China's new national carbon emissions trading scheme (ETS)

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In news

China's carbon emissions trading scheme recently made its debut with 4.1million tonnes of carbon dioxide in turnover.

About Emissions Trading Scheme (ETS)

- It is an intensity-based trading system for carbon dioxide emissions by China.
- This emission trading scheme (ETS) creates a carbon market where emitters can buy and sell emission credits.
- From this scheme, China can limit emissions, but allow economic freedom for emitters to reduce emissions or purchase emission allowances from other emitters.
- The scheme is run by the Ministry of Ecology and Environment of China which eventually plans to limit emissions from six of China's top carbon dioxide emitting industries.
- **This year, it started with its power plants, and covers 40% of China's emissions(**accounts for more than 60% of China's total power capacity**)**, which is 15% of world emission.
- China expects its ETS to become the largest carbon market in the world by volume.
- China has set up the trading platform of the national ETS on the Shanghai Environment and Energy Exchange.
- As in other carbon markets, emission permits are

allocated to participating firms, which they can use to cover their own emissions or sell on the exchange.

- **It is part of China’s plans to use market mechanisms to help bring emissions to a peak before 2030 and to net zero by 2060.**
- The establishment of the scheme was first pledged by President Xi Jinping ahead of the signing of the Paris climate accord at the end of 2015.
- There was a “soft launch” in late 2017, but no transactions took place, and plans for a full launch were put back several times.

Who can trade under new ETS?

- Phase one of the scheme will cover 2,225 power plants responsible for over 4 billion tonnes of carbon dioxide emissions per year.
- The **allocation of permits is based on “carbon intensity” or the amount of emissions per unit of power generation**, rather than absolute levels.
- **A coal-fired power plant will be granted free permits to cover its verified emissions.**
- Even if it exceeds that verified amount by 100%, it will be required to buy no more than 20% of the surplus on the market.
- **Gas-fired power plants do not have compliance obligations**, meaning they can sell surplus allowances and have no need to buy even if they emit more than their allocation.

Who is not allowed to trade in the first phase?

Financial institutions or individual investors will not be allowed to participate in trading in the early stage of the national ETS, but institutional investors will be included once the trading mechanism matures.

Expansion of ETS

China aims to expand the ETS to cover eight high-emission industries, including petrochemicals, chemicals, building materials, non-ferrous metals, papermaking, steel, power generation and aviation, though the timescale is not yet known.

China’s thermal power plants

Thermal-fired power plants, including coal and gas, accounts for more than 60% of China’s total power capacity. The power sector contributes more than a third of its total carbon emissions.