise in China. The maximum power load in Taizhou, Zhejiang Province was up 4.7% year-on-year in the summer of 2023, and the city's maximum load demand is anticipated to reach over 9 million kW in 2024. There could be an electricity gap in the event of sustained extreme heat or hampered external electricity supply.

In this context, Taizhou Huangyan Power Supply Company of State Grid Zhejiang Electric Power Co., Ltd. (hereinafter referred to as State Grid Taizhou Huangyan Power Supply Company), in partnership with the People's Government of Huangyan District, launched the "Residential Energy Conservation and Consumption Reduction Consumer Vouchers" campaign in 2023. By binding the issuance of consumer vouchers to household energy conservation, the campaign harnessed the dual incentives of lowering electric bills and issuing consumer vouchers to encourage residents to actively participate in energy saving and consumption reduction, guide them to shift to civilized, healthy, green and low-carbon lifestyles and contribute to the realization of carbon peaking and carbon neutrality.

#### II. Mechanism Design and Innovation

The "Residential Energy Conservation and Consumption Reduction Consumer Vouchers" campaign focused on urban household power consumption in its mechanism design. Any household that signed up for the campaign and whose monthly electric bill dropped by more than 5% year-on-year could receive an energy saving load subsidy equivalent to the year-on-year decrease in the electric bill. In other words, for every 1 yuan saved on the electric bill, 1 yuan consumer voucher subsidy will be received. Save energy and reduce energy consumption, you will trim your electricity bill and get consumer vouchers. This dual-incentive model has greatly stimulated the enthusiasm of residents for saving energy, and the elaborate design has also solved the problem with quantifying green actions into energy-saving effects to generate positive incentives, so that residents can get positive feedback on their green actions.

To ensure the successful implementation and promotion of the campaign, State Grid Taizhou Huangyan Power Supply Company, as the planner of the campaign, firstly introduced the policy of residential energy conservation subsidies by working with the People's Government of Huangyan District, which set up a capital pool for consumer voucher subsidies as the source of incentives. Secondly, by leveraging its technological and data advantages, State Grid Taizhou Huangyan Power Supply Company independently developed a miniprogram for residents to participate in the campaign, designed a unified registration platform, and relying on the Zhejiang Electric Power Cloud Platform and the user data environment platform, built a residential electricity consumption data profile model. The model allowed the company to issue consumer vouchers, which were applicable to offline shopping at more than 3,000 stores, to eligible users in a timely manner through data

comparison. Finally, State Grid Taizhou Huangyan Power Supply Company gained support from Taizhou Huangyan Converged Media Center and Bank of Taizhou Co., Ltd. They worked together to promote the campaign among residents across the city, especially households, all while fostering a social atmosphere for green actions.

#### III. Application Scenarios, Results and Value

With application scenarios focusing on peak hours and season of residential electricity consumption, this solution has reduced unnecessary energy consumption by guiding residents to live an efficient and low-carbon life, leading to significant emission reductions and effectively alleviating the society-wide electricity consumption pressure. If the average decrease in the electric bill was 50 yuan per household, consumer vouchers worth 5 million yuan had been issued through the campaign, reducing residential load by an average of 20,000 kW during peak loads in summer, equivalent to 9,970 tonnes of greenhouse gas (GHG) emission reductions, and effectively relieving the regional power supply and demand pressure in Huangyan District at peak times. This is not only conducive to the environment, but also has a positive impact on the economy and society.

#### IV. Experience and Inspiration

Residential energy conservation and consumption reduction consumer vouchers have leveraged the government's policy-based funds to unleash residents' green and energy-saving consumption potential, effectively drive the public to embrace green and low-carbon lifestyles, and form a new green consumption model. Here are three key takeaways from the solution, which has led to public participation in green actions:

**Economic incentives are the motivator.** Consumer vouchers, as a means of economic incentives, are quantified against savings in electricity bills to form a mechanism of timely positive feedback, effectively stimulating residents' enthusiasm and motivation for energy conservation and consumption reduction.

**Data monitoring is the foundation.** Residential electricity consumption was monitored in real time by technical means such as smart meters to provide data support for policy adjustment and campaign optimization

and ensure targeted measures, making the policy more relevant and effective.

**Multi-stakeholder synergy is the key.** The success of the project could not be separated from the close government-enterprise-bank-media collaboration, through which a campaign mechanism covering all parts from energy saving behaviors to consumption rewards was established, creating good interaction and synergy, and guaranteeing the feasibility and influence of the campaign.

#### V. International Promotion Value

The successful practice of the project not only provides strong support for the development of China alone, but also offers a useful reference to global climate change response and sustainable development. The project is of great international promotion value.

**Firstly, Developing innovative incentives.** The practice of binding consumer vouchers to energy savings has created effective dual economic incentives and guided residents toward green behaviors, and can be used as a reference for other countries and regions.

Secondly, combining policy and market. The cooperation between State Grid Taizhou Huangyan Power Supply Company and the People's Government of Huangyan District demonstrates the strong cohesion created by the combination of government policies and market incentives. This new pathway to energy conservation and emission reduction, which is guided by the government and run by the market, is of reference significance.

Thirdly, leveraging technology and data. Through the development and application of an app and big data, it is possible to accurately identify energy-saving households and issue consumer vouchers to them, increasing the traceability and measurability of energy-saving actions. The relevant technical means and methods can be used for international reference.

**Fourthly, creating a multi-stakeholder synergy model.** The campaign successfully brought together government, business, media and other resources, and the partnership built upon addressing climate change can be used as a reference for other countries to promote global action on climate change.

