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Financing Support for Low-Carbon Transition of Coal

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Part I

China and global green capital markets

China's green capital market——Volume of green loan and green bonds

Outstanding volume of Green loan



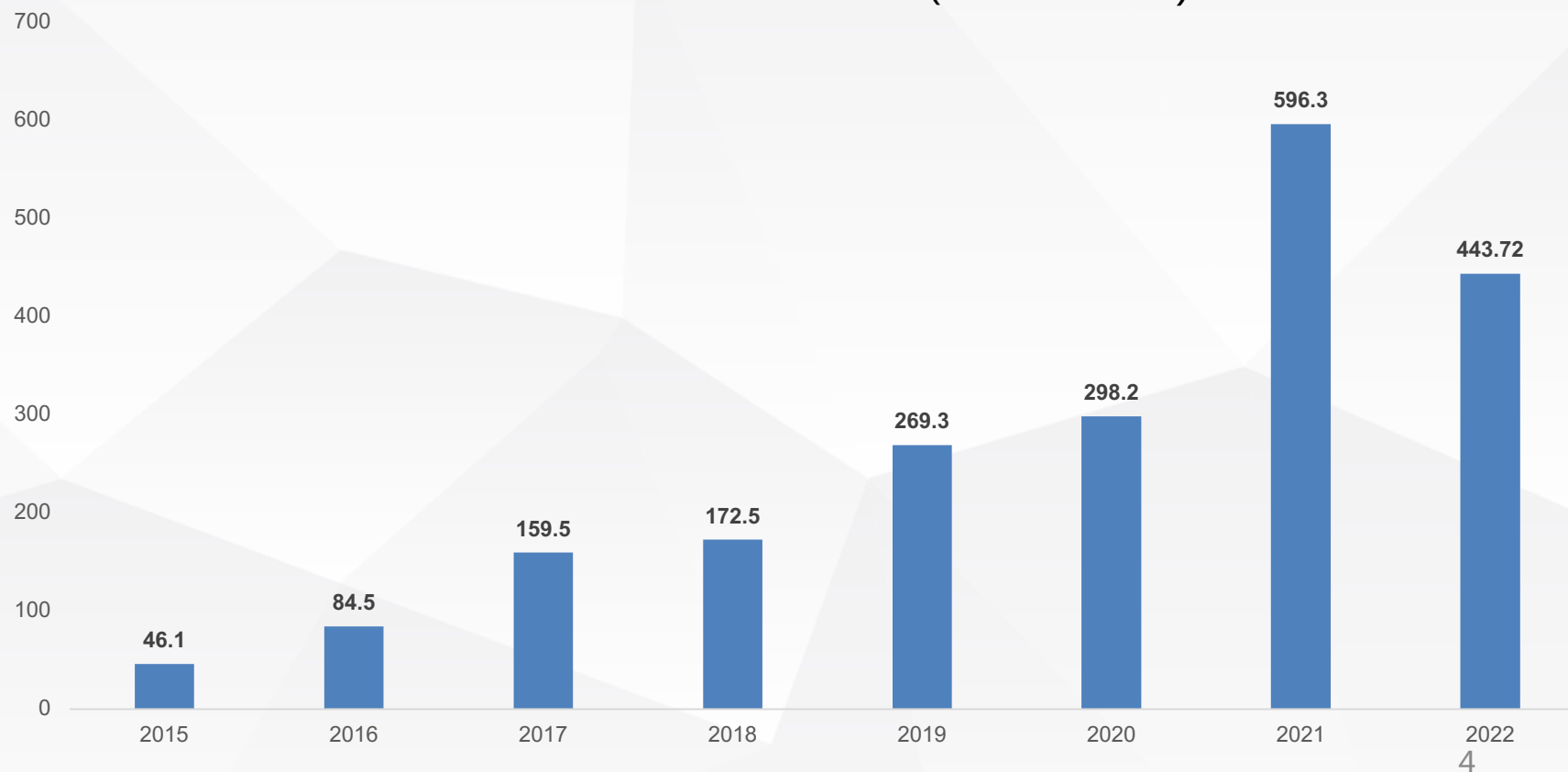
Green bonds issuance



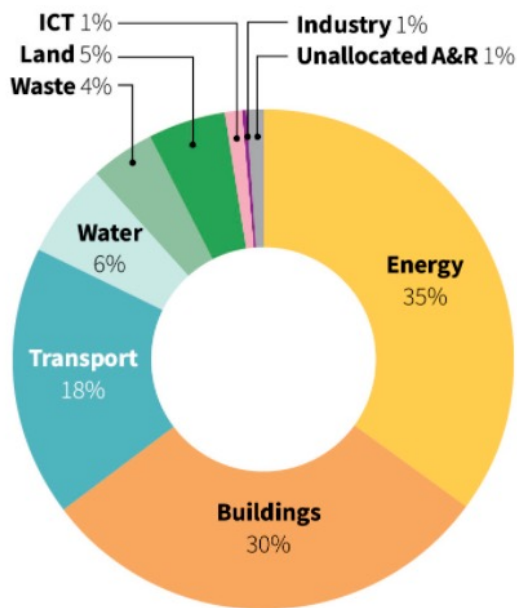
Global green capital market—Green bonds volume and use of proceeds

- According to the CBI, global green bond issuance hit \$443.72 billion in 2022

Global Green bonds issuance (Billion USD)

