



Global Energy Perspectives

The state of transition in the world's major emitters

#3: China

Key investor messages



The Ukraine Crisis has altered the geo-economics and political environment profoundly.



These developments have the capacity to alter the trajectory of the energy transition, being a stimulant in some markets whilst an inhibitor in others.



These events underline the vulnerability of the transition to macro forces.



Investors should continue to monitor these risks and review their strategy when determining their exposure to the energy transition in different markets.

The Russian invasion of Ukraine has generated four impacts each with the potential to alter the course of the energy transition.



Gas and power price shock

Shortages of Russian pipeline gas has sent fossil fuel prices spiking, with European benchmarks in particular seeing unprecedented highs.



Stagflation

Rising commodity prices have stoked a bitter cocktail of accelerating inflation and decelerating growth. As a consequence the growth outlook globally has been slashed.



Energy Security

Governments have placed renewed importance on the imperative of energy security as faith in global supply chains have been rocked on account of Putin's weaponisation of gas supplies.



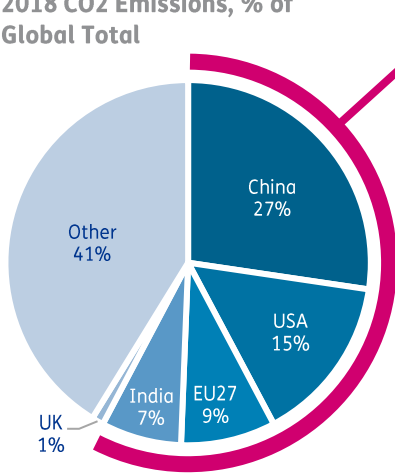
Political tension

The invasion of Ukraine has signalled an abrupt end to the stability of the post-cold war era. New geopolitical blocs creates instability abroad, whilst an emerging cost of living crisis threatens to enflame discord at home.

The State of the Transition: Climate Change & National Commitments

National Commitments suffer from credibility and durability risk


2018 CO2 Emissions, % of Global Total




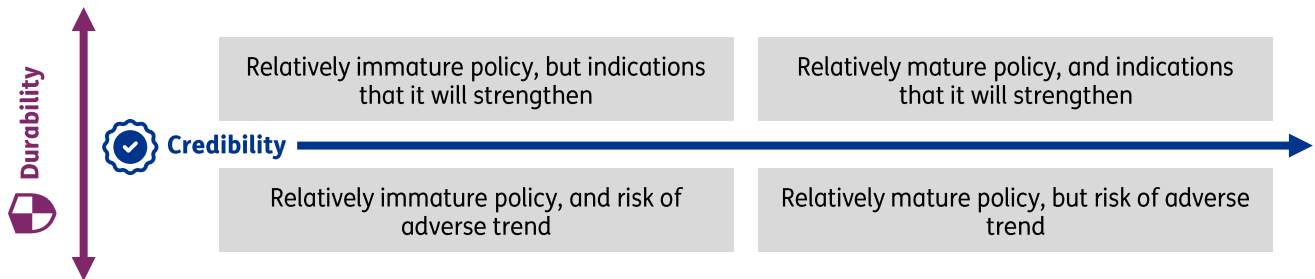
The top 4 global CO2 emitters produce 58% of global CO2 emissions. Their targets are disproportionately important to the global transition. However...

Future action is uncertain due to national commitments suffering from credibility and durability risk

Baringa's Global Energy Perspectives Team have developed a methodology to assess the credibility and durability of nations' commitments:

 **Credibility:** A measure of policy maturity. How developed is domestic decarbonisation policy in relation to Net Zero.

 **Durability:** A measure of the depth and breadth of political support. How vulnerable is the energy transition to political and economic shocks



The State of the Transition: Country Overview

National Transition plans have been impacted by the changing economic geopolitical environment of 2022



Major political breakthrough with the passage of the Inflation Reduction Act, the first major climate act in decades. The support of Congress reduces future rollback risks.



Energy war creates a paradigm shift in thinking on energy security. The lack of domestic fossil fuels spurs and accelerated transition to reduce foreign dependencies.



Geopolitical turmoil risks heightening impotence of domestic coal for supply security, whilst growth slowdown risks stimulating a carbon intensive growth stimulus.