Kindling the Green Sparks





#### 解决方案来自

#### 滴滴

### 创新激励,构建公众绿色出行新生态



气候变化是人类社会需要携手应对的重大议题,绿色低碳成为各国可持续发展的必然选择。交通运输行业作为能源消耗和碳排放的重要领域,在实现经济社会高质量发展和推进全球应对气候变化的进程中,发挥着举足轻重的作用。从全球范围看,交通行业是除电力行业之外的第二大碳排放部门,排放量占全球总排放的四分之一左右;在我国,交通行业作为能源消耗及碳排放的三大行业之一,其当前的碳排放量在全国碳排放量中的占比超10%,其中道路交通占比约80%,且仍处于不断增长阶段。

在此背景下,滴滴作为可持续交通体系的参与者,积极践行绿色低碳理念,推出了拼车激励计划和"碳元气"项目的数字碳普惠行动,激励引导公众绿色低碳出行,带动公众形成绿色生活消费的模式,助力交通行业碳减排,协同出行生态合作伙伴构建更加绿色的交通体系。

#### 二、机制设计与创新

滴滴通过产品绿色化和绿色数据产品化的策略,创新性地设计了拼车激励计划和"碳元气"项目,有效地引导公众绿色低碳出行。滴滴自 2019 发起"12.3 全民拼车日"活动,已经连续举办 5 年,持续向公众传达"环保、效率、共享、低碳"理念,联合合作伙伴推出了多种激励机制,多渠道跨界塑造共享出行新时尚,如联合合作伙伴发起绿色挑战活动,用户当日完成任务即可兑换拼车优惠券。2022 年滴滴搭建了碳管理工具——"长青",

可实现以订单为颗粒 度,对平台出行生态 的碳排放总量、碳排 放强度、碳减排量、 绿色里程比率、电动 化比率五个核心绿色 指标的动态核算,在 "长青"碳管理工具 的基础上,同年推出 了"碳元气"环保项 目,将用户低碳出行 带来的环保价值通过 "碳元气"具象化, 实现用户低碳出行减 碳量单单可量化、单 单可累计,通过月度 碳元气勋章、低碳出 行打车券等荣誉和物 质激励进一步引导用



户参与绿色低碳出行,并将用户低碳出行的减碳量进行 配捐,用于生态环境改善和动物保护。

#### 三、场景应用与价值成效

拼车激励计划和"碳元气"项目的应用场景主要集中在公众出行领域,通过引导公众使用拼车出行等绿色低碳出行方式,并将减碳量转化为可视化的"碳元气",实现用户激励,从而减少出行碳排放。在"12.3 全民拼



车日"活动期间,通过引导公众拼乘出行 共累计实现温室气体 减排量约为21万吨 二氧化碳当量;截至 2023年底,"碳元气" 项目已在全国298 个城市上线落地,自 2024年4月22日, 滴滴以并结合"一起 云守护八仔"活动, 截至9月30日,据 计1.419.974人次通

过 "碳元气"捐赠方式参与了守护八仔的公益项目,并获得守护证书。

#### 四、经验与启示

拼车激励计划和"碳元气"项目有效传达"环保、效率、 共享、低碳"理念,激励并引导公众选择绿色低碳的出行 方式,主要启示包括以下几个方面。

**夯实碳数据基础**。通过搭建"长青"碳管理工具, 对平台出行订单的碳排放总量、碳减排量等指标进行动 态核算,为量化公众绿色出行的碳减排贡献值提供了数 据支持。

发挥共享经济效益。通过归并公众出行需求,制订

优惠券等拼车激励计划,降低了公众出行成本,减少了 行驶汽车数量,缓解交通拥堵,进而降低了能源消耗和 碳排放。

精神激励与物质激励并重。通过量化和可视化用户的低碳出行减碳量,以勋章荣誉、低碳出行优惠券作为激励手段,有效激发了公众的绿色低碳出行的积极性。

环保意识提升与公益相结合。"碳元气"项目不仅关 注减碳,还与守护候鸟等公益活动结合,提升了公众的环 保意识,并鼓励用户参与到更广泛的生态环境保护中。

加强多方联动。携手平台上的司机、多元合作伙伴, 共同打造绿色出行新生态,不仅为用户绿色低碳出行提供 了支持,也强化了绿色生活方式的社会共识。

#### 五、国际推广价值

拼车激励计划和"碳元气"项目的实施有效推动绿色出行,助力交通行业碳减排,该聚焦出行领域的解决方案在国际上还具有以下推广价值。

第一,打造共享绿色出行生态,通过提供并引导用户使用拼车、电动车等绿色出行服务,提升了车辆利用率,推动交通工具电动化转型,实现减碳效应。

第二,开发出行场景的碳管理工具,有效识别和计算不同出行场景的碳排放,提高了绿色出行减碳量的可追踪性和可衡量性,增强用户的绿色出行意识,激励用户选择低碳出行。

第三,创新绿色出行激励方式,结合精神激励、物质 奖励和支持公益,提升用户绿色出行的动力,构建低碳 出行共同体,促进全民参与绿色出行。









### Building a New Ecosystem for Public Green Transportation Through Innovative Incentives

#### I. Background and Overview of Actions

Climate change is a significant issue that requires global cooperation. Green and low-carbon has become an inevitable choice for the sustainable development of all countries. As a major area of energy consumption and carbon emissions, the transportation industry plays a crucial role in achieving high-quality economic and social development and promoting the response to climate change. Globally, the transportation industry is the second largest carbon emission sector in addition to the electric power industry, accounting for about one-quarter of total global emissions. In China, the transportation industry is one of the three largest sectors of energy consumption and carbon emissions. Its current carbon emissions representing over 10% of the nation's total emissions, with road transportation accounts for about 80%, and is still in the continuous growth stage.

