

PROPOSAL: The Oasis Global Challenge

Accelerating Green Technology: From Lab to Industrial Scale

1. Executive Summary

The **Oasis Global Innovation Platform** is a strategic initiative based in Shanghai, designed to bridge the gap between "innovation" and "industrialization."

While global innovation is accelerating, many green technologies fail to cross the "Valley of Death" due to a lack of verification scenarios and high engineering costs. The **Oasis Challenge** is not just a competition; it is a gateway. It connects global innovators with Shanghai's massive industrial supply chain and real-world application scenarios, helping teams move from "0 to 1" (breakthrough) to "1 to N" (scale).

2. The Core Concept: "Problem-Led, Market-Driven"

Unlike traditional competitions that focus on theoretical pitches, the Oasis Challenge is defined by:

- **Government Platform:** Supported by Shanghai authorities.
- **Corporate Challenges:** "Chain Owner" enterprises (industry giants) define the actual problems.
- **Global Solutions:** International teams provide the answers.

The goal is to serve as the "**First Station**" for global green tech to enter the Chinese market and achieve industrial verification.

3. Key Focus Areas (Competition Tracks)

We are soliciting solutions in seven critical "Hard Tech" sectors:

1. **Extreme Energy Efficiency:** Industrial energy saving.
2. **Negative Carbon Technologies:** CCUS, carbon removal.
3. **Digital Intelligence & Green Computing:** AI for decarbonization.

4. **Green Manufacturing:** Low-carbon production processes.
5. **Green Fuels:** Hydrogen, SAF, Methanol, etc.
6. **Circular Economy:** Recycling and waste-to-resource.
7. **Clean Energy:** Renewable energy generation and storage.

4. Why Participate? (Unique Value Proposition)

We invite partners to nominate teams because this platform offers resources that standard accelerators cannot:

- **Real-World Verification (The "Oasis Base"):** Winners gain access to the **Oasis Technical Verification Base** (e.g., Laogang Base). We provide standardized interfaces (water, electricity, gas) and industrial scenarios to test and verify technology in a real environment, not just a lab.
- **"Review is Due Diligence" (Funding Access):** The judging panel consists of technical heads from industry giants and partners from top VC firms (e.g., Sequoia, Hillhouse). The review process doubles as investment due diligence, leading to immediate potential for investment intent signing.
- **Market Contracts (Pre-Purchase Commitment):** We pilot a "Conditional Pre-Purchase" mechanism. If a technology passes verification with certified data, industry partners commit to purchasing the solution, securing early market revenue for the startup.
- **IP Protection:** We use a "Black Box" verification mode. Innovators only need to open data interfaces; core control units remain sealed. Results are certified by third parties, ensuring IP safety.

5. Eligibility & Process

- **Target Level:** Technologies must be at **TRL 4 (Lab Validation)** or higher.
- The Process:
 1. **Selection:** Screening based on industrial fit and commercial viability.
 2. **Verification:** Selected projects undergo data verification or small-sample testing.
 3. **Finals:** Evaluation of engineering plans and cost-control capabilities.
 4. **Landing:** Signing of investment and deployment agreements.

6. Support for International Teams

To ensure smooth cooperation for overseas teams:

- **Soft Landing:** "Oasis Talent Train" provides support for visas, work permits, and housing for top talent.
- **Financial Support:** "Oasis Vouchers" are available to subsidize the costs of testing, venue use, and data certification in Shanghai.

Next Steps for Partners:

We invite you to act as a nomination partner. Please recommend high-potential teams in the sectors listed above to participate in the upcoming Oasis Challenge.

Development Plan for the Five Key Regional Platforms of the “Oasis Challenge”

1. Huangpu District: New-Type Power System Innovation Platform

- **Industry Foundation:** Huangpu has strong advantages in finance and R&D. It is home to the headquarters of **Shanghai Electric Group** and over 5,000 high-tech enterprises and 600 financial institutions. The district has already launched several projects, including virtual power plants (VPPs) for commercial buildings, Residential Virtual Power Plant 2.0, building-level energy storage systems, and an integrated energy and carbon management platform. With efficiency upgrades completed in 122 key buildings, it has a solid foundation to support energy storage innovation through technology and finance.
- **Development Plan:** Establish a New-Type Power System Innovation Platform by partnering with China Three Gorges Group, Shanghai Electric Group, China Electrical Equipment Group, AISWEI, QingTao New Energy, Shanghai Jiao Tong University, and the Shanghai Institute for Financial Services Supporting the Real Economy, jointly develop and strategically deploy a New-Type Power System Innovation Platform, strengthening the enabling role of finance in supporting green electricity integration and energy storage peak-shaving services.
- **Application Scenarios:** Virtual power plant control for high-end buildings, distributed energy storage and peak-valley price arbitrage, smart energy and carbon management, green electricity traceability and trading mechanisms, and carbon finance innovation.