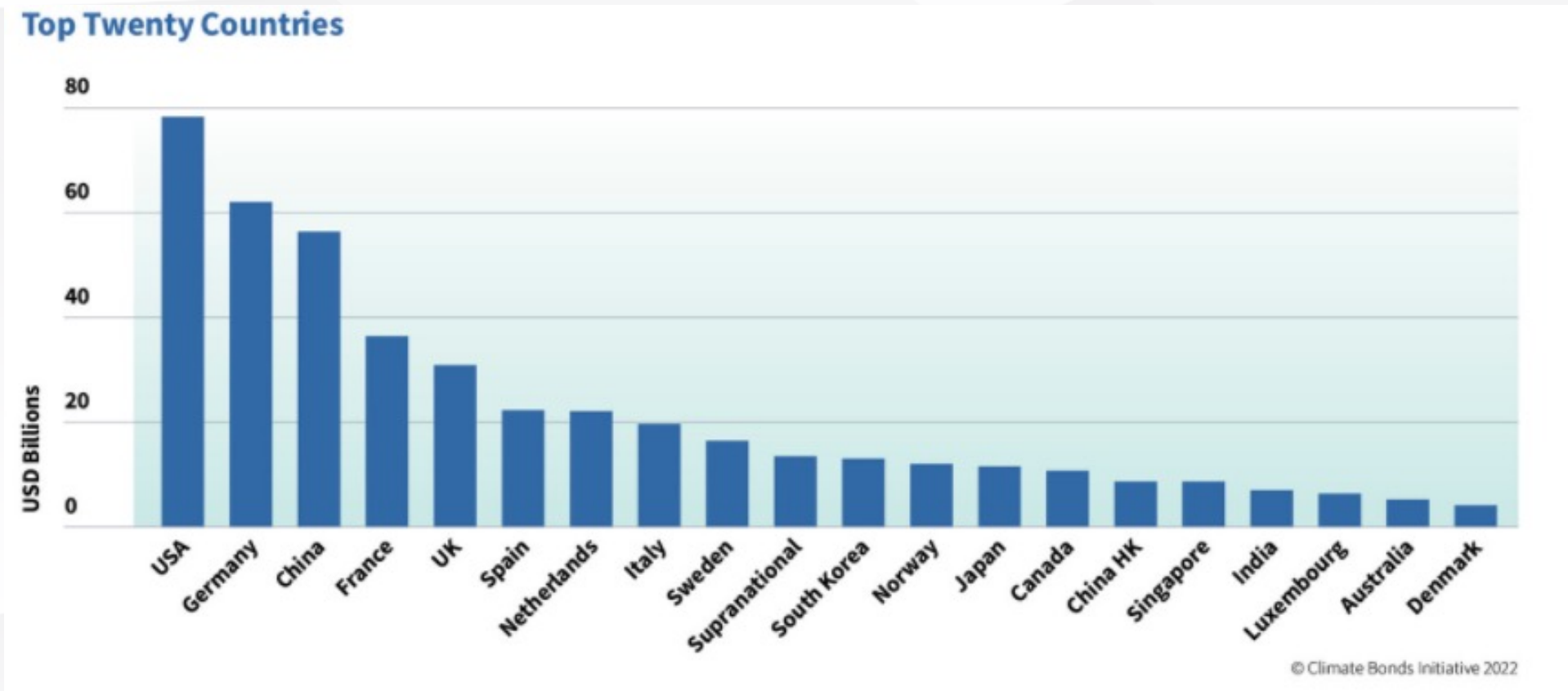


Use of Proceeds 2021



© Climate Bonds Initiative 2022

Global green capital market——Green bonds issuance by country



Top 20 green bond issuers in 2021 (by country)



Part II

The G20 Transition Finance Framework

Why transition finance?

- Green finance as a share of the global capital markets remains low. The sustainable development is also starkly uneven across developing and developed countries. According to Reuters, the market share of global green finance only accounts for about 4% of the global capital market by the end of 2021. The vast financing gap to achieve SDGs are still increasing.
- So far, only “dark green” or “green” economic activities are supported under the green taxonomy. However, majority of global economic activities cannot meet green standards
- Despite having plan and intention to transition, carbon-intensive companies cannot have access to financing channel

Transition finance framework

On November 15-16th 2022, The G20 Summit was held in Bali, Indonesia,. G20 leaders endorsed the G20 Sustainable Finance Report 2022 submitted by the G20 Sustainable Finance Working Group. The core content include the G20 Sustainable Finance Roadmap. It is the first consensus on transition finance after G20 leaders reached consensus on green finance at the Hangzhou Summit in 2016.



Transition finance framework

- Countries are expected to have different pathway to transition because of different conditions (Difficulty to reduce), economic structure (Source of CO2 emissions), and development level (Technology) Therefore, different countries may have different insight in transition
- The G20 SFWG has begun work to strengthen the transparency and credibility for transition activities. Also ,the SFWG has improved compatibility and cross-border investment in different markets through high level and principle-based consensus-reaching.
- The principle consists of five pillars: Transition Taxonomy, Information Disclosure, incentive policy, transition finance instruments and Just transition

