



北京大学国家发展研究院
National School of Development

Transition Finance and Coal Power Transition in China

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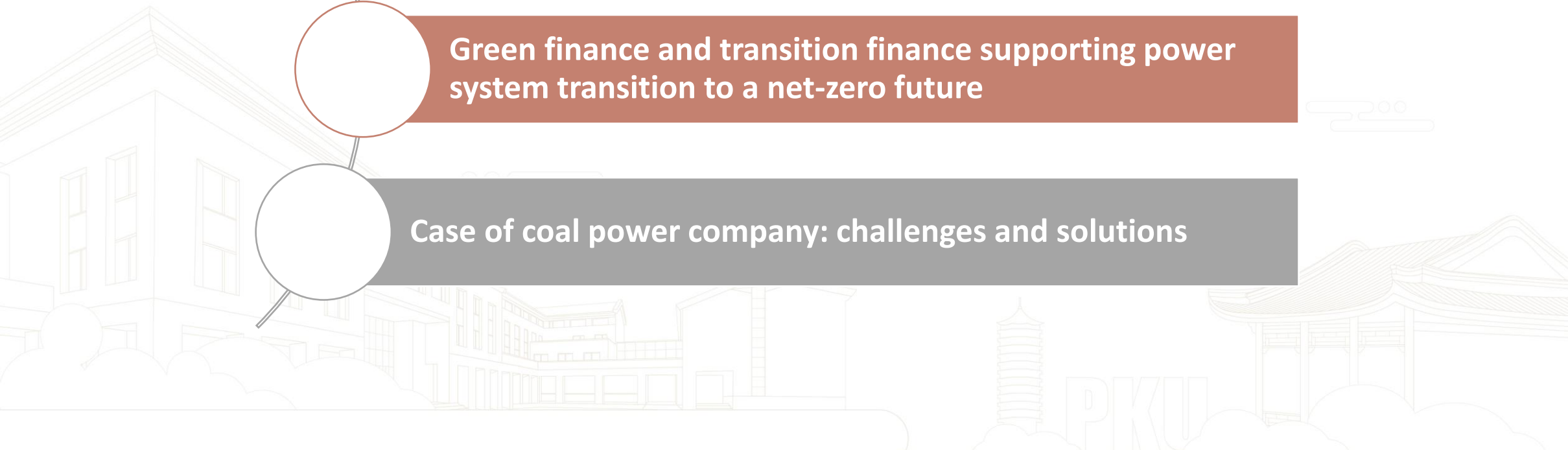
Policy planning and recent trend of coal power in China



