China Power ESG Strategy Model



Corporate Vision

Objective &Mission

ESG Strategy

Strategic Dimension



Strategic Goal



Strategic **Pathway**

Guarantee System

The World's Leading Green and Low-carbon Energy Provider

Lower Carbon Empower Better Life

Leading Low Carbon Development Creating Environmental Value

Empowering People's Well-being Dedicating Social Value

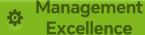
Standardizing Efficient Operations Enhancing Governance Value

Green & Clean Energy











Technological Innovation

By 2035

- · Clean energy will account for 95% of installed capacity
- Clean energy will account for more than 70% of power generation
- Increase the construction of wind power, photovoltaic and other clean installed capacity, and expand the production and supply of clean electricity
- Strengthen environmental quality monitoring and air pollution prevention and control, and adopt diversified environmental protection measures

Bv 2035

- Carbon emissions will not be higher than the peak in 2022
- Decrease in total and intensity of carbon emissions
- Take multiple measures to reduce carbon emissions and improve carbon emission management capabilities
- Participate in climate governance through carbon trading activities, green finance, etc.

By 2035

Ensure energy security for society with green and lowcarbon energy and improve social emergency support capabilities

- Strengthen standardized management of operations. and give full play to the role of coal-fired power in providing support, accommodation and quarantee
- · Improve professional asset management ability and utilization rate of new energy

By 2035

Create a number of influential responsibility projects or actions, and work with various stakeholders to create sustainable positive impacts on the economy and society

· Focus on the needs of partners, employees and customers, establish a positive interaction mechanism, and protect the rights and interests and value realization of employees and upstream and downstream industry chain

By 2035

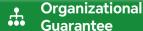
Essentially realize the modernization of the governance systems and capacities, and significantly improve ESG performance

- Promote deepening reform and improve the modern corporate system with distinctive Chinese
- Improve ESG construction and strengthen ESG integration into production and operation

By 2035

R&D Investment intensity and revenue share of science and technology will make industry leader, and a number of core technologies and solutions with global competitiveness will be mastered in lowcarbon new emerging industries

- Promote key technology research and cultivate strategic emerging industries
- Accelerate technological transformation and application of achievements
- Strenathen the construction of scientific research team
- Promote industrial digital transformation







Capacity Guarantee



Cultural Guarantee

characteristics





Strategic Dimension	Pathway	Indicators	Short-tem Target (by 2025)	Mid-term Target (by 2030)	Long-term Target (by 2035)	Response to SDGs	
Green & Clean Energy	Green energy production : Accelerate the development of clean energy such as wind power and solar energy, and help	Proportion of clean energy installed capacity	>90%	Domestic>95%; Overseas 100%	Domestic>95%; Overseas 100%		
	transform power supply from high-carbon to low-carbon, and from mainly fossil fuels to clean energy.	Proportion of clean energy power generation	up to 50%	up to 60%	up to 70%	SDG7, 12	
	Strengthen ecological and environmental protection: strengthen environmental quality monitoring and assessment, grasp environmental quality status and changing trends, continuously improve the management level of pollutant and waste discharge, achieve continuous improvement of environmental quality, and ensure ecological and environmental safety.	Air pollutant emission intensity (Air pollutant emissions /operating profit)	The intensity of sulfur dioxide, nitrogen oxides, and smoke emissions decreased by 15% compared with 2022	The intensity of sulfur dioxide, nitrogen oxides, and smoke emissions decreased by 20% compared with 2022	The intensity of sulfur dioxide, nitrogen oxides, and smoke emissions decreased by 25% compared with 2022	•	
Technological Innovation	Increase investment in science and technology: continue to increase investment in research and development, and strive to maintain the leading edge in scientific and technological innovation in the industry; Intensify efforts to build school-enterprise joint research centers and national, provincial and ministerial key laboratories, and continue to consolidate scientific research capabilities.	Research and development expenses	25% increase from 2022	30% increase from 2022	35% increase from 2022	SDG9	
	Accelerate technology transformation and application of achievements: actively strive to participate in major national special tasks and key core technology research projects; continue to carry out R&D and technology iteration in strategic emerging industries such as novel energy storage, green electricity transportation, photovoltaic colorization and recycling. By mastering core technologies, we will create a number of low-carbon and zero-carbon solutions, products and services that meet the needs of transportation and energy convergence, urban renewal, and industrial and agricultural energy transformation, and promote their application.	Transformation of innovations	Annual number of new patent applications≥120, applied in specific scenarios, and can continue to create value	Annual number of new patent applications≥130, transforming core technologies into multiple demonstration application projects	Annual number of new patent applications≥140, the core technology is leading in the industry and widely applied at home and abroad		