Transition finance framework

Five principles for transition finance

Taxonomy



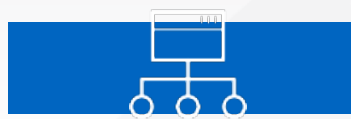
Mitigate transition risk

Environmental
information disclosure



Use of proceeds and
process

Instruments



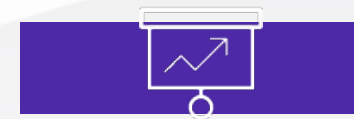
Mobilize capitals

Incentives



strengthen green
financing

Just transition

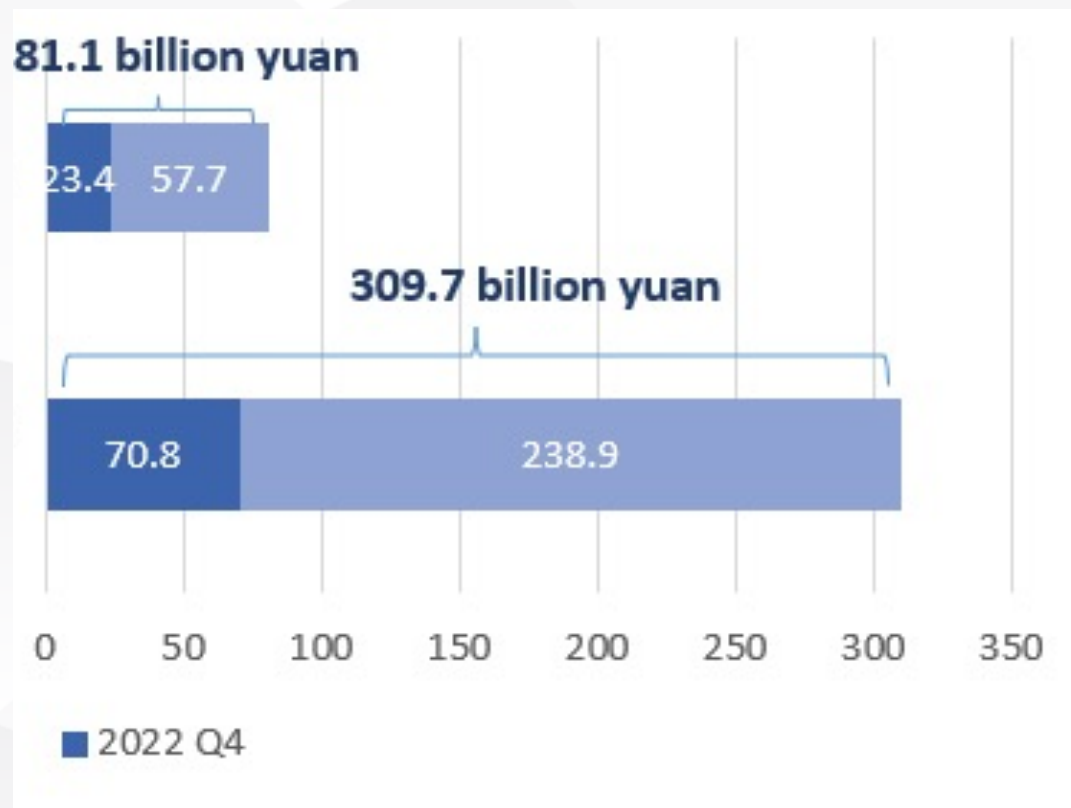


lower negative impact
on society

Supporting Facility for Carbon Reduction and Clean Coal

Clean Coal

Carbon Reduction