2. Hongkou District: Green Low-Carbon Core Industries and Biotechnology Development Platform

- **Industry Foundation:** Hongkou focuses on green low-carbon services. It hosts over 100 leading entities, including the **Shanghai Environment and Energy Exchange, China Three Gorges Group Shanghai Institute, Xiangsheng Technology**. The district has established a green low-carbon service alliance and a specialized business incubator that has nurtured over 10 high-potential startups in the biodegradable materials sector. Shanghai Hongkou Northern Science and Technology Innovation Biotechnology Industrial Park, in collaboration with Bluepha, a leading enterprise in the biodegradable plastics sector, has established the Tian Gong Kai Wu Industrial Innovation Incubation

Center. The initiative has nurtured more than ten SRDI (Specialized, Refined, Differential and Innovative) enterprises, including potential unicorns, and has developed a flagship-enterprise-led vertical incubation model.

- **Development Plan:** Establish a Green Low-Carbon Industrial Ecosystem Incubation Platform in Hongkou District, leveraging the strengths of Shanghai Hongkou Northern Science and Technology Innovation Biotechnology Industrial Park, Bluepha, the Shanghai Environment and Energy Exchange, the China Three Gorges Group Shanghai Institute, Xiangsheng Technology, Shanghai International Port Group (SIPG), and COSCO Shipping, to further advance five key sectors: green shipping, green finance, green trade, green technology, and carbon services.
- **Application Scenarios:** R&D of biodegradable materials, validation of microbial carbon sequestration technologies, low-carbon biological treatment solutions for solid waste and wastewater, and shore power applications for vessels and exhaust gas treatment technologies.

3. Xuhui District: User-Side Energy Storage and Smart Micro-grid Platform

- **Industry Foundation:** Xuhui's digital economy needs green energy support. The high concentration of AI industries and large-scale computing capacity creates a heavy load on the power grid. There is an urgent need for energy storage and smart micro-grids to balance demand. At present, Xuhui District, leveraging institutions such as Shanghai Jiao Tong University and SAIRI (Shanghai Artificial Intelligence Research Institute), is advancing AI-enabled applications in load forecasting, smart microgrid optimization, and virtual power plant dispatch.
- **Development Plan:** Create a **User-Side Energy Storage and Smart Micro-grid Demonstration & Training Platform**, leveraging Shanghai Jiao Tong University, SAIRI (Shanghai Artificial Intelligence Research Institute), Shanghai Yunjin Smart Construction Technology, Shenqin Xinneng, and Juxin Haiju, among other partners. While accelerating the development of the artificial intelligence industry, the district will promote the two-way empowerment between AI technologies and user-side energy storage and smart microgrid systems, establishing a benchmark green computing infrastructure base.
- **Application Scenarios:** User-side energy storage dispatch, smart microgrid operation and control training, energy storage supporting applications for

computing centers, AI-enabled intelligent control of virtual power plants, and integrated distributed solar-plus-storage applications.

4. Jiading District: NEV Full Life-Cycle Value Chain and Battery Recycling Platform

- **Industry Foundation:** Jiading District possesses strong endowment advantages in the New Energy Vehicle (NEV) industry. Shanghai International Automobile City has established a comprehensive industrial chain encompassing complete vehicle manufacturing, core components, R&D and testing, as well as trade and related services. Universities such as Tongji University and Shanghai University are advancing green and low-carbon technological innovation and commercialization across the full NEV value chain. Leading enterprises such as Wei Xiang Zhong Yi are focusing on breakthroughs in power battery performance enhancement, safety management and control, and recycling technologies. At present, Jiading District is developing second-generation all-solid-state batteries and has established a demonstration base for power battery recycling.
- **Development Plan:** Establish a Green Innovation Center for NEV Power Batteries in Jiading District, leveraging the industrial foundation of Shanghai International Automobile City and collaborating with Tongji University, Shanghai University, Wei Xiang Zhong Yi, SAIC-QingTao, and Zhiyun New Energy, among other partners, to support the green upgrading of the NEV industrial chain.
- **Application Scenarios:** Battery dismantling and reuse, battery material regeneration and purification, energy storage applications utilizing retired batteries, solid-state battery pilot-scale testing and industrial validation, and green manufacturing of auto parts.