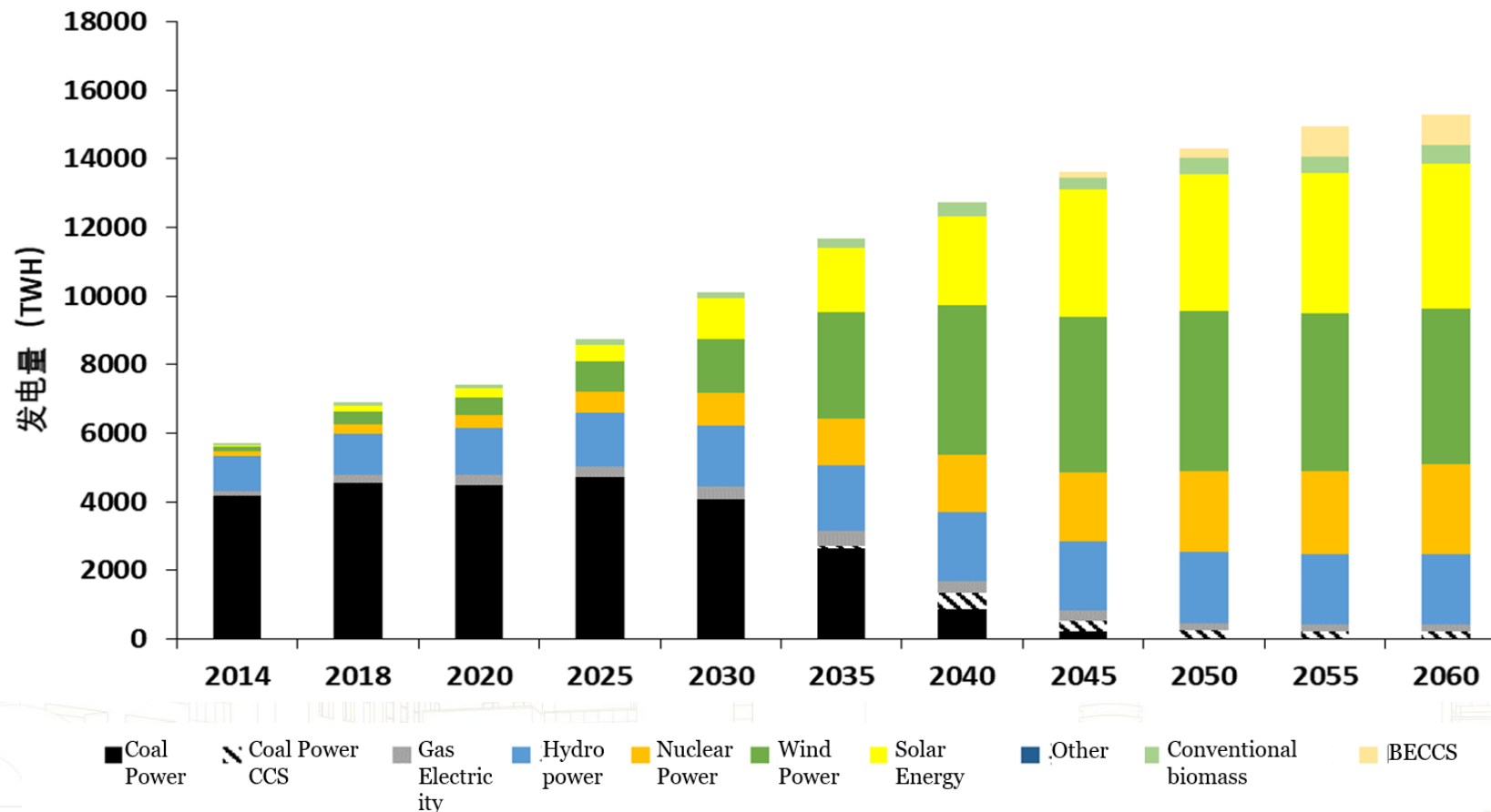
Green finance and transition finance supporting power system transition to a net-zero future



Case of coal power company: challenges and solutions



Renewables to account for 95% of China's power supply in 2045



Source: Tsinghua Energy Institute

2022/01

The 14th Five-Year Plan for Modern Energy System

NDRC

- **Coal power: supporting and adjustive role**
 - Ensure power supply & reduce pollution and emission
- **Clean and efficient use of coal**
 - Control the growth of coal consumption
 - All newly-built coal power units should meet ultra-low emission standard