Strategic Dimension	Pathway	Indicators	Short-tem Target (by 2025)	Mid-term Target (by 2030)	Long-term Target (by 2035)	Response to SDGs
Technological Innovation	Layout the development of strategic emerging industries: Focus on enhancing the competitive advantage of clean energy industry, increase efforts to promote key technology research and cultivate strategic emerging industries, focus on building a new power system, focus on novel energy storage and energy storage safety, green power transportation, the extension, replenishment and strengthening of photovoltaic industry chain, efficient and safe application of geothermal energy, and strive to cultivate a number of industry-leading and market-recognized "unicorn" enterprises.	Technology industry① revenue share	100% increase from 2022	200% increase from 2022	300% increase from 2022	
		Cultivate "unicorn" companies	1 potential "unicorn" company	2 potential "unicorn" companies	2 potential "unicorn" companies and 1 "unicorn" company	SDG9
	Industrial digital transformation: Continuously improve the level of intelligent production, strengthen the construction of information digitalization, and promote accurate transmission and efficient utilization of data.	Core business② digital intelligence	up to 98%	up to 100%	up to 100%	
Energy Security	Improve asset operation and management capabilities: Further strengthen standardized operation management, carry out centralized research and management in key areas and key links, control	Transformation of technological achievements in "Science and Technology for Safety" ③	Realize transformation of 3 technological achievements in "Science and Technology for Safety"	Realize transformation of 5 technological achievements in "Science and Technology for Safety"	Realize transformation of 8 technological achievements in "Science and Technology for Safety"	
	and reduce the non-stop shutdown of coal power units, and give full play to the role of coal power in bottom support and regulation guarantee. Improve professional management capabilities of new energy assets and improve new energy utilization efficiency.	Construction of new energy smart station④	The completion rates of intelligent transformation of qualified new energy and hydropower projects reach 50% and 25% respectively.	The intelligent transformation of qualified new energy and hydropower projects essentially completed	The intelligent transformation of qualified new energy and hydropower projects completed	SDG7, 11, 17

① Refers to emerging industries including novel energy storage and energy storage safety, green power transportation, the extension, replenishment and strengthening of photovoltaic industry chain, and efficient and safe application of geothermal energy.

 The core business includes finance, materials, projects, equipment, manufacturing, sales and human resources.
 Focusing on power industry, use advanced technological means to serve safety, and apply informationized and intelligent means to nip hidden accidents in the bud.
 Improve the intelligent operation level, economic and technical indicators and management efficiency of new energy stations by enhancing industrial standardization, intensification, and digital intelligence management and control capabilities.



Strategic Dimension	Pathway	Indicators	Short-tem Target (by 2025)	Mid-term Target (by 2030)	Long-term Target (by 2035)	Response to SDGs
	Take multiple measures to reduce carbon emissions: adhere to green production, green power generation and green office, constantly explore low-carbon technologies and digital intelligence levels, improve carbon emission	CO ₂ emissions	Down 20% from 2022	Down 30% from 2022	Down 40% from 2022	
		Climate risk indicators linked to executive pay	Identifying the range of climate risk indicators related to executive pay	50% of the climate risk indicators are linked to executive pay	100% of the climate risk indicators are linked to executive pay	
	management capabilities, reduce carbon emissions, and gradually link climate-related factors with executive compensation.	Coal consumption of thermal power supply	292g/kWh	Continue declining	Continue declining	
Climate Action	Participate in climate governance: regularly review the risks and opportunities brought by climate change to corporate management, and take improvement measures; Actively enter the carbon market and explore various carbon trading activities; Continue to develop green finance and deepen the integration of industry and finance; Participate in climate change-related activities and contribute to global climate governance system.	CCER development volume	Cumulative development of CCER no less than 1 million tons	Cumulative development of CCER no less than 3 million tons	Cumulative development of CCER no less than 5 million tons	SDG6, 13, 14, 15
		Green power trading volume; green certificate trading	Green power trading volume increase by 20% compared with 2022; green certificate trading volume increase by 20% compared with 2022	Green power trading volume increase by 25% compared with 2022; green certificate trading volume increase by 25% compared with 2022	Green power trading volume increase by 30% compared with 2022; green certificate trading volume increase by 30% compared with 2022	
Management Excellence	ESG value creation: Effectively integrate ESG governance into daily operations and governance, and continue to play the role of ESG governance in value creation.	Mainstream ESG ratings at home and abroad	Achieve a good level	Maintain a good level	Achieve an excellent level	
	Business ethics management: Establish a business ethics supervision and management mechanism to achieve comprehensive coverage of business ethics audits, and ensure compliance with business ethics standards and comprehensively supervise business ethics behaviors.	Business Ethics Supervision	Establish the supervision and management mechanism of business ethics, and determine the content of business ethics audit	Incorporate 70% of business ethics audit content into the scope of company routine audit	100% of business ethics audit content is included in the company's routine audit scope	SDG16



Strategic Dimension	Pathway	Indicators	Short-tem Target (by 2025)	Mid-term Target (by 2030)	Long-term Target (by 2035)	Response to SDGs
Shared Achievements	Deepen partnership cooperation : Relying on industrial advantages, comprehensively deepen mutually beneficial cooperation with governments at all levels, investors, suppliers and other partners to deepen industry influence.	Number of strategic cooperation agreements	More than 400 copies accumulated	More than 600 copies accumulated	More than 800 copies accumulated	SDG1, 2, 3, 4, 5, 8, 10, 11, 17
	Help employees become talents: Protect the legitimate rights and interests of employees, improve employee benefits and rewards, promote the construction of talent team, promote the sustainable development of human resources, and provide solid talent guarantee and intellectual support for the company's high-quality development.	Completion rate of employee annual training budget⑤	90%	95%	98%	
	Responsible supply chain: Carry out the audit and evaluation of suppliers' performance capabilities, focus on supply chain diversification, and promote the improvement of supply chain sustainability capacities with the company's technology and influence.	Supplier performance capability management	Establish a supplier ESG evaluation standard system	The proportion of suppliers selected according to the ESG evaluation standard system reaches 75%	The proportion of suppliers selected according to the ESG evaluation standard system reaches 100%	
	Product and customer responsibilities: Strictly control product quality and protect consumer information and privacy.	Service quality and customer satisfaction	Customer satisfaction up to 99%	Customer satisfaction up to 99.5%	Customer satisfaction up to 100%	

^(§) Completion rate of employee annual training budget = employee annual training input/employee annual training budget. The annual training budget is 2% of the total salary for the year.