

China struggles with driving decarbonisation and providing stable power

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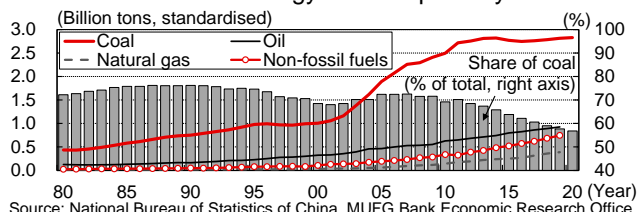
In China, a number of issues related to the energy situation have started to come to light. The price of coal – the source of energy for coal-fired electricity – skyrocketed to around four times the amount it was at the start of the year for a short while. Meanwhile, the central and local governments have adopted policies to curb power generation since summer, and electricity usage has been restricted in factories in many regions. In addition, temporary power cuts carried out in large cities, such as Beijing, have also affected the lives of citizens.

The background behind this disruption is similar to the situation in Europe, where attention has been focused on the soaring price of natural gas. The common pattern is as follows: investment in, and production and consumption of, fossil fuels has been artificially suppressed by the push to decarbonise, which in turn has laid the foundations for a potential widening of the gap between the demand and supply of energy. This becomes a risk as economies pick up after the COVID-19 pandemic and demand for energy recovers dramatically. The situation has been exacerbated by a build-up of separate factors that have limited supply, such as natural disasters. This can be seen in China's consumption of coal, which has plateaued for the most part since the first half of the 2010s, reflecting its policies to decarbonise (Chart 1). This means that, if the shift to other energy sources does not accelerate and catch up, there is a potential risk that supply and demand will be squeezed. On the other hand, the consumption of electricity this year (January to September) shows strong growth, even taking into account that it is the following year after the global pandemic started (2020), which can be attributed to the high level of production on the back of strong exports (Chart 2). Therefore, a series of unfortunate events, such as coal mining accidents and natural disasters (slump in hydroelectricity generated due to drought) may have triggered the potential risks detailed above. Furthermore, there are additional factors that have complicated the situation: as coal prices have been rising, energy companies whose electricity rates are effectively fixed are less willing to supply energy; and local governments aware of guidance from the central government have decided to curb their amount of energy consumption given that China may not achieve its target of “reducing energy intensity (energy use per unit of economic output) in 2021 by around 3% YoY”, which was set at the National People's Congress in March (Table 1).

Taking into account this situation, China's government has introduced short-term policies such as increasing its supply of coal and raising electricity prices, but also remains firm on its demand for decarbonisation in the medium and long term. As the world's largest producer of

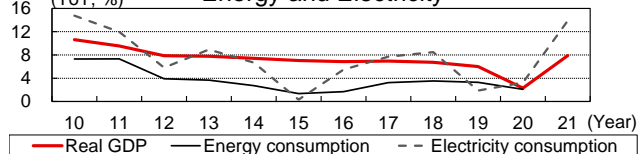
carbon dioxide, China has received attention from those who wonder how it will overcome its current issues and what this means for its economic growth and decarbonisation.

Chart 1: China's Energy Consumption by Source



Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

Chart 2: China's Real GDP and Consumption of Energy and Electricity



Note: 2021 results for "Real GDP" and "Volume of electricity production" uses data from January to September
Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

Table 1: China's Recent Energy Policies

Date	Details
March 2021	• The government announced its 14th Five-Year Plan at the National People's Congress along with a target of reducing energy intensity by 13.5% in five years. It set a target of lowering this year's energy intensity by around 3%.
May	• Shanghai said it aims to reach its peak CO2 emissions in 2025 - five years earlier than the central government's target.
June	• The government announced a feed-in tariff for new energy. It has also shown it will encourage investment in renewable energy, e.g. electricity generated by solar and wind power can be sold at higher prices.
August	• The government published a report on regions' energy consumption and intensity in the first half of 2021 and whether they met targets. Many regions have not reached the targets set for energy intensity or total energy consumed.
September	• The government announced its Scheme to Refine Dual-Control of Energy Intensity and Total Energy Consumption. It recommends increasing the weight of consumption intensity over total consumption, and exceeding consumption intensity goals.
October	• With the power shortage in mind, the government said it will increase coal production, will not include the consumption of renewable energy - which had recently been increased - in the total for energy consumed for a certain period, and will liberalise (raise) energy prices.

Source: Various news reports, MUFG Bank Economic Research Office

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