5. Laogang Industrial Zone: Resource Recycling Platform

- **Industry Foundation:** Laogang Industrial Zone possesses large-scale solid waste treatment capacity. As the core platform for the city's circular economy development, it has, in collaboration with Tongji University, East China University of Science and Technology, and Shanghai Chengtou Group, among other leading universities and enterprises, initially established an integrated system for solid waste treatment and resource recovery. To date, it has developed the world's largest deep wet-waste resource recovery base, a demonstration cluster for coordinated solid waste treatment and resource

utilization, and key projects such as the full-carbon directional conversion of biogas into green methanol.

- **Development Plan:** Build a **Circular Economy and Resource Utilization Demonstration Center**. Relying on institutions such as Tongji University, East China University of Science and Technology, Shanghai International Port Group, Shanghai Chengtuo Group, Shanghai Environment, and Fujie Technology, the center will be jointly established to explore scalable and commercially viable business models in the circular economy sector.
- **Application Scenarios:** deep resource recovery of wet waste, collaborative waste treatment and recycling, green fuel production and storage, and industrial waste recycling.

绿洲全球挑战赛 (Oasis Global Challenge)

—— 全球绿色科技：从实验室走向工业化的“首站”

1. 核心愿景

“绿洲全球创新平台”致力于解决全球绿色科技面临的共性难题：创新成果多，但验证场景少、工程化难度大。我们不只举办一场比赛，而是构建“全球技术创新 + 上海场景实证”的快速通道。通过政府搭台和链主企业出题，我们将全球前沿技术引入上海完备的工业体系中，帮助创新团队跨越“死亡之谷”，实现从“0 到 1”的突破走向“1 到 N”的规模化应用。

2. 赛事核心亮点：为何参与？

与传统的“路演型”比赛不同，绿洲挑战赛提供实实在在的落地资源：

- **场景实证（不仅是奖金，更是验证）：** 获奖项目将进入“绿洲技术实证基地”（如老港基地），利用我们提供的标准化水、电、气接口和真实工业场景进行技术验证。我们将运行数据作为融资与采购的核心依据。
- **订单承诺（预先锁定市场）：** 我们推行“有条件预先采购”机制。在实证数据经过第三方权威认证达标后，链主企业承诺按协议采购，直接为技术方打开市场大门。
- **投资直通（评审即尽调）：** 赛事评审团由行业龙头企业的技术负责人和红杉、高瓴等顶级投资机构组成。评审过程即是投资前的尽职调查，优质项目可现场签署投资意向书。
- **知识产权保护（“黑盒”验证）：** 针对国际团队的顾虑，我们实行“结果导向型”验证。技术方只需开放数据接口，核心控制单元保持封闭，且数据物理隔离，确保技术秘密安全。

3. 赛道设置 (七大领域)

面向全球征集处于 **TRL4（实验室验证）及以上**，具备工业化放大潜力的技术方案。聚焦以下七大前沿赛道：

1. 极致能效 (Industrial Energy Efficiency)
2. 负碳技术 (Negative Carbon Technologies / CCUS)
3. 数智化与绿色算力 (Digital Intelligence & Green Computing)
4. 绿色制造 (Green Manufacturing)
5. 绿色燃料 (Green Fuels: Hydrogen, Methanol, SAF)
6. 循环经济 (Circular Economy)
7. 清洁能源 (Clean Energy)