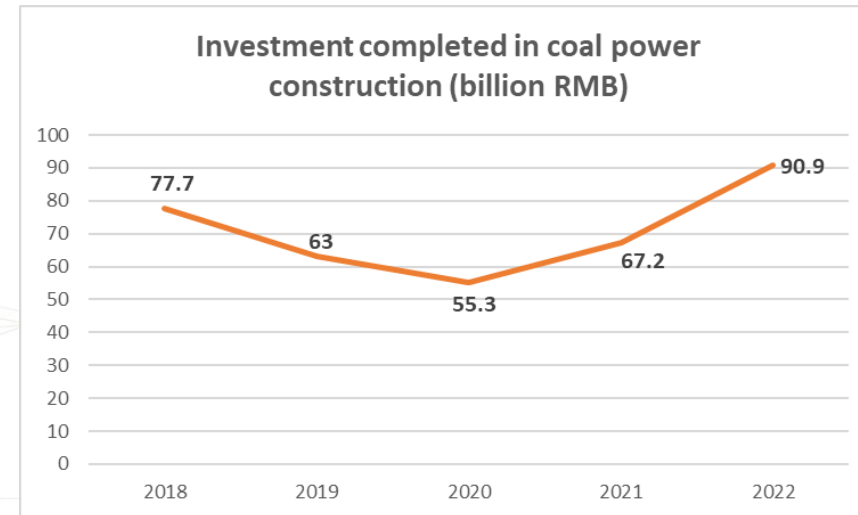
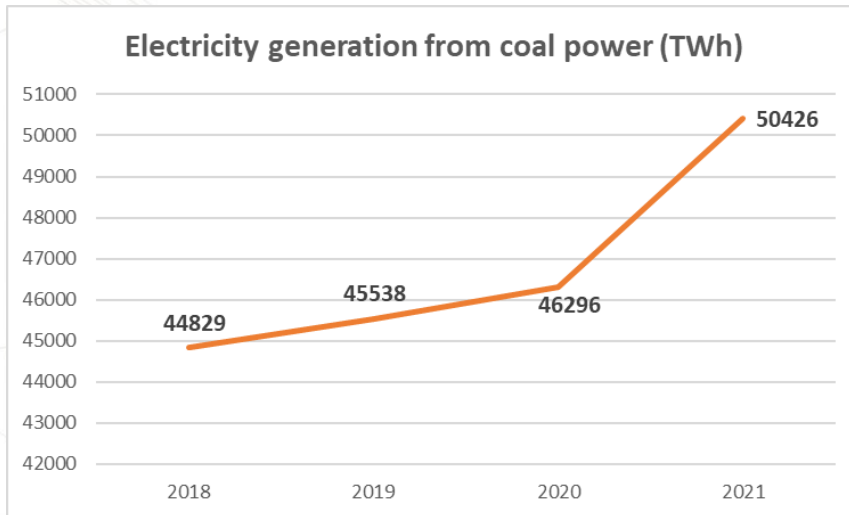
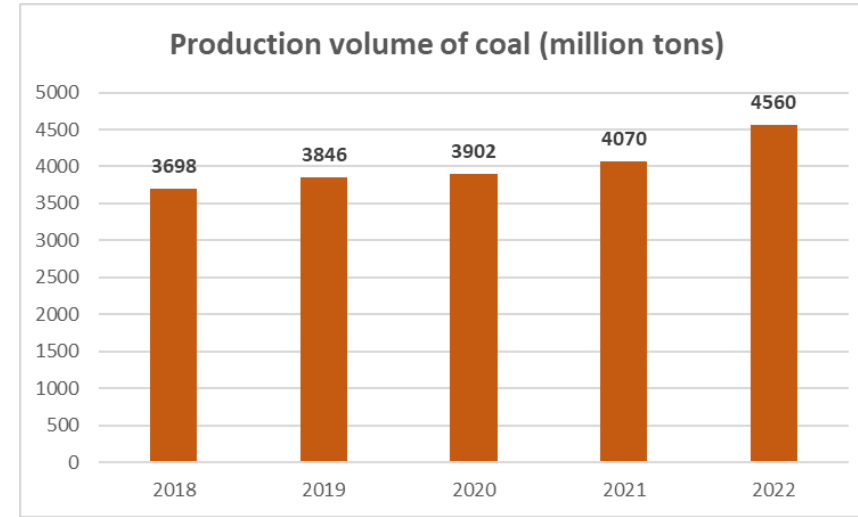
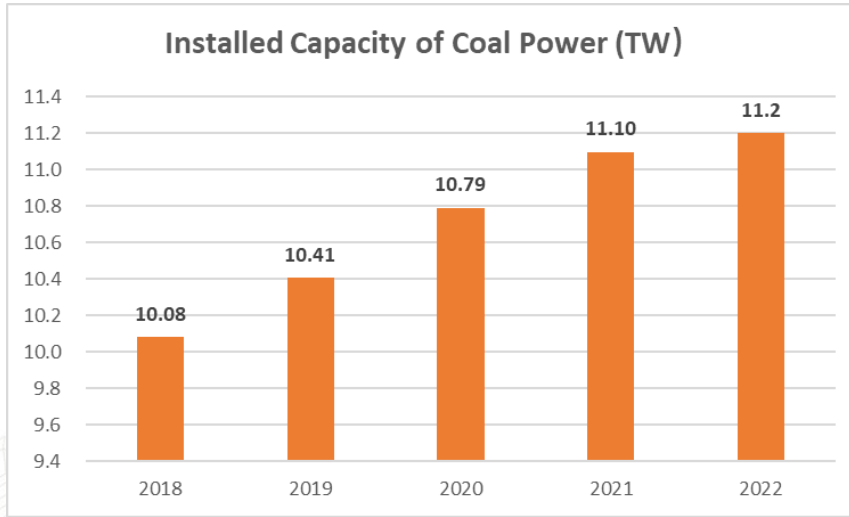