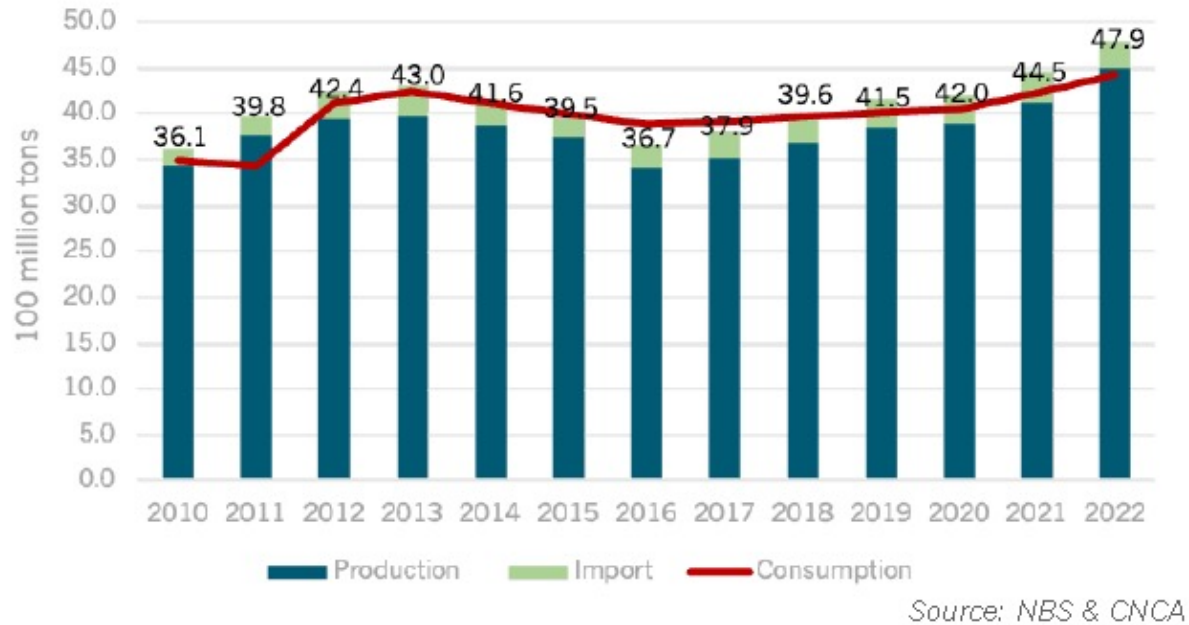


Part III

Financing Support for Low-Carbon Transition of Coal

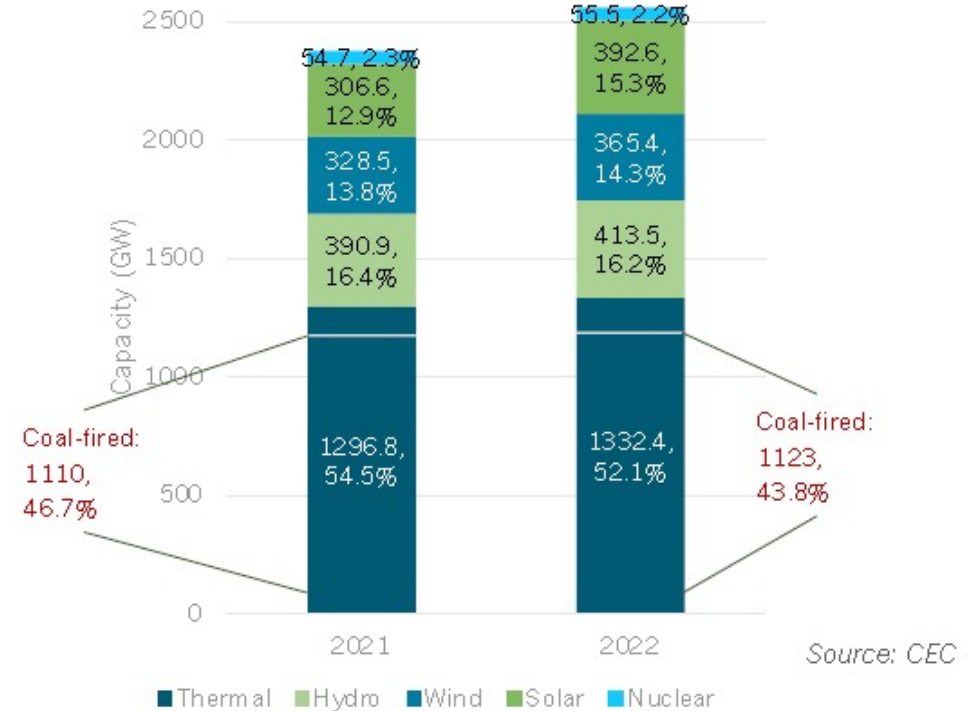
Coal Industry in China

Coal Supply and Demand



China coal supply and demand growth re-picked up momentum since 2021.

Installed Capacity and Share by Energy Type



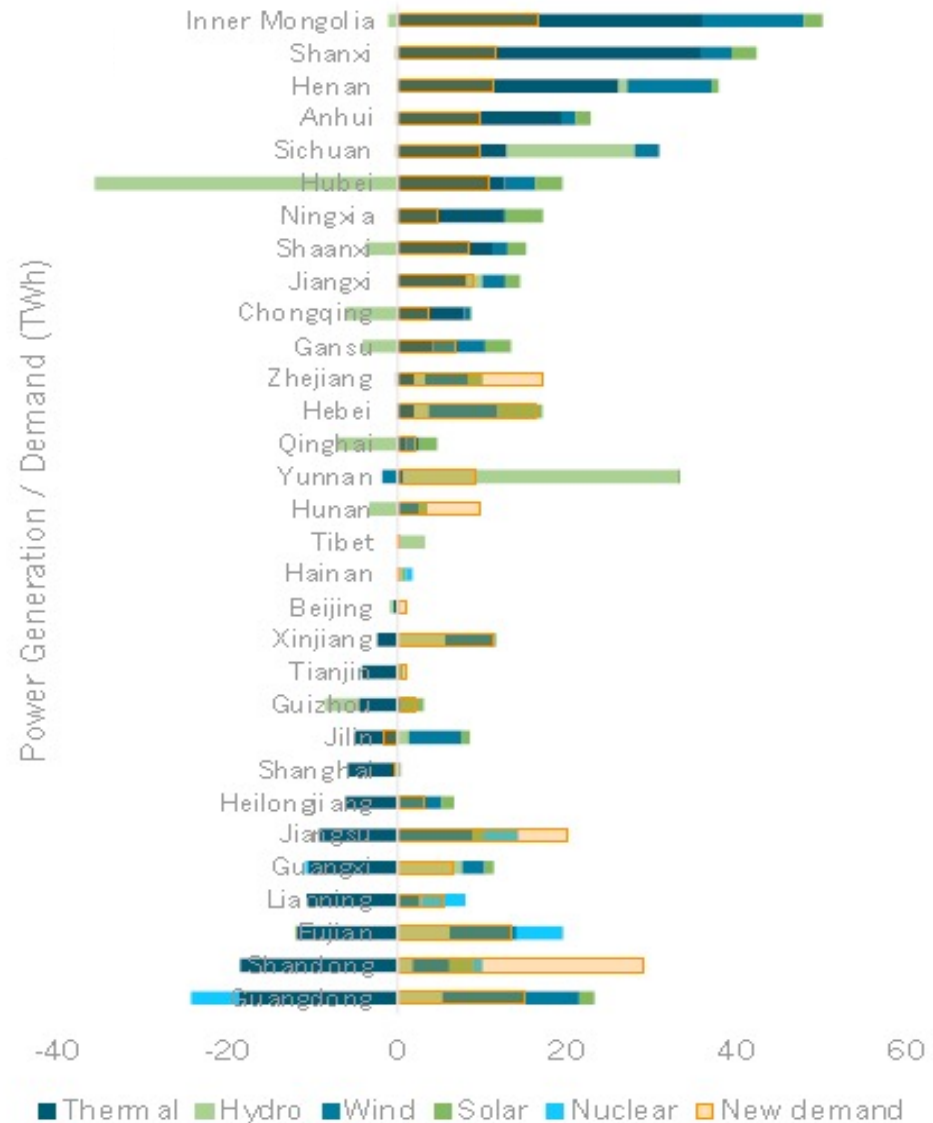
- Coal-fired power took up **58.4% of total electricity generation** and **43.8% of total installed capacity**.
- The percentage of coal-fired power installation **decreased** from 46.7% to 43.8%.

