

China

Initiatives for
Diffusion and Promotion of
Carbon Neutral Technologies

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Carbon Peaking and Carbon Neutrality Goals

China will strive to peak carbon dioxide emissions before **2030** and achieve carbon neutrality before **2060**.

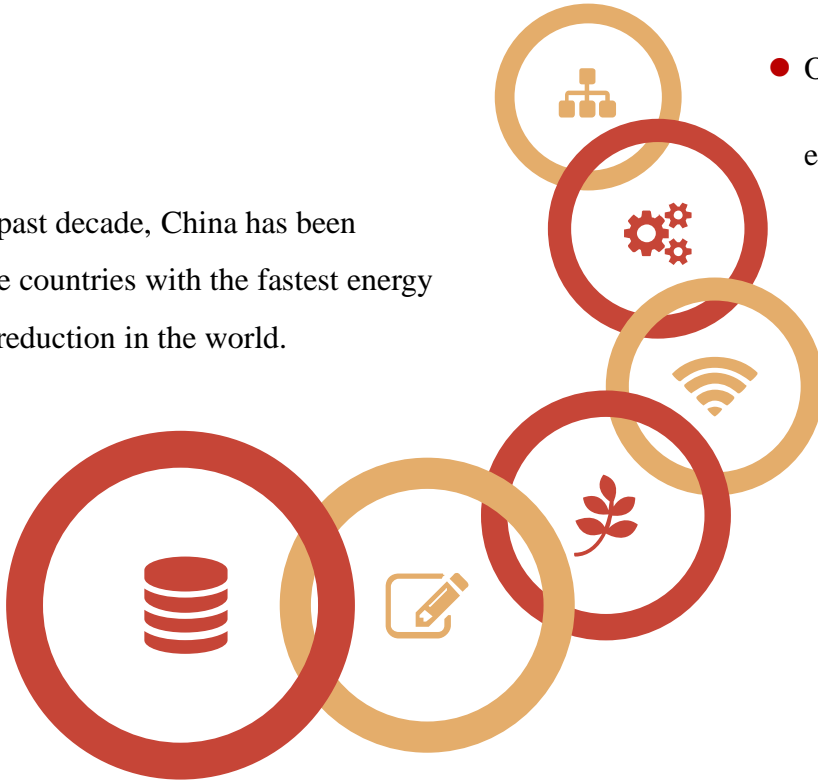
—— Chinese President Xi Jinping



Carbon Peaking and Carbon Neutrality Goals

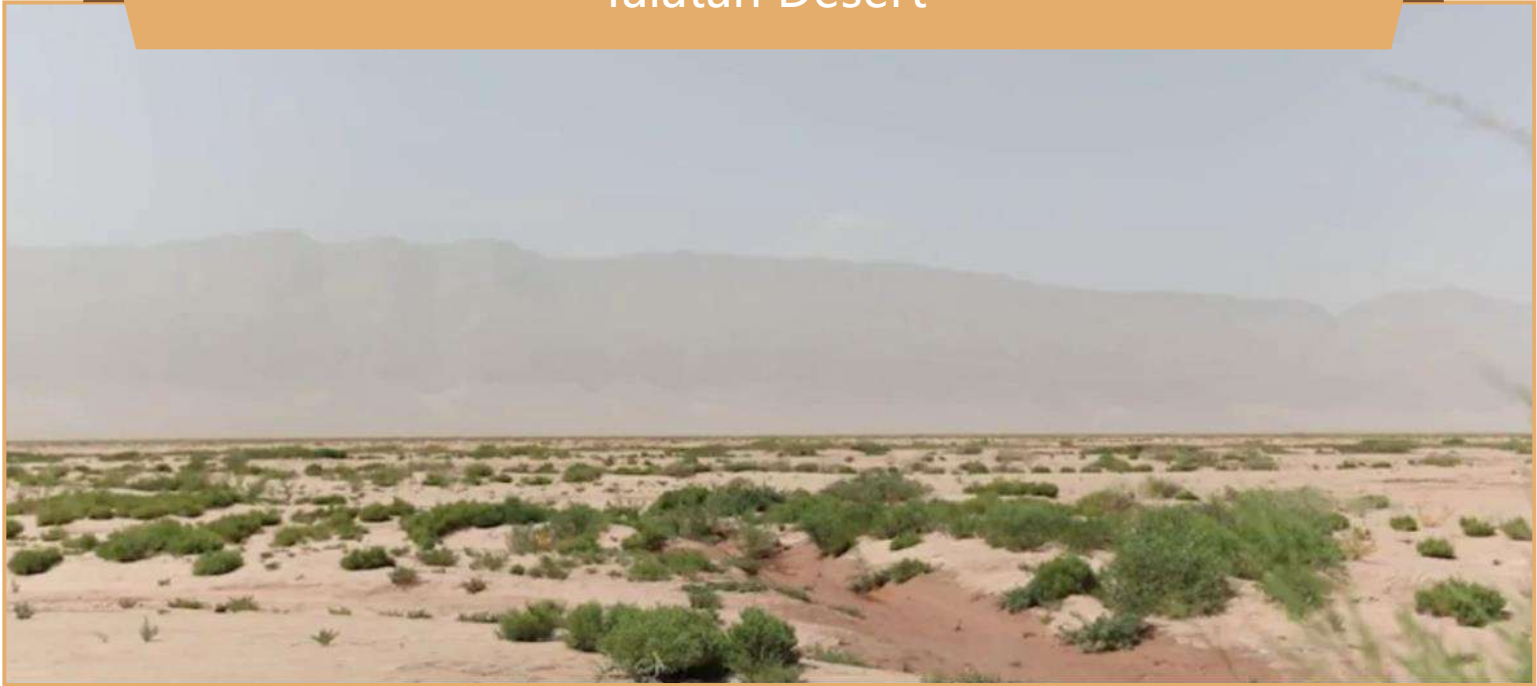
- Over the past decade, China has been among the countries with the fastest energy intensity reduction in the world.