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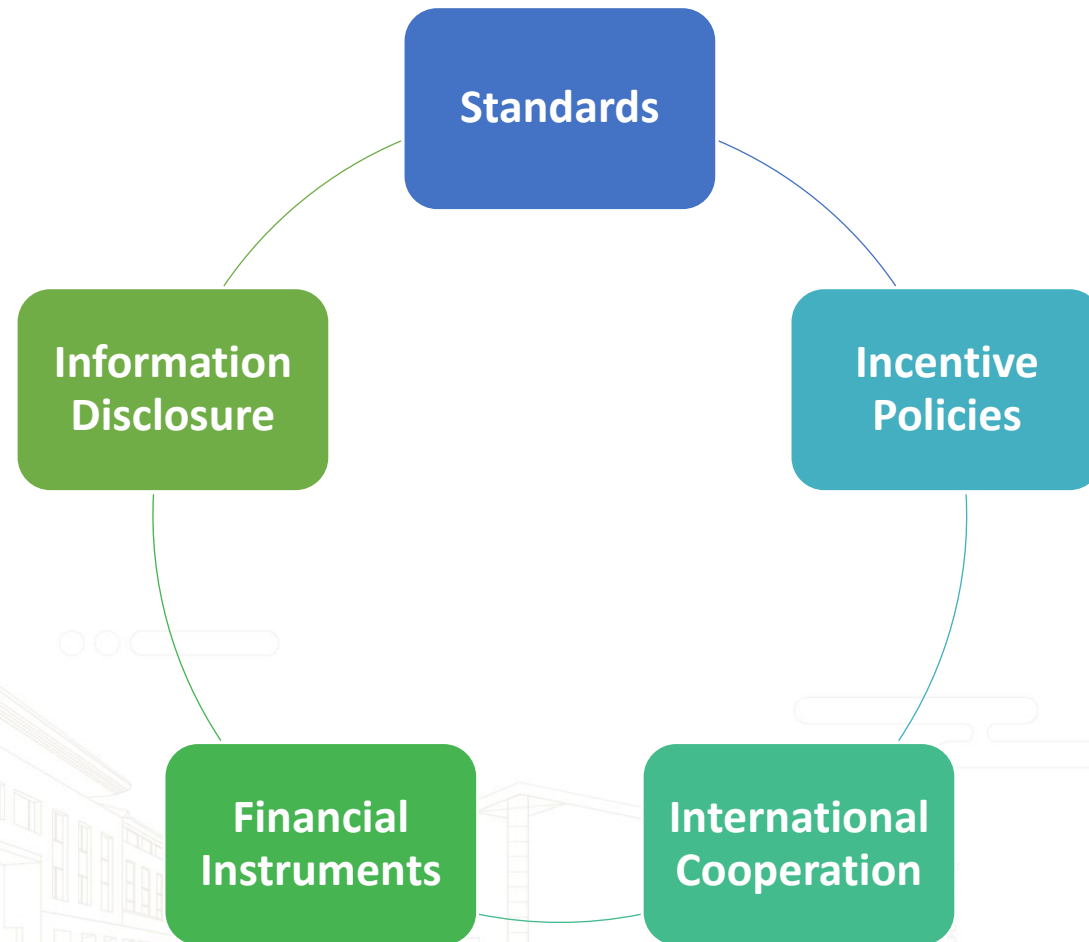
New Power System Development Plan