Coal Industry in China

- **Inner Mongolia, Shanxi, Henan, Yunnan, and Sichuan** are the major power sources; the top 3 accounted for 1/2 of newly added thermal power.
- **Inner Mongolia** and **Guangdong** led the newly installed thermal power capacity.
- **Currently**, the employment scale of the coal industry in China is approximately **2.6 million** people. It would decrease to **1 million in 2030** and **0.2 million in 2050**.

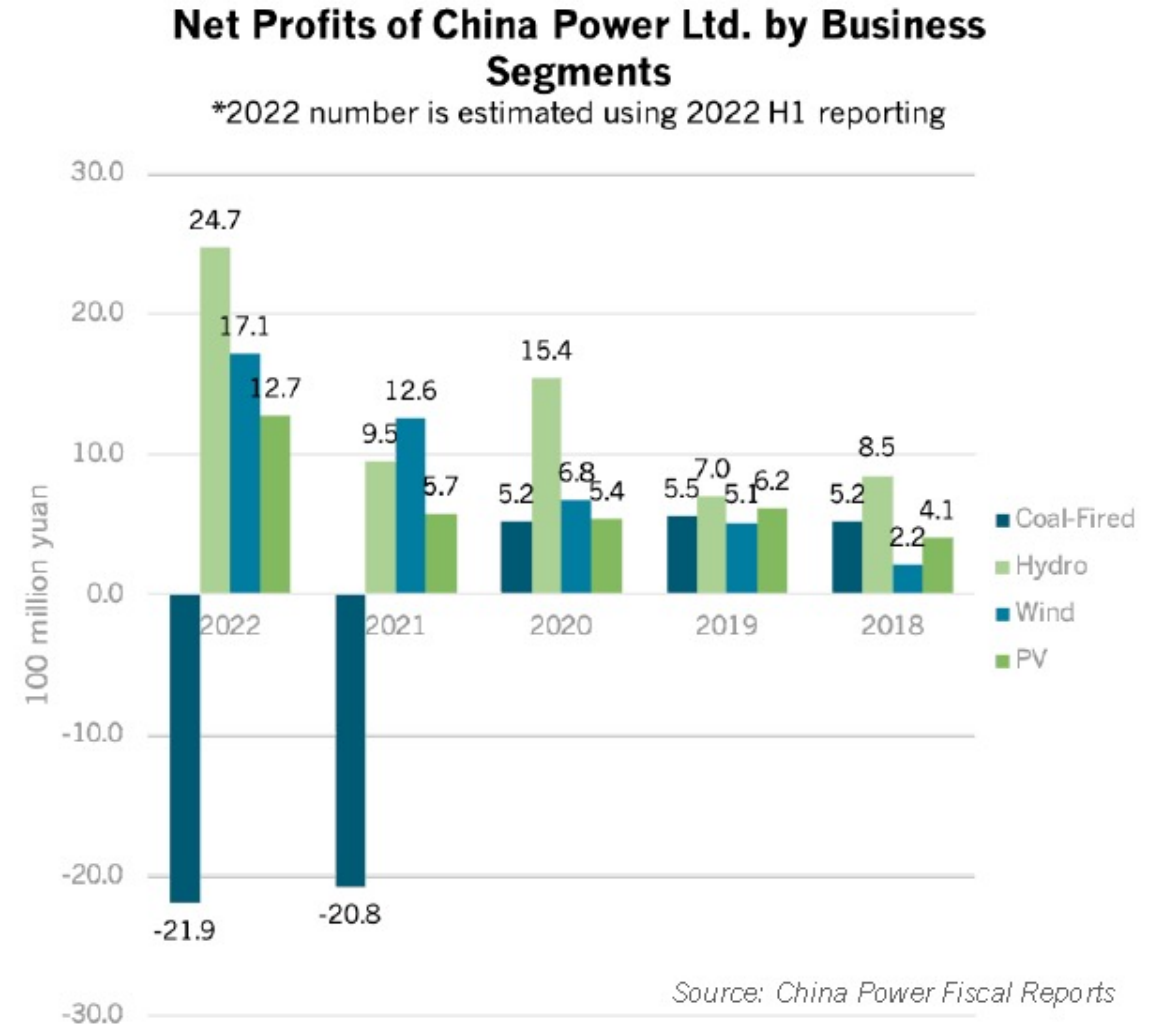
Sources: China Coal; 2022 Coal Tracker

Newly Added Power Generation VS. New Demand 2021—2022



Coal-Fired Power Getting Non-profitable

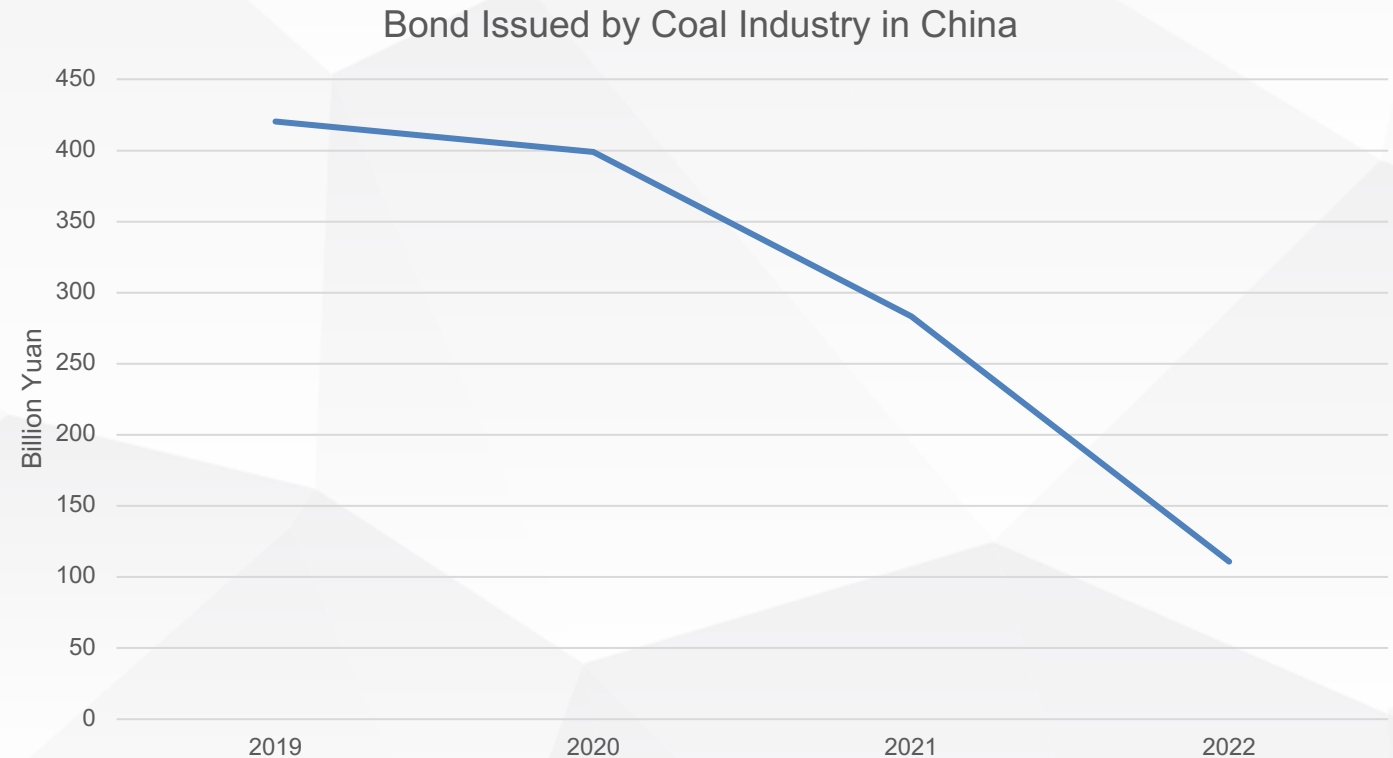
- 2021: over **80%** of coal-fired power companies reported negative profits, adding to a total loss of **100 billion yuan** for entire thermal power sector.
- 2022: still around **50%** of listed thermal power companies alerted negative profit, totaling a loss of **10 billion yuan**.



Estimated profits of *China Power* in 2022 are 2.3—2.7 billion yuan.

Coal-Fired Power Facing Financing Challenges

- As of December 4, 2022, the total amount of outstanding bonds in the coal industry is **711.52 billion yuan**.
- The total amount of bonds issued by the coal industry in 2022 is **110.8 billion yuan**, which is a decrease of approximately 60% compared to 2021. The net financing amount from bonds is **-19.99 billion yuan**.



Likelihood for Low-Carbon Transition



Appendix

1. Taxonomy

Taxonomy:

- Some activities in EU taxonomy are labeled as transition activities
 - In 2021, learned from EU, ASEAN and some of members established a list of transition activities in their taxonomies
 - China's central bank is creating transition taxonomy for four areas: coal power, steel, construction materials and agriculture.
- In June 2020, Singapore's DBS Bank released the 'Sustainable & Transition Finance Framework & Taxonomy', which proposed the principles for identifying transition activities and enterprises and provided a taxonomy covering 16 industries.
 - In May 2021, Standard Chartered Bank issued the "Transition Finance Framework 2021", which clarified three requirements for "transition assets and activities" and provided a list of transition activities, including 12 industries such as electrification, bioenergy and steel.