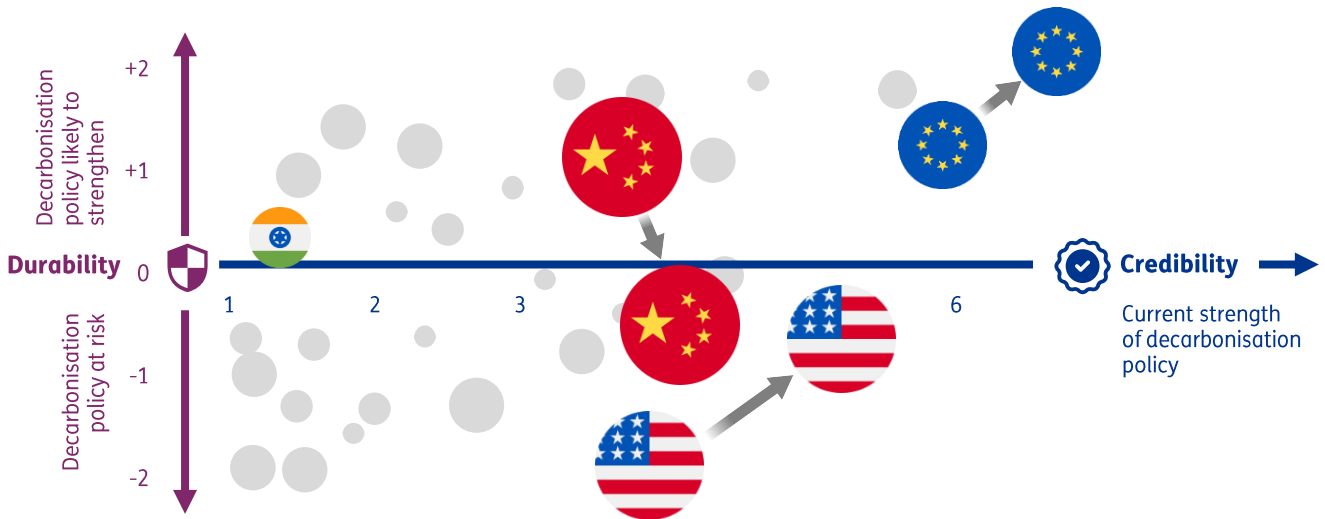


Commodity price shock has led to falling demand for gas in price sensitive markets like India, contributing to demand spikes in coal. Renewable build out is increasing at an impressive rate however, with fewer new coal plants built. Nevertheless, emission reduction targets remain unsupported by policy and are contingent on foreign finance.



Direction: PEP Credibility & Durability Index

Credibility & Durability is a measure of confidence over whether governments will reach Net Zero



Illustrative

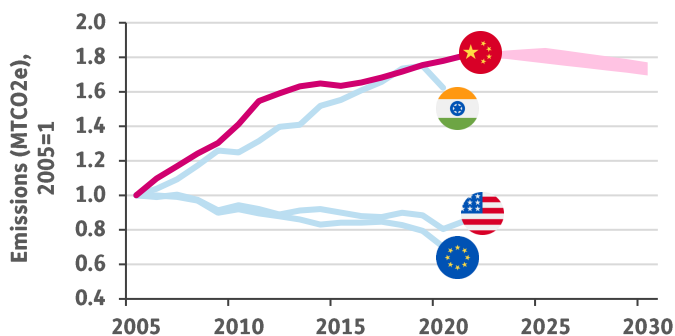
Historically China has had middling scores in our **Credibility** & **Durability** methodology, with moderate scores in both credibility and durability. The **Credibility** axis, on the X axis, looks at policy maturity, evaluating countries on its legislative and policy progress to Net Zero. The **Durability** axis, on the Y axis, looks at the political support, the momentum behind decarbonisation evaluating the risks of potential rollbacks.

China has suffered from middling credibility scores owing to its addiction to coal and fossil fuel subsidies, despite ambitious future targets for electric vehicles and renewable deployment.

In contrast, China has a moderate durability scoring owing to the historical priority to address air pollution issues for urban workers and the strong command and control nature of the CCP. Nevertheless, we recognise the potential contraction between Chinese growth and climate targets.

China: Emissions continue to grow

Total Emissions (excl. LULUCF), Indexed to 2005



Source: Climate Action Tracker Forecasts, Baringa Analysis

Progress:

- Emissions have been rising rapidly on account of extraordinary levels of economic growth
- GHG emission have risen by over 80% since 2005

Targets:

- Phase down of coal from 2026
- Peaking carbon dioxide emissions “before 2030”
- Lower carbon intensity by “over 65%” in 2030 compared to 2005
- Carbon neutral by 2060

China: Rising **Credibility** | Falling **Durability**

Re-running our methodology we see small increases in Credibility scores, whilst the Durability score has fallen.