In this context, DiDi actively promotes green and low-carbon concepts as a participant in the sustainable transportation system. We have launched carpooling incentive program and "DiDi Carbon Credits" to encourage the public to participate in green and low-carbon mobility and also adopt green lifestyles and consumption patterns. These initiatives assist in reducing carbon emissions in the transportation industry, collaborate closely with platform ecosystem partners to foster a paradigm in environmentally friendly transportation system.

#### II. Mechanism Design and Innovation

Through the strategy of product greening and green data productization, DiDi has innovatively designed the

carpooling incentive program and "DiDi Carbon Credits", effectively encouraging users to participate in green and low-carbon mobility. Since 2019, we have hosted the "12.3 National Carpooling Day" for five consecutive vears, aiming to advocate for environmental protection. efficiency, sharing, and low-carbon practices among the public. We have jointly launched various incentive mechanisms with our partners to create a new trend of shared mobility through multi-channel cross-border collaboration. For example, we worked with our partner to introduce the Green Mobility" challenge, encouraging users to earn carpooling coupons by completing daily tasks. In 2022, we developed a set of internal carbon management tools called "Evergreen". This toolset empowers us to dynamically count five key green indicators per order: total carbon emissions, carbon emissions intensity, carbon emissions avoidance, green mileage ratio, and electrification ratio. Supported by our carbon management platform "Evergreen", we launched "DiDi Carbon Credits" environmental project in the same year. We visualize the environmental impact of users' low-carbon mobility choices through "DiDi Carbon Credits". With "DiDi Carbon Credits", users can track the carbon emissions avoidance achieved with each order and accumulate the energy over time to earn rewards like monthly DiDi Carbon Credits medals and low-carbon mobility vouchers. This incentivizes continued low-carbon mobility practices. Moreover, we donate the carbon emissions savings generated by users through their lowcarbon mobility choices to support environmental improvement and animal protection initiatives.

#### III. Application Scenarios, Results and Value

The application scenarios of carpooling incentive program and "DiDi Carbon Credits" project primarily focus on the public transportation sector, reducing carbon emissions by encouraging users to use carpooling and others green and low-carbon mobility. We convert our carbon reduction efforts into visualized "Carbon Credits" to enable user incentives and reduce carbon emissions from travel. Throughout the "12.3 National Carpooling Day", we have successfully avoided approximately 210,000 tons of carbon dioxide. By the end of 2023, DiDi has rolled out "DiDi Carbon Credits" in 298 cities across China. Since April 22. 2024, DiDi has committed to a lifelong guardianship of the giant panda named "Ba Zai". In conjunction with the "Carbon Credits", DiDi initiated the "Together Cloud Guardianship of Ba Zai" campaign. As of September 30, a total of 1,419,974 person-times have participated in the public welfare project to protect "Ba Zai" through the "Carbon Credits" donations and have received guardianship certificates.

#### IV. Experience and Inspiration

The carpooling incentive program and "DiDi Carbon Credits" project effectively convey the concepts of environmental protection, efficiency, sharing, and low-carbon practices, encouraging and guiding the public to participate in green and low-carbon mobility. The main insights include the following several points:

**Carbon data foundation.** Through the development of the "Evergreen" carbon management tool, we dynamically account for indicators such as total carbon emissions and carbon emissions avoidance per order. This provides data support for quantifying the carbon emissions contributions of users' green mobility.

#### Leveraging the benefits of the sharing economy.

By aggregating public transportation needs and implementing carpool incentive programs such as coupon schemes, we can reduce the cost of public transportation, reduce the number of vehicles on the road, alleviate traffic congestion, and ultimately reduce energy consumption and carbon emissions.

Both spiritual and material incentives are equally important. By quantifying and visualizing the carbon

reduction achieved by users' low-carbon travel, incentives such as medals and honors, as well as low-carbon travel discount coupons, have been effectively used to stimulate the public's enthusiasm for green and low-carbon travel.

**Raising environmental awareness while promoting public welfare.** The "DiDi Carbon Credits" project not only focuses on carbon reduction, but also combines it with public welfare activities such as protecting migratory birds, raising public environmental awareness, and encouraging users to participate in broader ecological protection.

**Strengthening multi-party coordination.** Work together with drivers and diverse partners on the platform to jointly create a new green mobility ecosystem, which is not only providing support for users' green and low-carbon travel, but also strengthening the social consensus on green lifestyles.

#### V. International Promotion Value

The implementation of carpooling incentive program and "DiDi Carbon Credits" project has effectively promoted green mobility and helped reduce carbon emissions.

The solution focused on travel also has the following international promotion value.

First, we have building a shared green mobility ecosystem by providing and guiding users to use carpooling, electric vehicles, and other green mobility services, which has improved the utilization rate of vehicles, promoted the transformation of transportation tools to electric vehicles, and achieved carbon reduction effects.

Second, developing carbon management platform for travel scenarios, effectively identifying and calculating the carbon emissions of different travel scenarios, improving the traceability and measurability of green mobility carbon reduction, enhancing users' awareness of green mobility, and incentivizing users to choose low-carbon travel.

Third, developing innovative green mobility incentive methods, combining spiritual incentives, material rewards, and support for public welfare to enhance users' motivation for green mobility and build a low-carbon travel community to promote public participation in green mobility.