4. 落地支持与激励政策

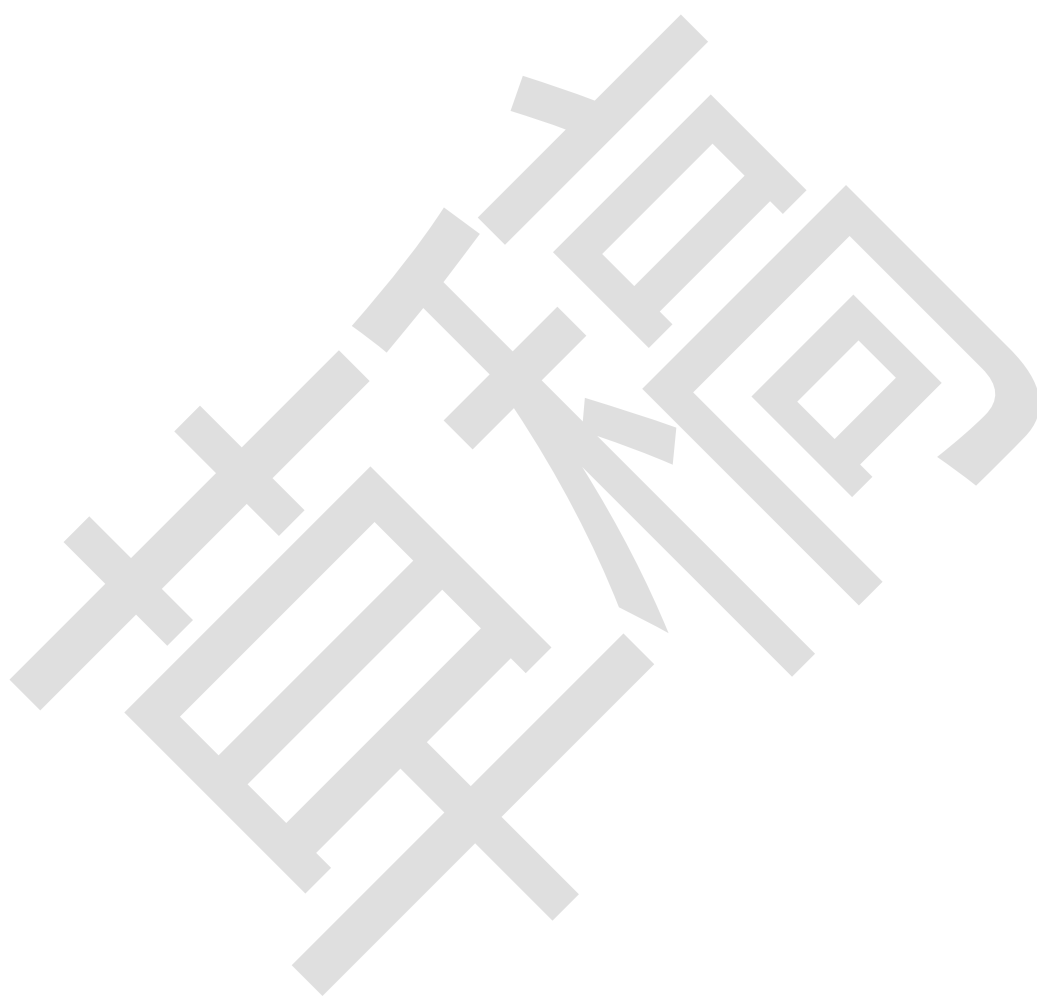
为确保全球团队在上海顺利落地，我们提供全方位的“软硬件”支持：

- **资金支持（“绿洲转化券”）：** 设立专项资金，补贴企业在中国开展技术实证、检验检测和场地使用的成本。
- **风险分担：** 引入“绿色技术实证保险”，对验证过程中可能出现的设备风险提供保障。
- **人才服务（“绿洲人才直通车”）：** 为落地的高层次国际人才提供签证办理、永久居留申请、人才公寓直租及子女教育等便利化服务。
- **资质认证：** 协助落地企业申报“专精特新”企业等各类技术中心认定，享受税收优惠与专项奖励。

5. 合作邀约

我们诚挚邀请全球合作伙伴作为**推荐机构**，提名优秀的初创企业或研发团队参与“绿洲全球挑战赛”。

我们寻找的是：拥有硬核技术，正在寻找工业级验证场景、规模化生产能力以及进入中国市场机会的全球创新者。



“绿洲挑战赛”五大重点区域平台建设规划

1. 黄浦区：重点围绕新型电力系统创新平台建设开展

产业基础：黄浦区具有金融与科技研发的集聚优势。国内高端装备制造龙头——**上海电气集团总部**位于黄浦区，区域内汇聚了高新技术企业 5000 余家、持牌金融机构 600 余家。目前，黄浦区已落地商业建筑虚拟电厂、居民虚拟电厂 2.0、楼宇储能、综合能碳管理平台等多个项目，完成 122 栋重点楼宇的能效提升改造，具备以科技和金融赋能新型储能科创平台的基础。