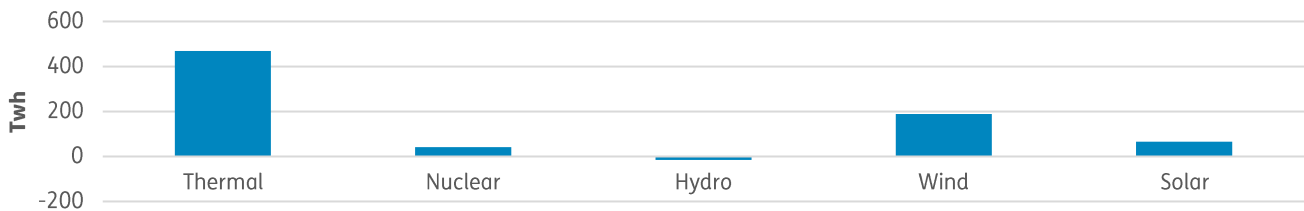


On the **Credibility** axis, there have been some moderate advancements in Chinese policy. However, these have been undermined by continued coal addition.

Credibility: Major policy development – The 14th Five Year Plan (FYP)

Coal continues to undermine China’s decarbonisation credibility.

2021 Power Generation Change YoY



Strong renewable development targets undermined by coal addiction

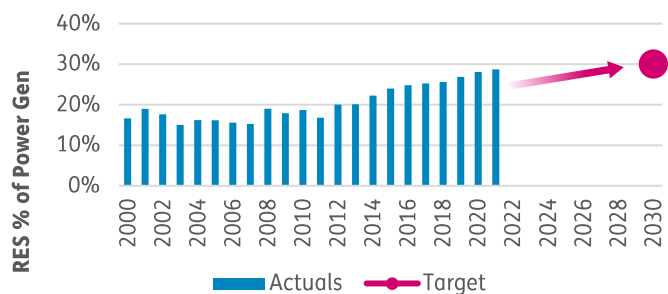
Credibility has been increased with the 14th five year, increasing climate commitments with higher renewable and zero-carbon power targets.

- However, renewable energy deployment is unable to keep up with total energy demand growth with coal representing 65% of total new capacity in 2021.
- The continued acceleration of coal use with the new generation of coal fleet undermines the potential progress in Chinese climate credibility.

The 14th FYP (2021) and the 14th FYP for a Modern Energy System rouse hope of progress

- The 14th FYP marks a shift in primacy of environmental policy with “new progress on ecological civilization” given prominence as one of the plans six pillars.
- The plan advanced new higher climate commitments including a target to achieve 30% of power capacity from RES by 2030. China is on track to exceed this.
- This is supplemented by 25% non-fossil fuel commitment for total energy consumption by 2030.

China on Course to Exceed RES Target



Source: Bloomberg. Baringa analysis

But implementation challenges remain

Energy market transformation required to enable renewable power reliance

Increase targets for flexible power sources (to 24%) and demand-side response capacities (to cover between 3% and 5%).

Top-down energy governance hampers coordination

By passing plans and instructions down through the layers of government, China limits local governments’ policy tools and powers, and limits coordination within or between provinces.

Climate and growth challenge competes at local and national levels









Growth targets are driven at local government level whereas emissions targets driven centrally. This limits climate incentives in comparison to growth incentives.

Durability



On the **Durability** axis we see the emergence of major risks. In China three out of the four major impacts of Ukraine have been negative with one neutral.

Energy security and growth slowdown stimulate emissions risk

Risk	Impact RAG	Transition Response	Commentary
Gas and power price shock	 Medium	 Negative	Gas prices resulting in decreased national demand for gas in favour of coal. <ul style="list-style-type: none"> LNG imports declined for first time in eight years. \$146bn August 2022 stimulus set to direct investment towards both coal and renewables
Energy security	 High	 Negative	Achieving energy security is a geostrategic imperative, resulting in risk of decreased gas imports and increased coal in energy mix. As geopolitical tensions heat up in Taiwan, energy security concerns over China's vulnerability to the Strait of Malacca has increased. This has incentivised maintaining coal capacity which can be sourced domestically. China central bank has increased lending quota for coal industry by \$15 bn.
Stagflation	 High	 Negative	Imperative for stable economic growth will be fuelled by carbon intensive growth. <ul style="list-style-type: none"> China's coal equity index has surged by 50% this year in anticipation of greater demand as economic conditions increase the need for state investment Energy consumption cap removed for the first-time signaling growth priority
Political tension	 Low	 Neutral	Frictions between local and central government create conflicting energy policy agendas. Frictions between state and central government may increase as economic growth weakens and targets become harder to achieve.

If you are interested in hearing more, please get in touch with our experts.



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