#### 解决方案来自

上海拉扎斯信息科技有限公司

## "e 点碳" 消费者碳账户, 引导上亿消费者形成绿色点餐小习惯

## C·饿了么

#### 一、行动背景与概述

作为中国向国际社会的郑重承诺,"双碳"目标开启了我国绿色转型发展新时代,也对公众践行绿色低碳生活提出了新要求。从我国碳排放结构来看,26%的能源消费直接用于公众生活,由此产生的碳排放占比超过30%。因此,提高公众低碳生活意识并引导公众参与低碳行动,具有重要意义。

2022年,外卖平台"饿了么"推出中国外卖行业首个消费者碳账户——"e点碳",将消费者在饿了么上的碳减排行为,如无需餐具、小份餐食、环保小票、拼团配送等,换算成减碳量积分存到该平台对应账户里,这些减碳量积分既能兑换饿了么上的商品服务,也可用于支持公益项目,借此引导和激励消费者形成绿色低碳点餐习惯。

#### 二、机制设计与创新

饿了么对无需餐具、小份餐食等低碳场景进行碳减排量的计算,设计消费者碳账户 "e点碳"的相关激励措施,在外卖场景下探索实现"个人—平台—碳中和"的闭环。前端,通过与专业机构合作,开发出多个外卖消费场景的减碳量计算标准,有效解决了消费端碳减排数据难以计量的问题,让绿色消费行为与减碳量直接挂钩。中端,通过数字技术开发"e点碳"消费者碳账户,用户只要选择无需餐具、小份餐食、环保小票、拼团配送等低碳行为,就可以得到减碳量积分,让绿色消费行为与减碳量直接关联

并直观地转化为积分激励,在降低消费者参与低碳消费门 槛的同时激励用户反复参与,养成低碳行为习惯。后端, 消费者获得的减碳量积分可兑换环保餐具等绿色商品,或 用于捐赠森林保护项目、校园清洁电力项目等公益项目, 延展了绿色消费行动的社会价值。

#### 三、场景应用与价值成效

该模式适用于外卖点餐、即时零售,以及单位减碳量不高但消费频次高、参与人次多的消费场景,能够实现减少一次性餐具用量,减少食物浪费,降低运输碳排放,促进绿色商品消费等绿色价值,有效发挥了互联网平台型企业的引导能力,带动消费者参与绿色行动。

目前,已经有超过1亿消费者参与饿了么"e点碳"项目,减少温室气体排放8万多吨当量。其中,无需餐具订单已超20亿单,提供小份餐食的商户达上百万家,



每年减少食物浪费约 2 万吨。该项目已经与 10 余个省市的碳普惠项目、绿色消费项目开展合作,并纳入大型活动碳抵消相关试点活动。

#### 四、经验与启示

该项目充分发挥互联网平台型企业的数字能力、链接能力,通过与专业机构、政府部门合作,开发消费场景的减碳激励机制,带动了大量公众参与低碳绿色消费,反过来也促使平台持续挖掘和提供更多低碳场景供消费者实践。该项引导公众参与绿色行动的解决方案,带来以下三点启示。

碳減排量计算是基础。科学计算绿色消费行为的减 碳量,使低碳行为变得具体、可量化,有效激发了公众 的环保意识和行动。

数字化产品是核心。碳账户这样的数字化产品,能够高效地实现对低碳场景的识别、统计和激励,形成完整的链路模式。

低碳与公益结合是创新。减碳量积分可用于支持公益项目,不仅增加了公众参与绿色消费的情感动力,也为公益项目提供了更多的社会支持和资源,扩大了绿色消费的社会价值。

#### 五、国际推广价值

该项目的成功实践不仅为中国外卖平台提供了可资 借鉴的经验,也为全球同业和相关消费场景引导公众的



绿色行为提供了具体的解决方案,在国际上具有广泛的 推广价值。

第一,建立数字化激励机制,通过数字化手段量化 和激励个人低碳行为,降低参与门槛,提高公众参与积 极性,从而带动供给侧的商户提供更多低碳商品与服务。

第二,跨领域合作与标准制定,与专业机构合作开 发消费场景的碳计算标准,为全球碳减排行动和消费场 景提供了减碳量评估工具。

第三,建立消费行为碳账户,通过数字化碳账户, 有效沉淀用户低碳行为数据,不仅便于引导和促进绿色 消费,还能对比分析激励策略的有效性,不断优化激励 举措。

**第四,绿色消费关联公益活动**,用减碳量积分支持公益项目,形成双重激励,增加公众参与情感动力,扩大绿色消费社会价值。

第五,以减碳为纽带促进多方协作,通过强化减碳 共识,能够有效整合政府、企业、研究机构、媒体等多 方资源,形成以应对气候变化为中心的生态伙伴关系。





### C·饿了么

## "e-Carbon" Consumer Carbon Ledger: Guiding Over 100 Million Consumers Toward Green Ordering Pattern

#### I. Background and Overview of Actions

As part of China's solemn commitment to the international community, the "dual carbon" target has ushered in a new era of green transformation for the nation and introduced new requirements for the public to practice a green, low-carbon lifestyle. Looking at China's carbon emissions structure, 26% of energy consumption is used directly for public life, accounting for over 30% of overall emissions. Therefore, raising public awareness of low-carbon living and guiding citizens to participate in low-carbon actions are of great significance.

In 2022, the online food delivery platform Ele.me launched the "e-Carbon" program, China's first consumer carbon ledger in the food delivery industry. Actions like ordering without single-use utensils, smaller-portioned meals, eco-friendly receipts, and pooling deliveries are all converted into carbon reduction points that accumulate in a dedicated account on the platform. These points can be redeemed for goods and services on Ele.me or used to support public welfare projects, thus encouraging and rewarding consumers for forming green and low-carbon ordering pattern.