 - In June 2021, AXA Asset Management issued a "Guidelines for Transition Bonds", which listed some transition activities in three industries: energy, transport and industrial.

2. Disclosure

In July 2021 the Guidelines on Environmental Information Disclosure for Financial Institutions

Commercial bank

Asset management Company

Trust Company

Insurance Company

- ✓ Encourage financial institutions to disclose environmental information at least once a year
- ✓ The PBOC suggests that disclose related information if applicable

International Sustainable Standards Board

ISSB is developing IFRS Sustainability Disclosure Standards to promote globally consistent, comparable and reliable sustainable reporting.

- The Exposure Draft for IFRS S2 Climate-related Disclosures was released on 31 March 2022
- Clarified and discussed additional disclosure requirements for climate-related targets in the Transformation Plan in November 2022;
- January 2023 to clarify that companies shall disclose how the latest international agreement on climate change affects their strategies.

ISSB Sustainability Disclosure Standards (1)

➤ Background

- Lack of environmental and climate-related financial information disclosure required by investors and regulators ;
- There are several information disclosure frameworks (TCFD, GRI, etc.) in the world, but the differences cause lack of data comparability ;
- Based on TCFD, ISSB is mainstreaming in the world as ISSB focus on strengthening information disclosure and promoting standardization and auditable disclosure.

➤ Progress

- The ISSB issued two exposure drafts and comment letters in March 2022, including Guidance on Climate-related Financial Disclosures and General Sustainability-related Disclosures; The ISSB has received more than 1,300 comment letters on its two proposed sustainability disclosure standards.
- The draft is under discussion and expected to be finalized and implemented by the end of June ;
- The ISSB is expected to expand disclosure scope, including other areas of sustainability, including society, biodiversity, etc.

