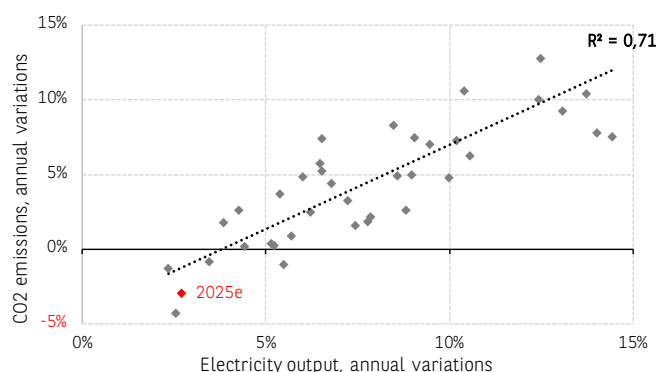


CO₂ EMISSIONS: WHEN THE TREND IN CHINA REVERSES...

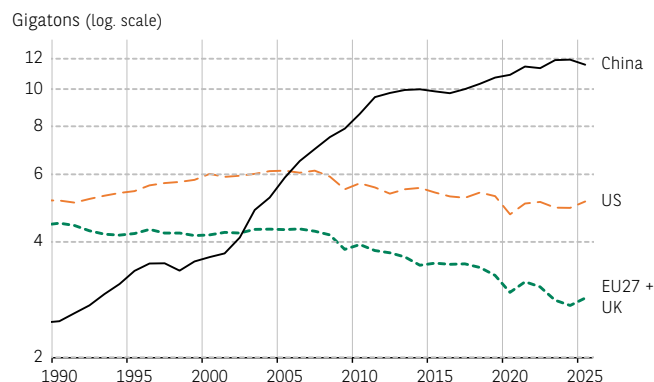
Jean-Luc Proutat

CHINA'S CO₂ EMISSIONS ABOUT TO GO DOWN?

China : CO₂ emissions vs Electricity output (1985-2015)



Annual CO₂ emissions



SOURCE: OUR WORLD IN DATA, CARBON MONITOR, BNP PARIBAS

Decline in emissions in the first half of 2025: the point does not make the trend...

In the first half of 2025 (H1 2025) and according to the Carbon Monitor website, China would have reduced its carbon dioxide (CO₂) emissions by around 3% compared to the same period last year¹. Even if this is good news coming from the world's largest CO₂ emitter (30% of the total), this is not surprising given the slowdown in the energy sector. In the same first half of 2025, the growth in electricity production slowed to 2.3% year-on-year, which is low by Chinese standards. Historically well correlated with emissions, weak electricity output largely explains the above-mentioned figure (see *left chart*).

... but the trend remains encouraging.

At normal speed, China is probably less likely to reduce its CO₂ emissions, but isn't that far away from reaching this goal. After the boom that followed its entry into the World Trade Organization (WTO), the pace of its emissions moderated at the turn of the 2010s, as economic growth normalized and the country accelerated its energy transition; the last few years have seen the beginning of a plateau (see *right-hand chart*).

With USD 625 billion spent annually (twice the US amounts), China is by far the country that invests the most in clean technologies, a sector in which it is clearly the leader². Having already set records in 2024, the use of renewable energies is now becoming widespread (it already accounts for 17% of the total primary mix, more than in France³). In the first half of 2025, the China Electricity Council reported nothing less than a doubling of wind turbine and photovoltaic panel installations (compared to the same period last year), to the point where an overcapacity crisis now threatens the sector.

In China, as in many regions of the world where green energy has taken off quickly (Spain, California, etc.), the challenge is no longer to increase the flow of megawatt-hours, but to distribute them by investing in networks and to rationalize supply. After the era of subsidies comes the era of consolidation. The new five-year plan, currently being drafted and applicable from March 2026, will reveal more about Beijing's intentions. However, it would be surprising if China did not reaffirm its determination to remain a key player in the energy transition. China, which has long promised to reverse its emissions curve by 2030, may be ahead of schedule.

¹ Emissions related to production activities: industry and energy. See <https://carbonmonitor.org>.

² In 2024. Source: International Energy Agency (2025) World Energy Investment.

³ In 2024. Source: Energy Institute (2025) Statistical Review of World Energy, data available via the Our World in Data website.

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