#### II. Mechanism Design and Innovation

Ele.me calculates the carbon reduction for low-carbon actions, such as ordering without single-use utensils or opting for smaller-portioned meals, and designed incentives around the "e-Carbon" consumer ledger to

create a closed-loop system of "individual-platform-carbon neutrality" within the food delivery context. Upfront: In collaboration with professional institutions, Ele.me developed carbon reduction calculation standards for various ordering scenarios, effectively addressing the challenge of measuring consumer-side carbon reduction and linking green consumption directly with carbon reduction points. Midstream: The digital "e-Carbon" consumer ledger allows users who choose low-carbon actions—such as forgoing single-use utensils, opting for smaller-portioned meals, eco-friendly receipts, or pooling delivery—to earn carbon reduction points. This effectively links green actions with tangible incentives, making it easy for consumers to participate in and repeat low-carbon behaviors, ultimately forming green habits. Downstream: The carbon reduction points earned by consumers can be redeemed for eco-friendly products like sustainable utensils or donated to support public welfare projects, such as forest conservation and campus clean energy initiatives, further extending the social value of green consumption.

#### III. Application Scenarios, Results and Value

This model is applicable to food delivery, instant retail, and other scenarios where individual carbon reduction associated with each order may be small but the consumption frequency and the number of consumers are high. This approach effectively reduces the use

of disposable utensil, minimizes food waste, lowers transportation emissions, and promotes the consumption of green products, fully leveraging the influence of an internet platform company to mobilize consumers for green actions.

To date, over 100 million consumers have participated in Ele.me's "e-Carbon" project, reducing greenhouse gas emissions by more than 80,000 tons equivalent. "No single-useutensil" orders alone have exceeded 2 billion, while over a million merchants now offer smaller-portioned meals, cutting food waste by around 20,000 tons annually. The project has partnered with over ten provincial and municipal carbon-inclusive projects and green consumption initiatives and has been included in related pilot events for large-scale carbon offset activities.

#### IV. Experience and Inspiration

This project fully leverages the digital capabilities and connecting pivot of an internet platform company, collaborating with professional institutions and government departments to develop a carbon reduction incentive mechanism in consumption scenarios. This approach has driven substantial public participation in green, low-carbon consumption and has also spurred the platform to explore and offer additional low-carbon scenarios for consumers. Here are three key takeaways from the solution, which has led to public participation in green actions:

#### Carbon Reduction Calculation as a Foundation.

Accurately calculating the carbon reduction for green actions makes low-carbon behaviors concrete and measurable, effectively inspiring environmental awareness and actions.

**Digital Products as Core.** The use of digital products, like the carbon ledger, efficiently recognizes, tracks, and incentivizes low-carbon scenarios, creating a close-loop model of green engagement.

Combining Low-Carbon and Public Welfare as

**Innovation.** Allowing carbon reduction points to support public welfare projects not only boosts emotional motivation for green consumption but also provides social support and resources for public welfare, enhancing the social value of green consumption.

#### **V. International Promotion Value**

This project's success offers useful insights for other food delivery platforms in China and provides a concrete solution for guiding green behavior in related consumption scenarios worldwide, holding broad international promotion value.

#### Firstly, establishing a digital incentive mechanism.

By quantifying and rewarding individual low-carbon actions through digital tools, the project lowers the barrier for participation, increases public engagement, and motivates merchants to offer more low-carbon goods and services.

Secondly, encouraging cross-sector collaboration and standard development. Working with professional institutions to create carbon calculation standards for consumption scenarios provides an assessment tool for global carbon reduction actions and various consumption scenarios

**Thirdly, creating consumer carbon ledgers.** Digital carbon ledgers effectively record user data on low-carbon behaviors, facilitating green consumption while allowing for comparative analysis to optimize incentive measures continually.

Fourthly, linking green consumption with public welfare activities. Using carbon reduction points to support public projects adds dual motivation, enhances public enthusiasm, and expands the social impact of green consumption.

**Fifthly, fostering multilateral collaboration for carbon reduction.** By reinforcing a common understanding of carbon reduction, the project effectively brings together government, business, research institutions, and media to create a climate-centered ecosystem of partnerships.





# 分析 ANALYSIS

找到撬动改变的支点 FINDING LEVERAGE POINTS FOR CHANGE





### 引导公众参与绿色行动的经验分析与建议

全球气候变化危机日益严峻,极端天气频发、资源过度消耗、生物多样性丧失等问题严重威胁地球生态与人类可持续发展。研究显示,公众向绿色生活方式转型将大幅减少全球碳排放,为应对气候变化发挥重要作用。作为全球最大的能源消费和温室气体排放国之一,中国积极参与和引领全球气候治理,自 2020 年向世界宣示"双碳"目标以来,中国已经建立碳达峰碳中和"1+N"政策体系,推进全国碳市场建设,积极探索绿色低碳转型路径,通过多种方式引导和推动公众参与绿色低碳行动。

鼓励公众参与绿色低碳行动不仅有助于减缓气候变化,更能提高公众环保意识,发挥巨大正外部效应。面对绿色转型的迫切要求,为积极贡献"双碳"目标,大量中国企业通过机制设计和创新模式,在自身积极开展减碳实践的同时积极推动公众参与绿色低碳行动,取得了具有广泛影响力的成效,积累了宝贵经验,为全球绿色低碳转型带来了诸多启示。通过本报告所重点展示的7个创新解决方案,可以总结出企业有效引导公众参与绿色行动七大经验启示。

#### 一、设计触发绿色行动的激励机制

根据美国心理学家和行为科学家斯金纳、赫西、布兰查德等人提出的行为强化理论,即时 奖励和积分兑换机制可以有效提升公众的参与动机。设计奖励机制能够使绿色行为变得有回报 感,让公众在行为触发后立即体验到成就。