NEA

- China's energy resource endowment determines that **coal will remain a high proportion in the energy mix for a long time**
- Coal power will remain an import support of power security for a long time
 - **Installed capacity and power generation of coal power will still increase moderately before 2030**
- **Accelerate clean and low-carbon development of coal power**
 - Renovation of energy conservation & emission reduction
 - Coal coupled biomass power generation, CCUS, etc.
- **Clean energy power replacing fossil fuel power gradually**

Recent Trend of Coal Power in China





Green Industry Guidance Catalogue (NDRC, 2019)

Clean utilization of coal

Clean production of coal

Ultra-low emission transformation of coal power plant

Green Industry Guidance Catalogue (NDRC, 2023)

Clean and **efficient** utilization of coal

Clean production of coal

Ultra-low emission transformation of coal power plant

Energy saving, heat supply and flexibility transformation of coal power units

Carbon capture in coal power plant

RMB 22tn

(Outstanding Balance as of end 2022)



Green Loans

ABS

RMB 1.5tn

(Outstanding as of end-2022)



Green Bonds

ETF

Insurance

700 funds

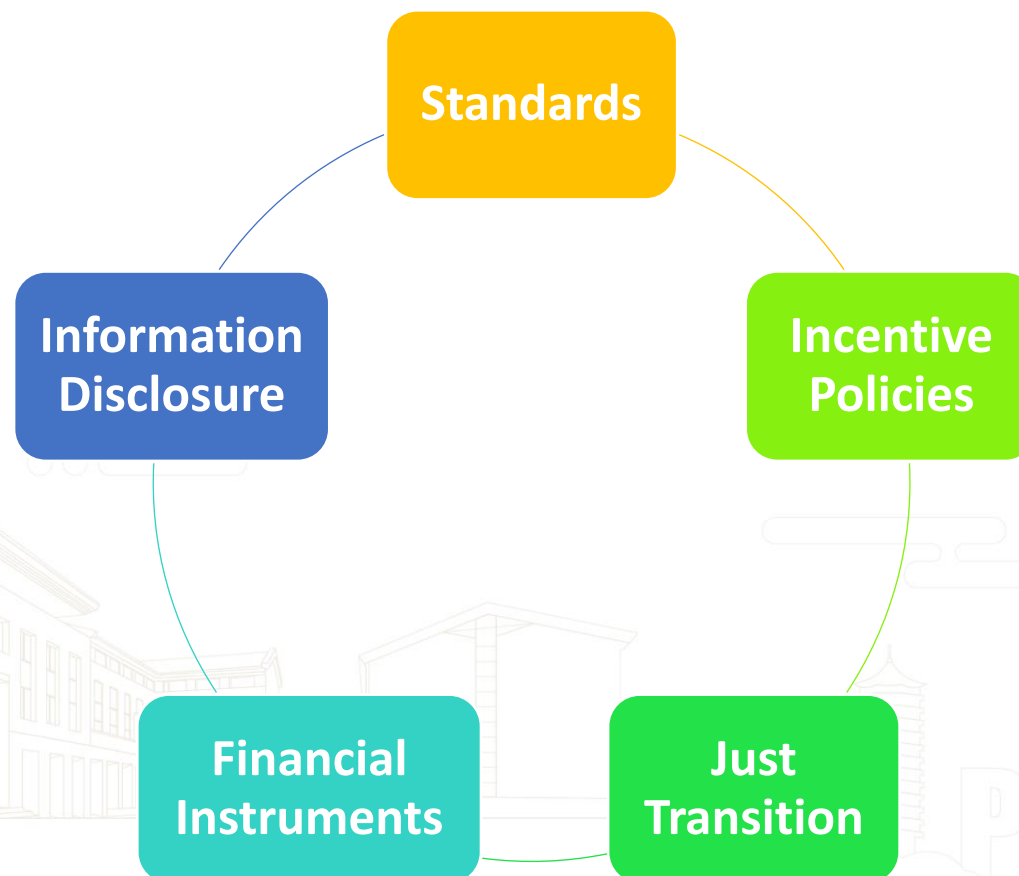


Green Funds

Carbon Finance

Transition Finance refers to financial services supporting the whole-of-economy transition, in the context of the **Sustainable Development Goals (SDGs)**, towards **lower and net-zero emissions** and **climate resilience**, in a way aligned with the goals of the **Paris Agreement**.

- G20 Transition Finance Framework (Nov. 2022)



In China, the PBoC is leading the development of national-level transition finance framework.

