Question: As we heard today, the coordinated interplay between power markets and carbon pricing is essential for green transformation. In your view, what are the next steps in China to develop the emission trading scheme in the context of a unified power market system?

I think it is necessary to accelerate the promotion of power-carbon market system establishment to adapt to the Dual Carbon Goals. The carbon market mechanism is a major national strategy and initiative to achieve low-cost emission reduction in the whole society. As there is a strong coupling relationship between the power market and the carbon market, a coordinated and efficient power-carbon market mechanism has become one of key factor promoting the Dual Carbon work (peaking carbon emissions by 2030 and achieving carbon neutrality by 2060).

At present, the low-carbon development of thermal power and the development of new energy has not been effectively linked in China. There is a mechanism to encourage new energy power generation adopted in the design of power market system. It is necessary to conduct in-depth research on the peak shaving and flexibility mechanism for thermal power to support new energy in the carbon market. With the stable operation of the national carbon market, the existing regulations on benchmark, energy conservation and adjust factor need to be adjusted and revised in combination with coal functional orientations of various generating units, so that the carbon market and the electricity market can play a coordinated role, Strengthen the optimized combination of new energy and traditional energy.

1. In mechanism designing, we need to scientifically grasp the development orientation of coal power in building the new power system. From a strategic perspective,

According to Modern energy system planning, energy development and
security should be taken into account together, it is necessary to deeply understand the value of coal power in the context of pursuing green and low-carbon energy development and fostering a new power system in China.

(1) the first role is to secure basic energy supply

(2) the second role is to serve the large-scale development of renewables, so we should accelerate the transformation of coal power from basic power source to flexibility source

(3) the third role of coal power is to support safe mega grid

2. Ideas and suggestions for updating the ETS plan for power generation sector in the context of the Dual Carbon Goals

(1) Improving the allowance allocation plan for power generation sector in the national carbon market

(2) Fully evaluating the functional status of coal power in the power system, and scientifically and rationally updating the allowance allocation benchmark and adjustment factor for coal-fired units

(3) Improving the CCER mechanism and considering the impact of CCERs in the allowance allocation plan

(4) giving positive incentives to units with comprehensive resource utilization and high energy efficiency

(5) Prudently devising the allowance allocation plan for newly included sectors in the carbon market

(6) improving various market mechanisms

At the initial stage of the national carbon market, there is a deficit of carbon allowances issued for free, which leads to additional costs of carbon reduction for thermal power companies. Such incremental costs should ultimately be passed on to electricity consumers, rather than being borne
by electricity companies alone. In the meantime, it is necessary to explore a mechanism for effective coordination among carbon market, electricity market, green power market, green certificate mechanism and CCER mechanism to facilitate efficient market operation.