发展规划：在黄浦区打造新型电力系统创新平台，依托三峡集团、上海电气集团、中国电气装备集团、爱士惟、清陶新能源、上海交通大学、上海金融服务实体经济研究院等单位，共同布局新型电力系统创新平台，强化金融对绿电支撑、储能调峰的赋能作用。

落地场景：高端楼宇虚拟电厂聚合调控、楼宇分布式储能与峰谷套利、综合能碳一体化智慧管理、绿电溯源交易与碳金融创新等。

2. 虹口区：重点围绕绿色低碳支柱产业与生物技术产业建设开展

产业基础：虹口区以绿色低碳服务为特色赛道。区域内聚集了上海环交所、三峡上海院、象生科技等百余家龙头企业、科研院所及服务机构，建立了北外滩绿色低碳服务产业联盟。

北科创孵化器与生物可降解塑料领域龙头企业蓝晶微生物打造天工开物产业创新孵化中心，培育了 10 余家专精特新及潜在独角兽企业，构建了龙头企业垂直孵化模式。

发展规划：在虹口区构建绿色低碳产业生态孵化平台，依托北科创、蓝晶微生物、上海环交所、三峡上海院、象生科技、上港集团、中远海运等单位，进一步发展绿色航运、绿色金融、绿色贸易、绿色技术和碳服务五大产业。

落地场景：生物可降解材料研发与示范应用、微生物碳汇技术验证、生物处理固废 / 废水低碳解决方案、船舶岸电应用与尾气治理等。

3. 徐汇区：重点围绕用户侧储能实训平台、智能微电网建设开展

产业基础：徐汇区数字经济发展需要绿色支撑。徐汇区人工智能产业集聚度高、发展势头强劲，超大规模算力对区域负荷调节与高效用能构成挑战，亟待通过用户侧储能及智能微电网等手段实现就地消纳、削峰填谷。目前，徐汇区依托上海交通大学、上海市人工智能研究院等单位，正在推动 AI 赋能负荷预测、智能微电网优化、虚拟电厂调度等场景。

发展规划：在徐汇区打造用户侧储能与智能微电网实训平台，依托上海交通大学、上海市人工智能研究院、上海云锦智慧建设科技、申沁鑫能、聚信海聚等单位，在加速发展人工智能产业的同时推进 AI 与用户侧储能与智能微电网实训平台的双向赋能，打造绿色算力底座标杆。

落地场景：用户侧储能调度、智能微电网运行控制实训、算力中心储能配套应用、AI+虚拟电厂智能调控、分布式光储一体化应用等。

4. 嘉定区：重点围绕新能源汽车全生命周期价值链、动力电池回收产业建设开展

产业基础：嘉定区新能源汽车产业禀赋优势明显。上海国际汽车城具备整车制造、核心零部件、研发检测、贸易服务等全链条产业，同济大学、上海大学等高校围绕新能源汽车全链条开展绿色低碳技术创新与成果转化，伟翔众翼等优质企业聚焦动力电池性能提升、安全管控及循环回收技术攻关。目前嘉定区正在开发二代全固态电池，落地动力电池回收示范基地。

发展规划：在嘉定区打造新能源汽车动力电池绿色创新中心，依托上海国际汽车城产业基础，携手同济大学、上海大学、伟翔众翼、上汽清陶、炙云新能源等单位，打造新能源汽车动力电池绿色创新中心，助力新能源汽车产业链绿色升级。

落地场景：动力电池回收拆解与梯次利用、动力电池再生与材料提纯、退役电池储能场景应用、固态电池中试与产业化验证、汽车零部件绿色循环制造等。

5. 老港工业区：重点围绕资源循环利用平台建设开展

产业基础：老港工业区具备固废规模化处置能力。老港工业区作为本市循环经济核心载体，依托同济大学、华东理工大学、上海城投集团等高校与龙头企业，初步构建了固废处置与

资源化体系。目前，已建成全球最大规模湿垃圾深度资源化基地、固废协同处置与资源化利用示范集群，落地沼气全碳定向转化制绿色甲醇等重点项目。

发展规划：在老港工业区打造循环经济与资源化利用示范中心，依托同济大学、华东理工大学、上港集团、上海城投集团、上海环境、复洁科技等机构，共同布局循环经济与资源化利用示范中心，探索循环经济领域规模化盈利模式。

落地场景：湿垃圾深度资源化利用、固废协同处置与再生利用、绿色燃料制备与储运、工业固废资源化回收等。