



汇聚金融力量,创新投融资模式

Gathering Financial strength, innovative investment and financing model

-金融联盟助力构建非洲能源互联网

Financial Alliance Helps Build African Energy Internet

中国民生银行 集团金融事业部/战略客户一部 王秀新

Strategic Client Department of CMBC,Xiuxin WANG 2019年11月 November 2019

目录



一、全球能源互联网金融联盟情况简介 Introduction to the Globe Energy Internet Finance Alliance



二、非洲能源互联网的构建需要投融资模式创新 Innovation in financing a investment models required for Africa's energy Internet construction



三、关于投融资模式创新的几点建议
Suggestions on innovation of investment and financing models



全球能源互联网金融联盟成立于今年9月26日,与全球能源互联网装备联盟、大学联盟和智库联盟组成合作组织的四大联盟。目前首批创始成员有23家,包含了多家中资商业银行、多家类主权基金、产业投资基金、财务公司、多家外资银行以及世界知名的会计师事务所,比如安永、毕马威、普华永道等。目前其他金融机构会员也在积极踊跃的申请加入金融联盟,我们也欢迎非洲的金融机构或对参与非洲能源互联网投融资的其他金融机构参加金融联盟。

The Global Energy Internet Finance Alliance was established on September 26 this year, and it has formed four alliances with the Global Energy Internet Equipment Alliance, the University Alliance and the Think Tank Alliance. At present, there are 23 founding members, including a number of Chinese-funded commercial banks, a number of sovereign funds, industrial investment funds, financial companies, a number of foreign banks and world-renowned accounting firms, such as Ernst & Young, KPMG and Pwillon. Road and so on. At present, members of other financial institutions are actively applying to join the financial alliance. We also welcome African financial institutions or other financial institutions involved in the African energy Internet investment and financing to participate in financial alliances.

联盟是全球能源互联网发展合作组织独立发起成立,作为合作组织框架下的交流合作机制,其各项工作由合作组织统一管理。联盟旨在通过构建资源共享、优势互补、多元开放的合作平台,汇聚全球金融机构,对全球能源互联网相关政策、模式和机制进行研讨,促进金融创新,分享实践经验,发掘商业机会,推动全球能源互联网建设,共同分享全球能源互联网发展红利。

The Alliance is independently established by the Global Energy Internet Development Cooperation Organization(GEIDCO). As a communication and cooperation mechanism under the framework of GEIDCO, its work is managed by GEIDCO. The Alliance aims to bring together global financial institutions by building resource sharing, complementary advantages, and multiple open cooperation platforms to discuss global energy Internet related policies, models and mechanisms, promote financial innovation, share practical experience, explore business opportunities, and promote global energy Internet construction, sharing the global energy Internet development dividend.

二、非洲能源互联网的构建需要投融资模式创新 Innovation in financing a investment models required for Africa's energy Internet construction 目前,中国资本是非洲电力行业投融资的主力军。在一带一路倡议下,不 论是企业还是金融机构,都在非洲投资了多个电力项目。但这些项目相对孤立, 没有互联互通。非洲的清洁能源发展潜力巨大,特高压+清洁能源+智能电网 的技术路径切实可行,但构建洲内和跨洲的能源互联网,我认为需要解决三个 方面的关键问题:

At present, China's capital is the main force in the investment and financing of the African power industry. Under the Belt and Road Initiative, both companies and financial institutions have invested in multiple power projects in Africa. However, these projects are relatively isolated and have no interconnection. Africa has a huge potential for clean energy development. The technical path of UHV+clean energy+smart grid is feasible, but to build an energy Internet in the continent and across continents, I think there are three key issues that need to be addressed:



- 1、谁来投资电站?
- 2、负荷端与电站建设是否匹配?是在国内消纳、跨国消纳还是跨洲 消纳
- 3、经济可行性如何?投融资风险如何?商业机构是否愿意参与?
- 1. Who will invest in the power station?
- 2. Does the market end match the power station construction? Domestic consumption, transnational consumption or transcontinental consumption
- 3. What is the economic feasibility? What is the risk of investment and financing? Are businesses willing to participate?

对于投资人和金融机构来讲,风险和收益是永恒的话题。非洲内部清洁能源分部不均衡,负荷端与清洁能源端相距较远。构建非洲能源互联网》首先要研究非洲电源点和负荷端的整体规划,可以让负荷端参与到电源点和输变电项目的建设中,而不是孤立的研究单个电源点的建设和开发。

For investors and financial institutions, risks and benefits are an eternal topic. Africa's internal clean energy division is uneven, and the load side is far from the clean energy end. To build an African energy Internet, we must first study the overall planning of power points and load terminals in Africa, so that the load side can participate in the construction of power points and power transmission and transformation projects, rather than researching the construction and development of individual power points in isolation.

从金融机构角度,我们建议有意愿参与能源互联网的国家要步调一致,针对能源互联网这一宏伟事业出台政策,给予特殊支持。参与能源互联的企业和国家,要建立合理的风险和收益分配体制,谁参与谁受益,谁贡献大,谁受益多。合作组织提出的电-矿-冶-工-贸一体化发展模式很好地体现了上述理念。

From the perspective of financial institutions, we suggest that countries that are willing to participate in the energy Internet should be consistent, and give special support to the grand policy of the energy Internet. Enterprises and countries involved in energy interconnection must establish a reasonable risk and income distribution system. Whoever participates in who benefits, who contributes greatly, and who benefits more. The development model of electricity-mineral-metallurgy-work-trade integration proposed by the cooperative organization is a good example of the above concept.