3. Financial Instrument

Issuers and qualified transition instruments shall have following key elements :

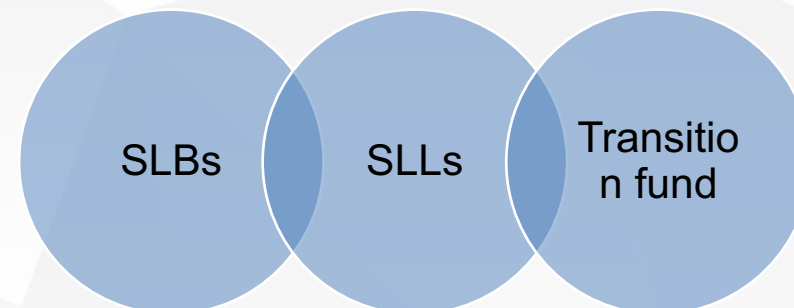
Bond issuing are linked with low-carbon transition goal. Transition activities should have significant emission reduction effect and reliable transition path

Transition plan shall comply with principle of measurable、reportable、verifiable (MRV) 。

Incentive and punishment mechanism is necessary

- CA-CIB and Electricity Italia issued qualified transition instruments in 2019 ;
- NAFMII issued transition instruments such as SLBs in April 2021 and June 2022

European financial institutions



Sustainability-Linked Bond

Debt instrument that links debt financing with sustainability-related KPIs

Guidance :

Sustainability-Linked Bond Principles (SLBP) (ICMA , 2020) ;

NAFMII 'Sustainability-Linked Bond Principles Related questions'

1) no specific requirements on use of proceeds

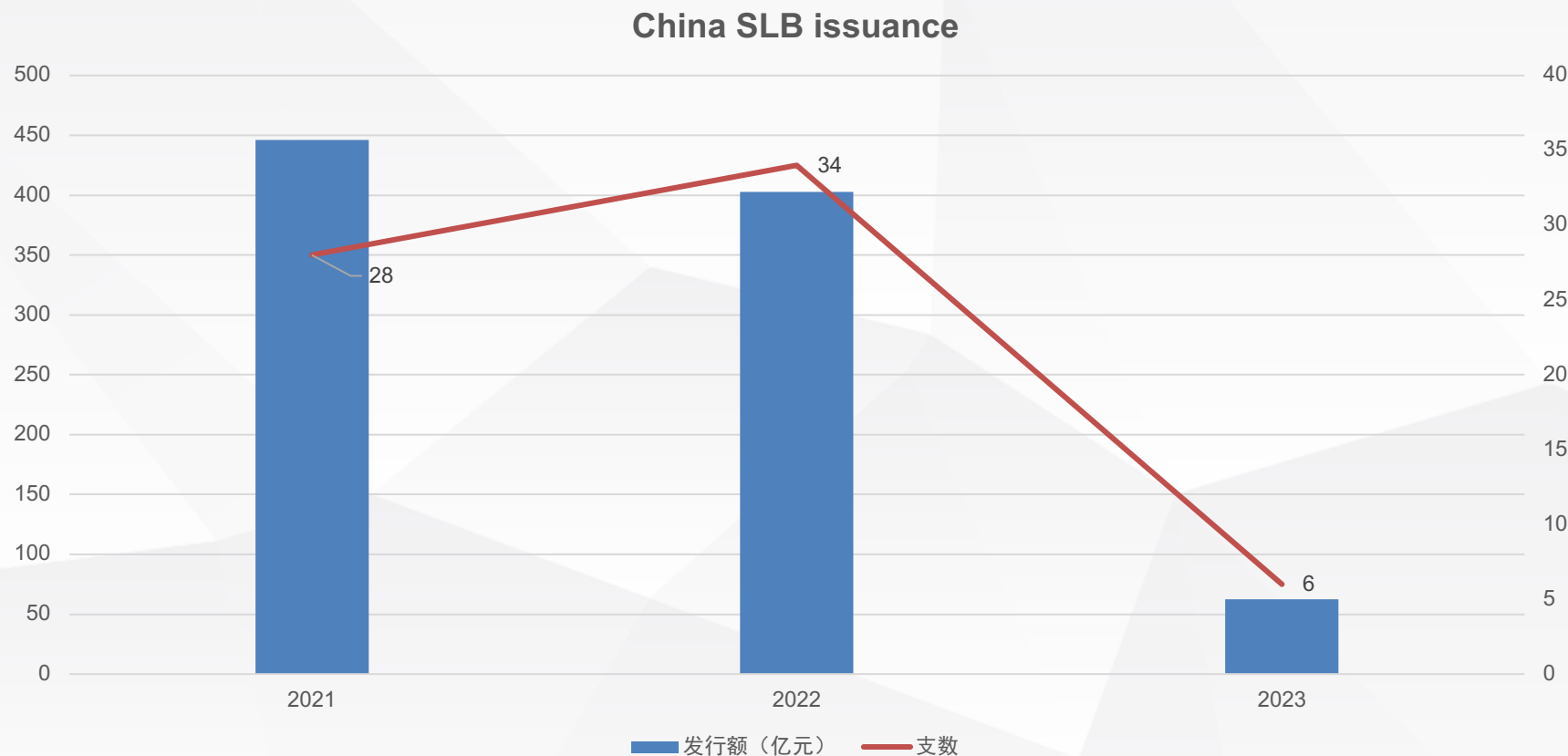
2) interest rate rises if unable to meet certain sustainable goals

In 2021, China Huaneng Group raised 1.5billion RMB from SLB debuts, Bank of China acted as the lead underwriter. Terms : 3 years , interest rate 3.38% ,

The SLB bonds link interest rate with Newly installed capacity of renewable energy as KPI. The proceeds will be used in wind power and solar PV projects.

