JAMIE P. HORSLEY

Under coal's shadow, China is accelerating its carbon mitigation effort

China, like the United States, is reeling from record extreme temperatures, flooding ↗, and drought ↗. One of the world's most climate-vulnerable countries ↗, its actions are central to our shared existential climate challenge. China is both the world's biggest greenhouse gas emitter, responsible for 35% ↗ of global climate-damaging carbon dioxide (CO2) emissions, and possibly its greatest hope ↗ as a world leader in renewable energies, clean mobility, afforestation, and green finance ↗. Given its extraordinary acceleration ↗ of renewable energy capacity in 2023, some analysts predict that China's emissions may peak in 2024 ↗, six years before its declared goals to peak carbon by 2030 and reach carbon neutrality by 2060. Nonetheless, through 2023, solar provided less than 5% and wind just over 10% of China's actual energy generation ↗, and China still relied on coal—the major source of CO2—for 60% of its energy. Its newly approved coal-fired plants comprised 95% of new coal power construction ↗ globally in 2023, justified as security ↗ against unreliable renewables ↗ under the mantra of "building the new before discarding the old."

Still, China's leadership now recognizes that its green, low-carbon transformation is a strategic imperative ↗. It is enacting a flurry of climate mitigation requirements ↗ and plans ↗ to expand carbon and other greenhouse gas reduction initiatives, better integrate renewables into power grids, and innovate green hydrogen production, complemented by mutually reinforcing ↗ climate adaptation ↗ efforts such as sponge cities ↗. And, while adding new coal capacity to ensure energy security as demand increases, the government has imposed a new fee ↗ on coal power consumers. This fee will compensate coal-fired power plants ↗ for maintaining stand-by capacity to meet irregular demand, but constrain excessive coal power utilization, as clean energy output rapidly grows ↗.

China's emission-reduction initiatives include a nationwide, mandatory CO2 emissions trading system (ETS), informed by global efforts ↗ to realize climate change costs ↗ through market-based mechanisms, to gradually reduce carbon emissions. Covered emitters trade emission credits based on allowances to emit designated amounts of CO2. Companies emitting less than their allotment sell the difference as credits, while those exceeding their allowance must buy credits to compensate. After a decade of

experimentation under regional pilots, China's national ETS—the world's largest in terms of covered emissions—launched in 2021. State Council regulations ↗ promulgated in January bolstered the ETS institutionally and increased penalties, including for misreporting data ↗. China's national ETS covers only the power sector, accounting for 40% of China's carbon emissions, but will expand its ambit this year ↗, with the goal to cover 70% ↗ of total carbon emissions by 2030. Regulators will gradually tighten allowances ↗ and replace them with paid allotments to further incentivize emission reductions.

The European Union's ETS ↗, the world's oldest, helped achieve a 47% reduction in power generation and energy-intensive industrial emissions between 2005-2023. 2022 power sector emissions from northeastern states in the U.S. Regional Greenhouse Gas Initiative ↗ fell by 44% compared to a 2006-2008 baseline, faster than the nationwide emissions decline. Although China's ETS is young and underdeveloped ↗, it has already demonstrated benefits in reducing emissions ↗, conserving energy ↗, and promoting clean energy technical change ↗. Just one of many tools being deployed to address China's massive climate-related challenges, its adoption and evolution illustrate the dynamism amidst complexity—especially regarding coal—of the country's decarbonization effort.

CHENG LI AND MALLIE PRYTHERCH

China's domestic tourism surge signals a new economic roadmap

Beyond the widely noted stagnation and lack of consumer confidence in the Chinese economy, there is an intriguing and important phenomenon about changing consumer spending patterns and economic choices in China. Despite the reality of overall subdued consumerism, China is witnessing a remarkable surge in domestic tourism, signaling a pronounced shift toward experiential spending, as well as providing insights into market prospects and the dynamics of the socio-economic landscape.

China's retail sales grew 7.2% year-on-year in 2023, competitive on a global scale but much lower than the double-digit rates of the 2010s. This change underscores an