我们看到,合作组织之前已经发布过非洲能源互联网的规划发展报告,可以为各个非洲国家和企业及金融机构的合作提供参考。同时,洲内和洲外互联均涉及跨国,不同国家的电力体制、监管政策、税收政策、法律政策都需要协调。

We have seen that the cooperative organization has previously published the planning report on the development of the African Energy Internet, which can provide reference for cooperation between African countries and enterprises and financial institutions. At the same time, intra-continental and extra-continental interconnections involve transnationals. The power systems, regulatory policies, taxation policies, and legal policies of different countries need to be coordinated.

通常项目融资分为股权部分和债权部分。通常股权部分由产业投资人或各类投资基金参与,债权部分主要依托商业银行等金融机构,贷款期限可能长达10-20年。

Usually project financing is divided into equity and credit. Usually, the equity part is participated by industrial investors or various types of investment funds. The creditor's part mainly relies on financial institutions such as commercial banks, and the loan term may be as long as 10-20 years.

在投融资模式创新方面,除了买方信贷、卖方信贷外,对股东实力特别强, 经济效益特别好的项目,我们可以探讨无担保无追索或者有限担保有限追索的 项目融资。

In terms of investment and financing model innovation, in addition to buyer credit and seller credit, we can explore project financing with no guarantees or recourses with limited guarantees for projects with particularly strong shareholder strength and particularly good economic returns.

股权方面,我们可以引入丝路基金、中非发展基金、中非产能合作基金以及全球的各类投资基金与产业投资人一起解决资本金不足的问题以及共担风险共享收益。我们还可以设计多层结构,利用资本市场在项目商业运营后实现部分股权的转让和退出,如果能形成灵活的股权交易模式,将吸引更多的私人投资参与非洲能源互联网建设。

In terms of equity, we can introduce Silk Road Fund, China-Africa Development Fund, China-Africa Capacity Cooperation Fund and various types of investment funds around the world to work with industrial investors to solve the problem of insufficient capital and share risk-sharing benefits. We can also design a multi-layer structure and use the capital market to realize the transfer and withdrawal of part of the equity after the commercial operation of the project. If a flexible equity trading model can be formed, it will attract more private investment to participate in the construction of African energy Internet.

针对非洲国家主权债务金额较大,对项目融资难以提供担保的情况。我们可以探讨PPP和BOT等融资模式,希望相关国家政府提供良好的政策支持。对项目的经济可行性进行充分论证,吸引有实力的投资人,引入全球各类投资基金、多边金融机构和国际化程度高的国际银行参与项目融资,不同的视角分析研究项目风险和收益,共担风险共享收益。

In view of the large amount of sovereign debt in African countries and the difficulty in providing guarantees for project financing, we can explore financing models such as PPP and BOT. We hope that relevant governments will provide good policy support and fully demonstrate the economic feasibility of the project. Investors of strength introduce various types of investment funds, multilateral financial institutions and international banks with high internationalization to participate in project financing. Different perspectives analyze project risks and benefits, and share risk-sharing benefits.





- 1、加强顶层设计,优化相关国别的电力投融资政策,在税收、电力进出回贸易、项目审批等方面提供便利条件。
- 1. Strengthen the top-level design, optimize the power investment and financing policies of relevant countries, and provide convenient conditions in tax, power import and export trade, project approval, etc.
- 2、电源端要积极参与电源点及输变电项目的投资建设,共建共享投资成果。
- 2. The power station end shall actively participate in the investment and construction of power supply station and power transmission and transformation projects, and jointly build and share the investment results.
- 3、引入多边金融机构、各类投资基金,扩大资金来源,为项目投资提供充分 的资金保障。
- 3. Introduce multilateral financial institutions and various investment funds, expand the source of funds, and provide sufficient financial guarantee for project investment.

- 4、中国与项目所在国、以及第三国合作开发共同参与能源互联网建设,有利于推动项目落地进度。
- 4. China and the host country of the project, as well as the third country, jointly participate in the development of energy Internet, which is conducive to the progress of project implementation.
- 5、积极发挥各国ECA机构以及MIGA的作用,为项目投融资化解风险。
- 5. Actively play the role of ECA institutions and MIGA in various countries to resolve risks for project investment and financing.

- 6、创新投资融资模式,在项目规划设计时充分考虑项目的资金来源以及投资者对投资收益率,银行对融资利率的期望值,对经济可行性好的项目,降低对主权担保的要求,可以采用PPP以及BOT模式解决项目融资。
- 6. Innovate the investment and financing mode. When planning and designing the project, fully consider the capital source of the project, the investor's expectation on the investment return rate, the bank's expectation on the financing interest rate, the project with good economic feasibility, and reduce the requirement on sovereign guarantee. PPP and BOT mode can be used to solve the project financing.



謝謝 THANKS