国网江西电力的"智·享节电"项目,通过用红包及时奖励节电行为的方式,鼓励上千万户次的家庭在用电高峰时段参与节能节电。蚂蚁森林、滴滴"碳元气"项目、闲鱼的"绿色打卡"项目均通过积分或虚拟能量的奖励机制,激励用户采取低碳行为。用户完成低碳行为后获得的积分可用于兑换公益项目支持或享受特定优惠,如蚂蚁森林的绿色能量支持植树造林,滴滴的"碳元气"则可兑换绿色出行券等。饿了么的"e点碳"项目通过消费者碳账户积分鼓励用户选择小份餐食、无需餐具等绿色洗项。

可见,企业在设计绿色行动机制时,可通过红包、积分、优惠券等方式触发公众低碳行为; 同时应注重奖励的即时性和可持续性,并能通过虚拟能量积累、积分兑换等手段鼓励用户持续参与。

#### 二、实现绿色行动环保成效的科学量化与可感知

基于严谨的方法学或权威专业机构所开发的计量标来量化环保效果,让公众看到自己行为改变带来的环境贡献度和环保价值,既能满足公众的知情权,又能增强信任度,从而使其更愿意持续参与绿色行动。

闲鱼通过与北京绿色交易所合作测算每次闲置物品交易的碳减排效益,使用户清楚自己在环保中的贡献; 滴滴的 "长青" 碳管理工具和 "武碳江湖" 平台通过实时监测用户出行的碳减排量,将环保效果数据化; 饿了么的 "e 点碳" 将绿色行为量化为减碳积分,使用户在平台上直观地看到其行为的减碳效果。这些项目均通过让用户感知绿色行动可量化的价值实现了行为激励。

可见,企业应借助物联网、大数据、区块链等技术,以及权威的碳减排量核算方法,构建 绿色行动的量化体系,使公众能实时追踪和查看自己绿色行为的环境效益,增加参与的满足感 和成就感,持续激励绿色行动。

#### 三、促进绿色行动的技术创新或模式创新

技术创新为公众绿色行动创造了新路径,不仅可以让参与过程更加便捷,也能够利用数字技术所提供的数据不断优化方案,使其更具针对性和有效性,有力促进绿色行为的识别和引导。

国网黄岩供电公司的解决方案是将消费券发放与家庭节能深度绑定,利用智能电表实现节能比对,通过电费节省和消费券奖励的双重激励,推动居民的节能降耗。滴滴利用"长青"碳管理工具精确核算出行减碳量,从而优化出行方案;饿了么的"e点碳"通过合作开发减碳量计算标准,实现了外卖平台低碳行为的量化可视。这些项目都在技术层面创新应用了物联网、智能化监控和数据分析等技术,让引导公众绿色行为更有效。

可见,企业可在绿色行动项目中引入大数据分析、智能硬件等创新技术,构建透明、科学的低碳管理系统,能够使绿色行动更加智能化和规范化。

#### 四、激发绿色行动的社交机制

根据社会心理学家亨利·泰杰费尔(Henri Tajfel)和约翰·特纳(John Turner)所提出的社会认同理论,社会认同由类化、认同和比较三个基本历程组成,群体互动和社交分享有助于将更多人"卷入"绿色行动之中,从而扩大绿色行为的传播与范围。通过社交平台带动用户分享绿色成就,可以形成"从众效应",提升公众参与意愿。

蚂蚁森林以好友互动和排行榜提升用户参与度;滴滴的拼车激励计划通过线上社群活动形成共享出行的潮流;闲鱼的"绿色打卡"项目通过用户分享打卡行为,使环保行动在社区内传播开来。社交互动在这些项目中增加了绿色行动的趣味性和公众认同感,推动了绿色行动的社会风潮。

可见,企业可以开发带有社交功能的绿色平台,鼓励用户记录和分享低碳行为,强化社交 互动;可利用排名、挑战赛等活动,让绿色行动更具竞争性和社交吸引力。





#### 五、降低绿色行动的参与门槛

降低行为门槛可以有效增加公众的行动意愿。根据行为经济学,小而简单的行动更易于公众接受 和坚持。便捷的操作使低碳行为更自然地融入公众的日常生活,减少实施绿色行为的"摩擦"。

饿了么的"e点碳"通过小份餐食、无需餐具等简单选项降低了公众参与的门槛;国网江西电力的"智·享节电"项目,通过后台数据比对,居民节电即可领取红包,这种简单便捷的奖励方式有效激励了居民参与节电;闲鱼的"绿色打卡"项目和国网黄岩供电公司的"居民节能降耗消费券"活动,则通过易操作的积分兑换机制,使低碳行为在公众日常生活中无缝融入,降低了公众参与绿色行动的门槛。

可见,企业在推动绿色行动时,应设计便捷的绿色选择,将低碳选项内嵌于用户日常行为,让操作 无感、激励有形;设置简单、参与门槛低的绿色行为,更有助于将无意识的选择转化为持续的环保行动。

#### 六、建立绿色行动与公益项目的关联

根据获得诺贝尔经济学奖的美国芝加哥大学教授理查德·塞勒所提出的心理账户(Mental Accouting)理论,即便是经济意义相同的行为,在不同心理账户下会引发不同的情感反应和后续行动。公众更愿意参与带有社会价值的行为。情感认同和公益关联可以增强用户的内在动机,使低碳行为更具情感价值和社会效益。

蚂蚁森林通过支付宝平台将绿色能量和生态公益结合,绿色能量能被直接用于公益植树项目;滴滴的"碳元气"项目让用户的减碳行为与公益捐赠挂钩;"武碳江湖"通过碳普惠平台,让用户的低碳行为与公益捐赠相连接。这些项目不仅关注减碳效果,还将减碳行动与公益行为结合,赋予绿色行动更高的情感价值。

