

To consider coordinated regional development in China's long-term power Scenarios



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As the main unit in the construction of the high-end think tank of State Grid Corporation of China, **State Grid Energy Research Institute Co., Ltd. (SGERI)** strives to become a world-class think tank in the energy and power sector, and a world-class think tank in the research on the reform and development of power grid enterprises.



Organizational setting

Corporate Strategy Research Department

Grid Development Research Department

**Energy Strategy & Planning Research
Department**

New Energy Research Department

Economy and Energy Supply & Demand
Research Department

Management Consulting Research
Department

Energy Internet Research Department
(Energy Internet Economic Research
Department,
Think Tank Data Center)

Financial Accounting & Auditing Research
Department

Energy Digital Economy Research
Department

West of China:

- Low GDP
- Rich renewable resources



East of China:

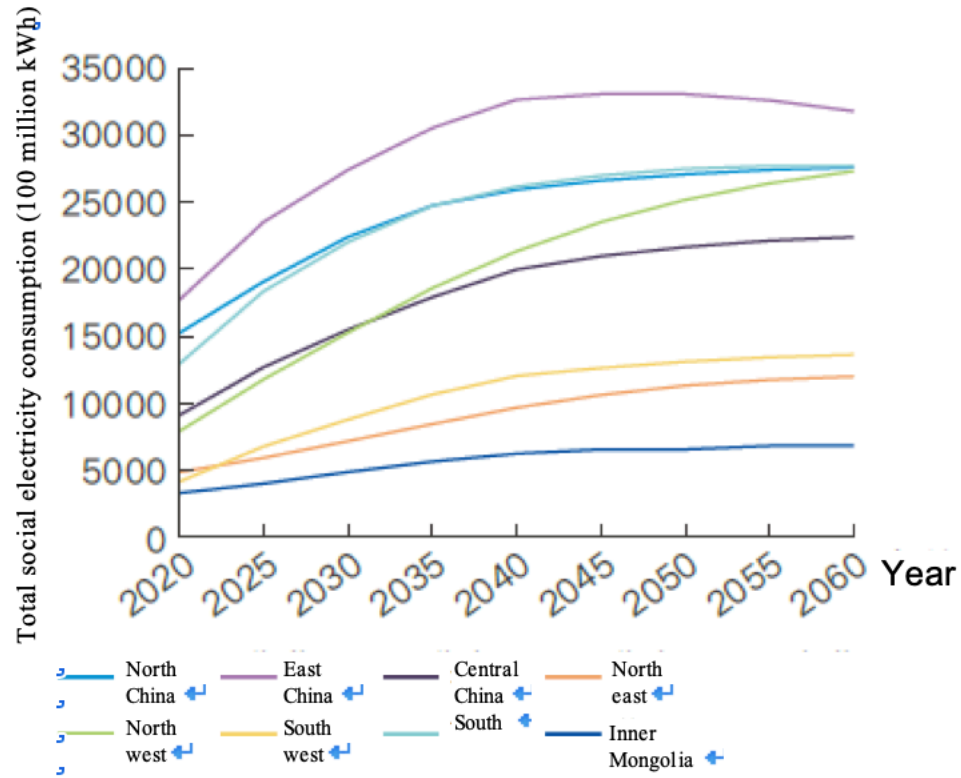
- High GDP
- Not much renewable resources