- The People's Bank of China is developing a **policy framework** (including **taxonomy, disclosure, products, and incentives**) for transition finance.
- ✓ PBoC's current work concentrates on developing 4 industries' transition finance taxonomy

Coal Power

Construction
Material

Cement

Agriculture

- Transition taxonomy will include both **project-** and **entity-based activities** that are aligned to the China's 2030 carbon peaking and 2060 carbon neutrality goals.

Debt instruments: transition or sustainability-linked loans (SLL) and bonds (SLB)

- With clearly specified transition targets;
- Incentives and penalties for outperformance/underperformance against targets, disclosure requirements, use of proceeds requirement, etc.

Equity-related instruments

- Investments by transition funds, PE/VC funds, buyout funds, and mezzanine financing, that are suitable for companies adopting green transition technologies, highly indebted companies, and/or SMEs;

Risk-mitigation products and others

Sectoral policy levers

- Provision of land for renewable projects

Fiscal measures

- Subsidies
- Tax incentives
- Govt procurement

Central bank

- Monetary policy tools (re-lending)
- FI evaluation and rating

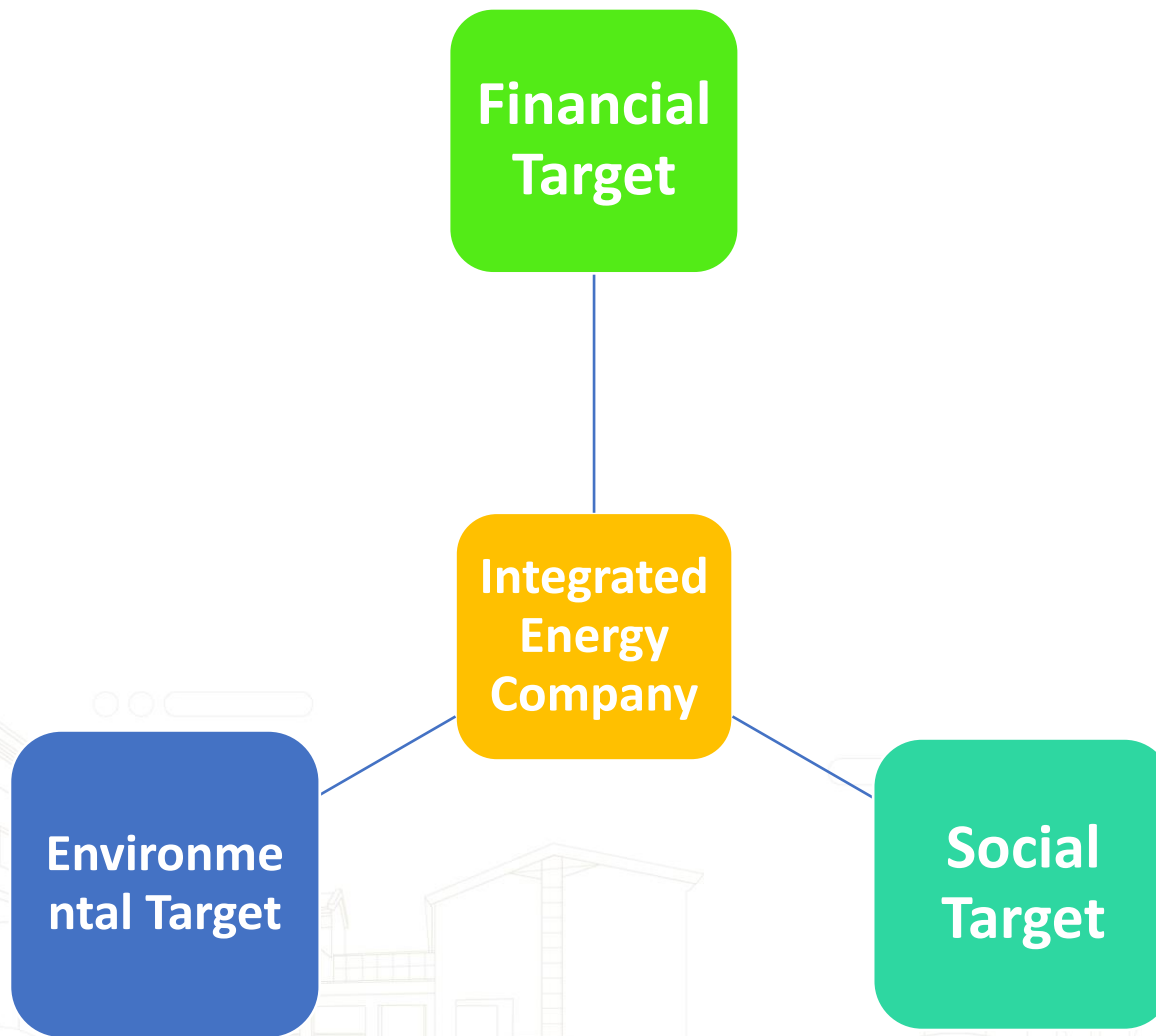
Transition fund