可见,企业在设计低碳行动时可以结合公益项目,使公众的绿色行为与社会公益挂钩,赋予其更高的社会意义,提升公众的情感归属感,增加行为的持续性。

#### 七、构建促进绿色行动的伙伴关系

多方协作是推动绿色行动的关键因素,构建伙伴关系可以扩大资源支持和政策保障,多方协同不 仅能提高项目的可操作性,还为公众提供了更完善的参与渠道。

国网黄岩供电公司携手黄岩区政府推出的"居民节能降耗消费券"活动,推动政府出台了居民节能负荷补贴政策,并由政府设立消费券补贴资金池,进而解决了激励资金的来源问题;"武碳江湖"通过与腾讯、滴滴等企业合作,形成跨平台的碳普惠体系;国网江西电力的"智·享节电"项目则得到江西省政府的政策支持,形成政企合作的生态体系。

可见,企业在推动绿色行动时要注重借助政府政策激励或行业标准的支持,提高方案实施的有效 性和影响力,可联合政府、非营利组织和技术机构,实现跨部门资源整合,共同推动绿色低碳行为在 更大范围内得到推广,打造合作共赢的绿色行动网络。

通过以上七个维度的分析可以看到,中国在推动公众参与绿色低碳行动方面取得了显著成效。这些创新机制和成功经验为全球气候行动提供了有效范例。在未来的推广中,企业可以继续在激励机制、社交互动、公益关联等方面深化创新,并积极构建多方合作网络,以增强绿色行动的社会覆盖面和影响力。通过多角度、多渠道的推广,绿色低碳生活方式将逐渐成为社会共识,为全球可持续发展贡献更多创新智慧和解决方案。

## **An Analysis of Experiences and Recommendations for Encouraging Public Engagement in Green Actions**

With the global climate crisis worsening, marked by frequent extreme weather events, excessive resource consumption, and biodiversity loss, the ecological balance of Earth and sustainable human development are under severe threat. Research shows that a shift by the public towards a green lifestyle can significantly reduce global carbon emissions, thus playing a vital role in combating climate change. As one of the world's largest energy consumers and greenhouse gas emitters, China has actively participated in and led global climate governance. Since announcing its "dual carbon" (carbon peaking and carbon neutrality) goals in 2020, China has established a "1+N" policy system for carbon peaking and neutrality, advanced the national carbon market, and actively explored green, low-carbon transition pathways, using various methods to guide and encourage public participation in green, low-carbon actions.

Encouraging public involvement in green, low-carbon actions not only helps mitigate climate change but also raises environmental awareness, creating substantial positive externalities. Faced with the urgent demand for a green transition and in support of the "dual carbon" goals, numerous Chinese enterprises have designed mechanisms and innovative models to support their carbon reduction practices while actively promoting public involvement in green, low-carbon initiatives. These efforts have achieved influential results, accumulated valuable experience, and provided insights for global green, low-carbon transitions. From the seven innovative solutions highlighted in this report, seven key lessons can be summarized for enterprises to effectively guide public engagement in green actions.

#### 1. Designing Incentive Mechanisms that Trigger Green Actions

According to the behavioral reinforcement theory proposed by psychologists and behavior scientists such as Skinner, Hersey, and Blanchard, immediate rewards and point-exchange systems can effectively boost public motivation. Reward mechanisms can make green actions feel rewarding, allowing the public to experience a sense of accomplishment immediately after engaging in such behaviors.

The "Smart Energy Saving" project by the State Grid Jiangxi Electric Power Supply Co., Ltd. encourages millions of households to save electricity during peak periods through red packet rewards. Ant Forest, Didi's "Carbon Energy" project, and Idle Fish's "Green Check-In" project all use point-based or virtual energy reward mechanisms to encourage users to adopt low-carbon behaviors. Points earned from these behaviors can be redeemed to support public welfare projects or for special discounts. For instance, Ant Forest's green energy supports reforestation, while Didi's "Carbon Energy" points can be exchanged for green travel vouchers. Ele.me's





"e-Carbon" project uses a consumer carbon account points system to encourage users to select smaller meal portions, reduce cutlery use, and opt for other green options.

Enterprises designing green action mechanisms can encourage public low-carbon behavior through red packets, points, coupons, and other incentives. It is essential to ensure the immediacy and sustainability of rewards while encouraging continuous participation through methods such as virtual energy accumulation and points redemption.

### 2. Achieving Scientific Quantification and Perceptibility of Green Action's Environmental Impact

Using rigorous methodologies or measurement standards developed by authoritative professional institutions to quantify the environmental impact of green actions allows the public to see their contributions and environmental value. This approach meets the public's right to know, enhances trust, and makes them more willing to continue participating in green actions.

Idle Fish, in collaboration with China Beijing Green Exchange, calculates the carbon reduction benefits of each secondhand item transaction, enabling users to see their environmental contributions. Didi's "Evergreen" carbon management tool and "Wutan Jianghu" platform monitor users' travel carbon reduction in real-time, converting environmental impact into data. Ele.me's "e-Carbon" project converts green actions into carbon reduction points, allowing users to see the carbon reduction effect of their actions on the platform. All these examples provide users with quantifiable value in green actions, thus motivating behavior.

Enterprises should use technologies like the Internet of Things, big data, and blockchain to build quantification systems for green actions, allowing the public to track and view the environmental benefits of their green behaviors in real-time. This increases satisfaction and a sense of achievement, motivating the continuation of green actions.

#### 3. Promoting Technological or Model Innovation in Green Actions

Technological innovation offers new pathways for public green actions, making participation more convenient and allowing digital technology to provide data that continually optimizes the scheme for greater effectiveness in identifying and guiding green behavior.