- Overfulfilled the 2020 target of cutting carbon emission intensity by **40%** to **45%**.
- A total of **5.8** billion tons less of CO2 is emitted.
- Both the largest carbon emissions market and the largest clean electric power generation system in the world.



Story of Achieving Carbon Neutrality in China

Talatan Desert



Once known as a barren land, with high altitude and strong sunlight.

Story of Achieving Carbon Neutrality in China

10 years'
construction



Largest installed capacity of photovoltaic power park covering **609** square kilometers
8,430 megawatts of photovoltaic power (PV) generation

Story of Achieving Carbon Neutrality in China

Cleaning the PV panels



Scattered grass seeds to prevent wind and sand fixation
Helped conserve soil and water and curbed the desertification of the land
But grass blocked the panels.

Story of achieving carbon neutrality in China



Shepherds started to graze their sheep in the PV park
Power generation over the PV panels and sheep grazing under them.



Story of Achieving Carbon Neutrality in China



Average annual power generation capacity of **80,000 MWh**

Vegetation cover has been restored to **80%**

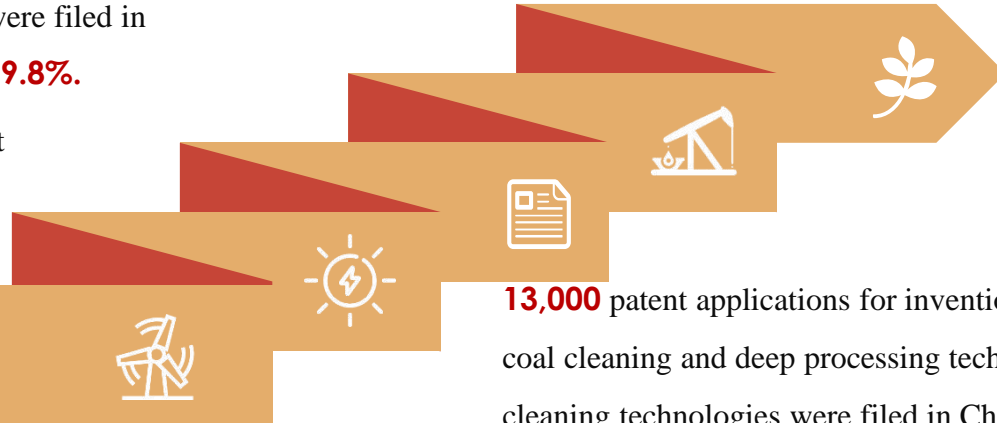
Technological Innovation Concerning Carbon Neutrality

A boom in innovation in the field of carbon neutral technologies

In 2021, a total of **72,000** Patent applications related to green and low-carbon technologies were filed in China with an year-on-year increase of **9.8%**.

Among them, **4,000 and 7000** patent applications in wind power and photovoltaic respectively.

China is rich in coal, poor in oil and little in gas, and fossil energy still accounts for more than 80% of the total energy consumption. Green exploitation, efficient conversion and clean utilization of traditional energy technologies play a leading role in carbon emission reduction.



13,000 patent applications for inventions in the fields of coal cleaning and deep processing technologies, and gas cleaning technologies were filed in China in 2021.

- Accounting for **17.8%** of patent applications for inventions in green and low-carbon technologies
- **3.6%** higher than the overall global level

Initiatives to Promote Green Technology Innovation and Transformation

Support regions with distinctive advantages to accelerate their economic transformation development. **01**



- Make full use of IPR to promote the economic transformation of the resource-based regions.
- Cooperate with provinces rich in resources and improve their competitiveness in IP.

Initiatives to Promote Green Technology Innovation and Transformation

02

Accelerate the transformation and utilization of IP in green and low-carbon technologies



- Build local patent navigation service bases on energy conservation and environmental protection, new energy and other related fields.
- Promote the transfer and transformation of new energy vehicles, new energy, energy conservation and environmental protection and other green industries.

Initiatives to Promote Green Technology Innovation and Transformation



- Build IPR operation centers in new energy, clean energy and other fields;
- Cultivate IPR demonstration enterprises in the field of green technology;
- Encourage more leading small and medium-sized enterprises that specialize in niche sectors to follow the road of the innovation so as to support industrial upgrading.

03

Facilitate the optimization and upgrading of green and low-carbon industries

Initiatives to Promote Green Technology Innovation and Transformation

2016

Introduced the green patent classification system and its related work at the 20th Session of the Committee on Development and Intellectual Property of the WIPO

Formulate green patent classification system, build green patent statistical database and conduct statistical monitoring of green patents

2017

Released China Green Patent Statistics Report (2014-2017) and Global Green Patent Statistics Report (2014-2017)

2018

Improved the patent classification system for green and low-carbon technologies.

2022

Built a green and low-carbon technology patent classification system and statistical database in a more refined manner.

04



Initiatives to Promote Green Technology Innovation and Transformation



The more refined patent classification system for green and low carbon technologies in 2022.

5 first-class technology branches,
19 secondary technology branches,
56 three-class technology branches,
62 four-class technology branches.

8 sections of IPC table, 47 categories, 108 subclasses, 1090 main groups and 9934 small groups.

A statistical database containing more than 2.42 million global invention patent data.

Furure plans



01 Deepen the communication and collaboration with the competent departments



02 Strengthen the service support for green industries.



03 Support the construction of industrial IPR operation centers



04 Maintain and update the patent statistics database on green and low-carbon technologies and continue to carry out related statistical analysis.



The 10th TRIPO User Symposium

Thank you!

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