Sustainability-Linked Bond

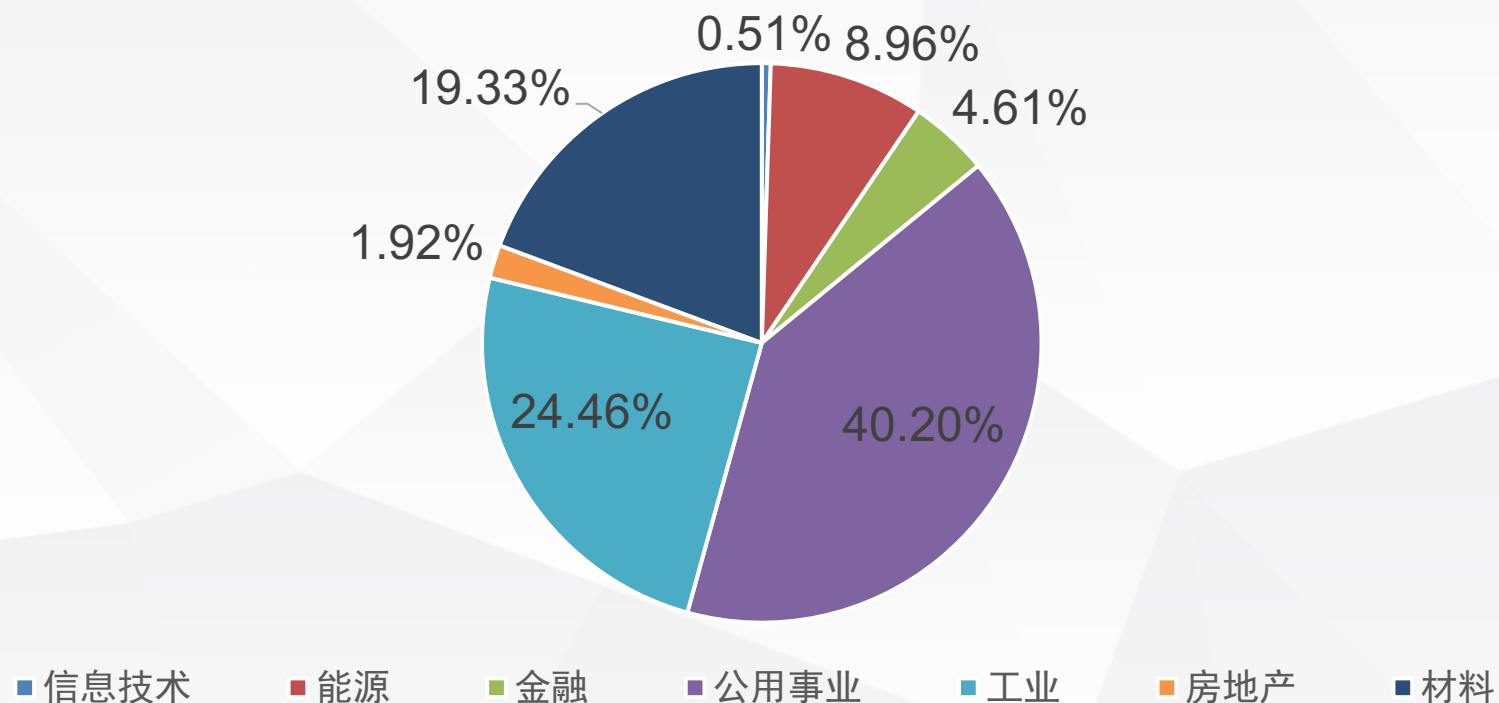
As of March 2023, 68 SLBs worth 91.136 billion RMB were issued by China



Sustainability-Linked Bond

In China, SLBs issuers were mostly from carbon intensive sectors such as energy and steel

SLBs issuance (%) by sector



4. Incentives

Government shall support transition activities because most of transition activities have difficulty accessing to financial channel due to high risks and low/uncertain rate of return

Incentives	Impact	Publisher
Green Macroprudential Assessment	Encourage banks to increase green loans	PBoC
Green re-loan facility	Provide low-cost funds for green loans	PBoC
Interest discount	Encourage to issue green loans and green bonds	Local government
Green project guarantee	Lower the cost of green loans	Local government
Carbon reduction supporting		PBoC , 2021
Banking Sector Financial Institution Green Finance Assessment Plan	Improve the green finance performance of banking and financial institutions	PBoC , 2021
Preferential corporate income tax catalogs	promote development and application of new energy-saving and environmental protection technologies	MoF, STA, NDRC , 2021

Incentives

PBOC: Carbon reduction supporting tool

The carbon emission reduction supporting tool launched by the People's Bank of China supports clean energy, energy conservation, environmental protection and carbon emission reduction technologies

By the end of 2022, more than 300 billion RMB of re-loans had been used. Commercial banks had used these re-loans to issue loans worth more than 500 billion RMB, reducing carbon emissions about 100 million tons

Ministry of Finance: Preferential corporate income tax catalogs

To promote development and application of new energy-saving and environmental protection technologies, in December 2021 Ministry of Finance, State Administration of Taxation, National Development and Reform Commission and Ministry of Ecology and Environment released preferential corporate income tax catalogs (2021) and Catalogue of Comprehensive Use of Resources for Preferential Enterprise Income Tax (2021) »

5. Just Transition

Not science-based transition may have negative impact on society , including unemployment , economically distressed communities , energy crisis and inflation

- Regulator and investors can ask transition companies to submit a transition assessment of social impact on employment ;
- If transition will have negative impact on employment, company shall disclose how company help unemployed workers by providing skill trainings and re-employment services.
- Regulator and investors can propose that creating transition instruments shall consider re-employment related KPIs

Thanks!