coordinated regional development

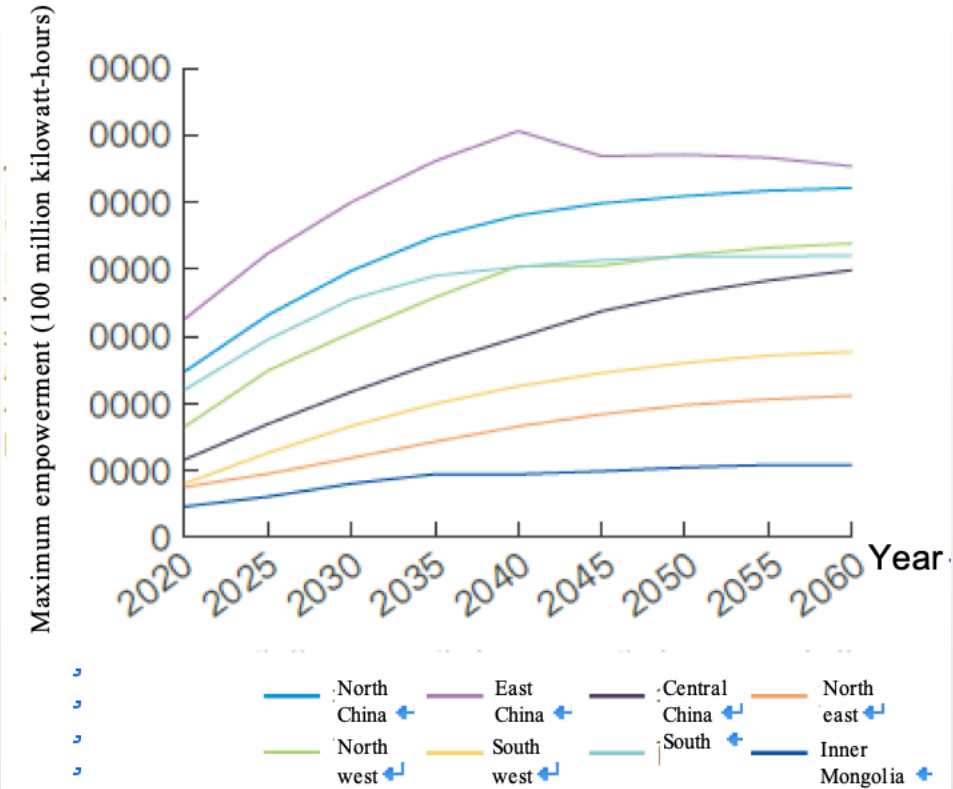
- Give full play to local comparative advantages
- Narrow regional development gap
- Achieve a relatively balanced equality

Still quick increasing demand, make coordinated development much harder

真研究问题 研究真问题



Power demand trend



Power load trend

In the past: Electric power industrial should develop in advance, to guarantee economy growth can be satisfied.

Which is, power supply meet power demand **passively**.

Now and the future: Under the carbon emission constraint, renewable become an important way to reduce carbon emission.

That gives a chance that power supply may reversely reshape power demand.

Which is, renewable can be an effective way to promote coordinated regional development .



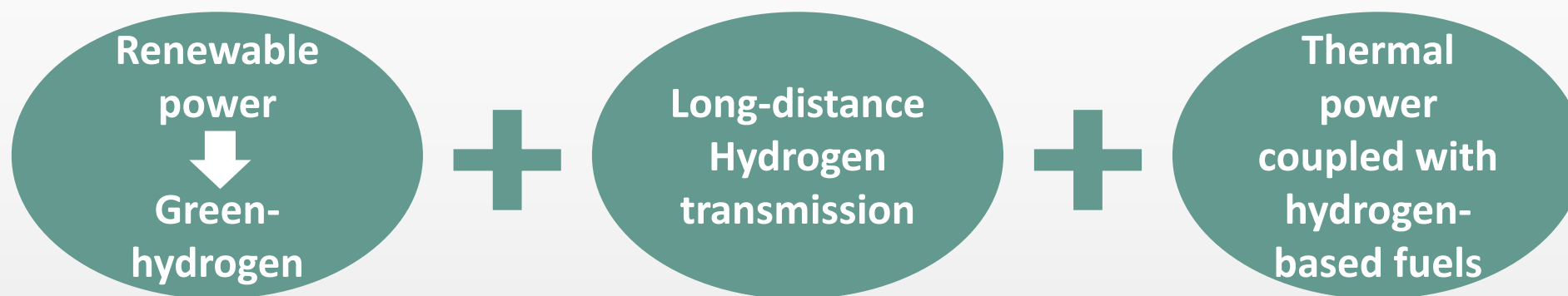
- Speed and scale of industrial transfer are set to increase, which will consequently alter power demand and its distribution.
 - Renewable energy related industries
 - High ESG requirement related industries
- Surge in demand for local renewable power will catalyze the rapid development of wind and solar sources in the vicinity, especially, local DGPV.
- By taking into account both the pace of industrial transfer and the rate of local wind power and solar power development, it is anticipated that there will be a minor impact on the scale of cross-regional power flow.

West of China:

- More industrial investments and jobs, higher incomes
- Easier to integrate renewable power to system, less curtailment
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East of China:

- Much lower power demand, easier to guarantee power balance
- Less fossil generation to be new added
- Less transmission lines, easier to operate power grid
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- Provide decision-making suggestions for national medium - and long-term energy and power planning and dual carbon goals.
- Support power grid plans of State Grid.
- Put forward suggestions of technological innovation directions for China's energy and power development.



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THANK YOU

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