- With govt funding

Carbon pricing mechanism

Shanxi Province & Inner Mongolia (provincial SOEs)

- 1) 70%+ coal power, developing new energy power in recent years
- 2) liability/asset ratio > 70%, with one near 85%
- 3) Profitability of coal power business has dropped significantly
- 4) Serious problem in capital management, lack of capital needed to build renewable energy projects
- 5) Need of capacity building and technical assistance in making a science-based and credible transition plan
- 6) Hard to get financial support under current green finance framework



Governance &
Strategy

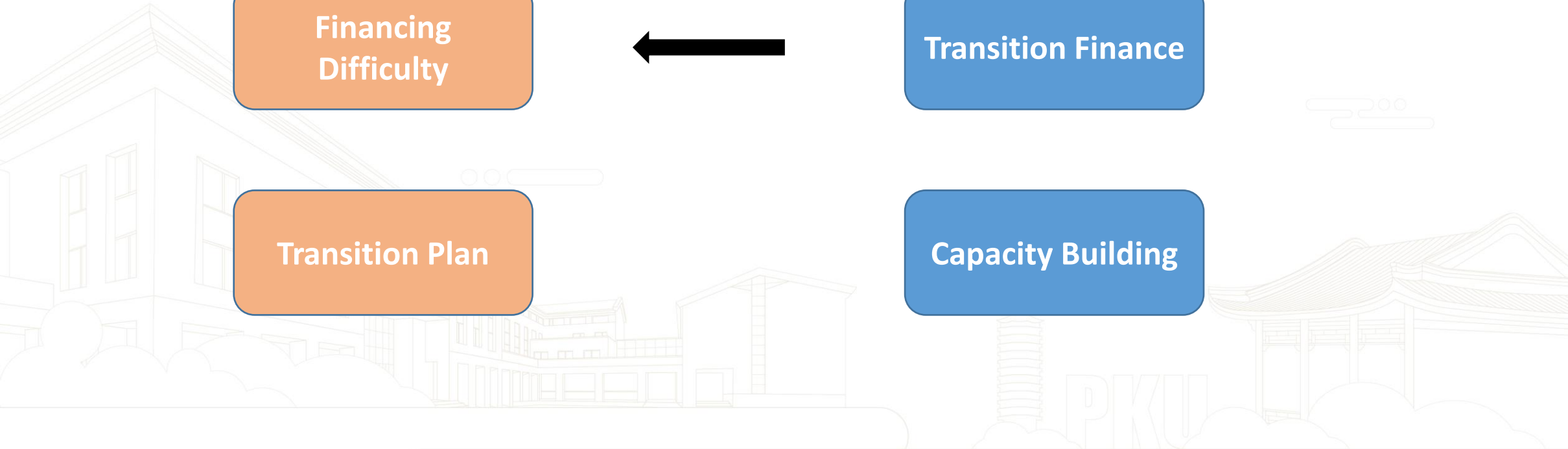
Performance
Evaluation

Financing
Difficulty

Transition Finance

Transition Plan

Capacity Building



- **Transition target: specific year of carbon peaking & carbon neutrality**
- **Technical path for the short, medium and long term**
- **CAPEX and financing plan for each term**
- **Governance and implementation plan:**
 - accountability of board and executives
 - cooperation among departments
 - incentive mechanism (remuneration, etc.)
 - emission data MRV
- **Just transition**
- **Information disclosure**



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THANK YOU

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