The solution of State Grid Huangyan Power Supply Co. is to deeply integrate the issuance of consumer vouchers with household energy conservation, utilize smart meters to achieve energy-saving comparisons, and promote residents' energy saving and consumption reduction through the dual incentives of electricity bill savings and consumer voucher rewards. Didi's "Evergreen" tool accurately calculates travel-related carbon reduction, optimizing travel plans. Ele.me's "e-Carbon" uses a co-developed carbon reduction calculation standard to quantify low-carbon behavior on the delivery platform. These projects incorporate technological innovations such as loT, intelligent monitoring, and data analysis to enhance public guidance in green behavior.

Enterprises can integrate data analysis, smart devices, and other innovative technologies in green action projects to create transparent, scientific low-carbon management systems that make green actions more intelligent and standardized.

#### 4. Stimulating Green Actions through Social Interaction Mechanisms

According to the social identity theory by social psychologists Henri Tajfel and John Turner, social identity comprises the processes of categorization, identification, and comparison. Group interaction and social sharing can encourage more people to join in green actions, expanding the spread and scope of green behavior. Sharing green achievements on social platforms can create a "bandwagon effect" that boosts public willingness to participate.

Ant Forest increases user engagement through friend interactions and leaderboard rankings. Didi's carpooling incentive program forms a shared mobility trend through online community activities. Idle Fish's green check-in project encourages users to share their check-in actions, spreading environmental action throughout the community. Social interactions in these projects add fun to green actions and foster public recognition, driving a social trend of green behavior.

Enterprises can develop green platforms with social features, encouraging users to record and share their low-carbon actions, thus reinforcing social interaction. Using leaderboards and challenges can make green actions more competitive and socially appealing.

#### 5. Lowering the Barriers to Green Action Participation

Reducing the barriers to action can effectively increase public willingness to participate. According to behavioral economics, small and simple actions are easier for the public to accept and sustain. Convenient processes make low-carbon behaviors more naturally integrated into daily life, reducing the "friction" in adopting green behaviors.

Ele.me's "e-Carbon" project lowers public participation barriers through simple options like small-portion meals and reducing cutlery use. The "Smart Energy Saving" project by the State Grid Jiangxi Electric Power Supply Co., Ltd. uses backend data comparison, rewarding residents with red packets for saving electricity, effectively encouraging participation through simple and convenient incentives. Idle Fish's "Green Check-In" project and the State Grid Huangyan Power Supply Co., Ltd.'s "Resident Energy Saving Coupon" initiative use easy-to-operate point redemption mechanisms, seamlessly incorporating low-carbon actions into daily life and lowering public participation thresholds for green actions.

Thus, companies promoting green actions should design convenient green choices, embedding low-carbon options into users' daily behaviors, making the process seamless and incentives tangible. Simple, low-threshold green actions are more likely to transform unconscious choices into continuous environmental actions.

#### 6. Linking Green Actions with Public Welfare Projects

According to the "Mental Accounting" theory by Nobel Prize-winning University of Chicago Professor Richard Thaler, even economically equivalent behaviors elicit different emotional responses and subsequent actions depending on their mental accounting categories. The public is more willing to engage in actions with social value. Emotional identification and public welfare connections can enhance users' intrinsic motivation, adding emotional and social value to low-carbon behaviors.

#### 点燃绿色星火

Kindling the Green Sparks

Ant Forest, through the Alipay platform, combines green energy with ecological public welfare by allowing green energy to directly support reforestation projects. Didi's "Carbon Energy" project ties users' carbon reduction behaviors to public donations. "Wutan Jianghu" platform links users' low-carbon actions with public donations via its carbon credit platform. These projects not only focus on carbon reduction but also connect carbon reduction actions with public welfare, endowing green actions with higher emotional value.

Thus, companies designing low-carbon actions can link them with public welfare projects, connecting the public's green actions to social welfare, giving them higher social meaning, enhancing users' emotional attachment, and increasing action sustainability.

#### 7. Building Partnerships to Promote Green Actions

Multi-stakeholder collaboration is a key factor in promoting green actions. Building partnerships can broaden resource support and policy guarantees. Multi-party collaboration enhances project feasibility and provides the public with better participation channels.

The "Residential Energy Conservation and Consumption Reduction Consumer Vouchers" campaign launched by State Grid Huangyan Power Supply Co. in partnership with the Huangyan District Government has prompted the government to introduce a subsidy policy for residential energy-saving loads. Furthermore, the government has established a consumer voucher subsidy fund pool, thereby resolving the issue of the source of incentive funds. "Wutan Jianghu" platform, through partnerships with companies like Tencent and Didi, has created a cross-platform carbon credit system. The State Grid Jiangxi Electric Power Supply Co., Ltd.'s "Smart Energy Saving" project received policy support from Jiangxi Provincial Government, forming a government-enterprise ecosystem.

Thus, companies promoting green actions should leverage government policy incentives or industry standards to improve the effectiveness and impact of initiatives. Collaborating with government, non-profit organizations, and technical institutions can integrate resources across sectors, jointly promoting green, low-carbon behaviors on a larger scale and establishing a winwin network for green action.

An analysis of these seven dimensions shows that China has achieved remarkable results in promoting public participation in green, low-carbon actions. These innovative mechanisms and successful experiences provide effective models for global climate action. In future promotion efforts, companies can continue to innovate in incentive mechanisms, social interactions, and public welfare connections, while actively building multi-party cooperation networks to expand the social reach and influence of green actions. Through multi-dimensional, multi-channel promotion, green and low-carbon lifestyles will gradually become a social consensus, contributing more innovative insights and solutions for global sustainable development.





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