

Summary of the China's Electric Power Sector Transformation 3rd webinar (21 September 2022)

中国电力行业转型 第三届网络研讨会总结 (2022年9月21日)

The ambitious power reforms China has been undertaking for more than two decades have seen a significant acceleration since the 2021 power shortages, with notably the publication earlier this year of a high-level guidance to build a unified system of power markets by 2030. In parallel, the power outages this summer in Sichuan province once again highlighted the concerns for electricity security in power systems and the benefits of continuous international experience sharing on these topics.

中国在过去二十余年中所进行的艰巨的电力改革自 2021 年电力短缺以来已显著加速，尤其是在今年早些时候，国务院发布了关于 2030 年前加快建成全国统一电力市场的高级别指导意见。同时，今夏四川省的电力短缺再一次强调了对电力系统的安全性的担忧，以及在这些问题上的国际经验分享的益处。

In this context and following the success of the previous webinars in [2020](#) and [2021](#), the 3rd webinar in the China's Electric Power Sector Transformation webinar series was organized on 21 September 2022, co-hosted by the IEA, the China Electric Power Planning & Engineering Institute (EPPEI), the Royal Danish Embassy in Beijing and Danish Energy Agency (DEA) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, with support from the European Commission. The webinar convened more than 160 participants from governmental institutions, state-owned enterprises, academic and research institutions, embassies and international organisations, private enterprises and industry associations. It was opened by Mr. Thomas Østrup Møller, Ambassador of Denmark to China, Ms. Xu Xin, Division Director in the Department of Legislative Affairs and Energy Sector Restructuring of China's National Energy Administration (NEA), and Mr. Jiang Shihong, Vice President of EPPEI.

在此背景下，在 [2020 年](#)与 [2021 年](#)网上研讨会的成功举办的基础上，国际能源署（IEA）、电力规划设计总院（EPPEI）、丹麦王国驻华大使馆、丹麦能源署（DEA）和德国能源合作机构（GIZ）在欧盟委员会的支持下共同于 2022 年 9 月 21 日主办了第三届中国电力行业转型网上研讨会。来自政府机构、国有企业、学术与研究机构、使馆与国际组织、民营企业和工业协会的超过 160 名代表参与本次研讨会。丹麦王国驻华大使马磊、国家能源局法制和体制改革司处长徐欣、电力规划设计总院副院长姜士宏致开幕词。

During the first session, speakers from EPPEI, GIZ, Energinet and IEA discussed the following key issues:

在研讨会的第一部分中，来自电力规划设计总院、德国能源合作机构、Energinet 公司和国际能源署的嘉宾讨论了以下关键议题：

- the latest developments in China's power sector, in the context of an increasing proportion of renewable power supply and the growing role of power market mechanisms;
中国电力行业的最新进展：可再生能源供给占比不断提升，电力市场机制作用加强
- the implementation of flexibility solutions in Germany (e.g. short-term power markets, bidirectional trading, demand-side response) and to what extent they can be applied to the Chinese case;
德国电力灵活性解决方案的实施（如短期电力市场，双向交易、需求侧响应）以及这些方案在何种情况下适用于中国

- the challenges of balancing power systems with high shares of variable renewable energy, with the example of Denmark;
平衡高波动性可再生能源占比电力系统的挑战：以丹麦为例
- the synergy between carbon and power markets in driving the low-carbon and cost-efficient transition of the Chinese power system.
驱动中国电力系统低碳与高成本效益转型，实现碳市场与电力市场协同

The moderated panel then gave the floor to experts to discuss their vision on the contribution of a unified system of power markets to clean, secure and affordable electricity. The benefits of integrated power markets were underlined, in terms of electricity security and economic efficiency. Different market designs were compared, China currently having a zonal (provincial) approach like in Europe, with progress yet to be made in the optimal use of grid infrastructure through markets coupling. In the context of the energy crisis in Europe, the need for reforming some features of the current power markets was pointed out. The issues of designing mid-to-long term capacity mechanisms, diversifying sources of energy and bidding systems as well as incentivizing the deployment of new energies were also addressed in the Chinese case. Finally, the panel discussed the further development of China's Emission Trading System (ETS) and green power trading, which generated interest from the audience with several questions asked.

第二部分的有组织专题讨论邀请了各参会专家分享各自对于统一电力市场体系对清洁、安全、可负担电力作用的相关理解。统一电力市场的优势突出体现在电力安全和经济效益上。研讨会对比了不同的市场设计：中国目前采取了欧洲式的区域（省级）的模式，而在通过市场耦合实现电网基础设施最优化使用的方面仍有进步空间。在欧洲能源危机的背景下，专家们也指出了改革现有电力市场中部分要素的需要。对中国电力行业而言，设计中长期容量机制，实现能源与竞价体系多元化以及激励新能源部署是重点讨论的话题。最后，专家们也讨论了广受关注的中国碳排放交易体系（ETS）和绿电交易等话题，并解答了与会者的相关问题。

This webinar showed that transforming the power sector is a fundamental enabling condition for both emission reduction and energy security in China. As an intergovernmental organisation covering the full-spectrum of energy issues, the IEA has been involved in China's power system transformation for many years, with notably the publication of the [China Power System Transformation](#) report in 2019. To continue IEA's work on China's Power Sector Transformation, another report aiming to support the design of spot markets at the national level will be published by the IEA during Spring 2023.

本次研讨会体现了电力行业转型作为中国削减排放与保护能源安全的基础与前提的重要性。作为广泛研究各类能源议题的政府间组织，国际能源署已参与中国电力行业转型多年，并于 2019 年出版了[《中国电力系统转型》](#)报告。为丰富对中国电力行业转型的贡献，国际能源署计划于 2023 年春季出版一份新报告，以支持全国电力现货市场的设计。

The agenda of the webinar with the video recording and presentations can be found at this [link](#).

本次会议的议程、视频录像与演示文稿可由[此处](#)参阅。