Baringa

Global Energy Perspectives

The state of transition in the world's major emitters

#1: The EU

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.

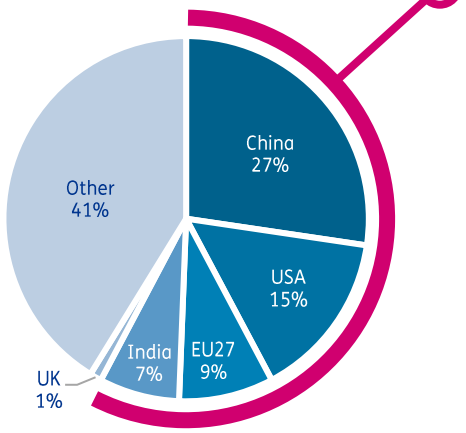
Political tension

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



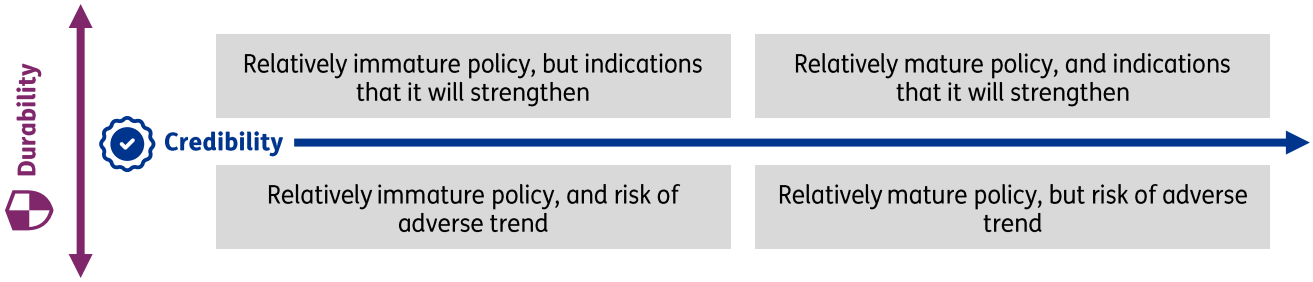
The top 4 global CO2 emitters produce 58% of global CO2 emissions. Their targets are disproportionately important to the global transition. However...

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



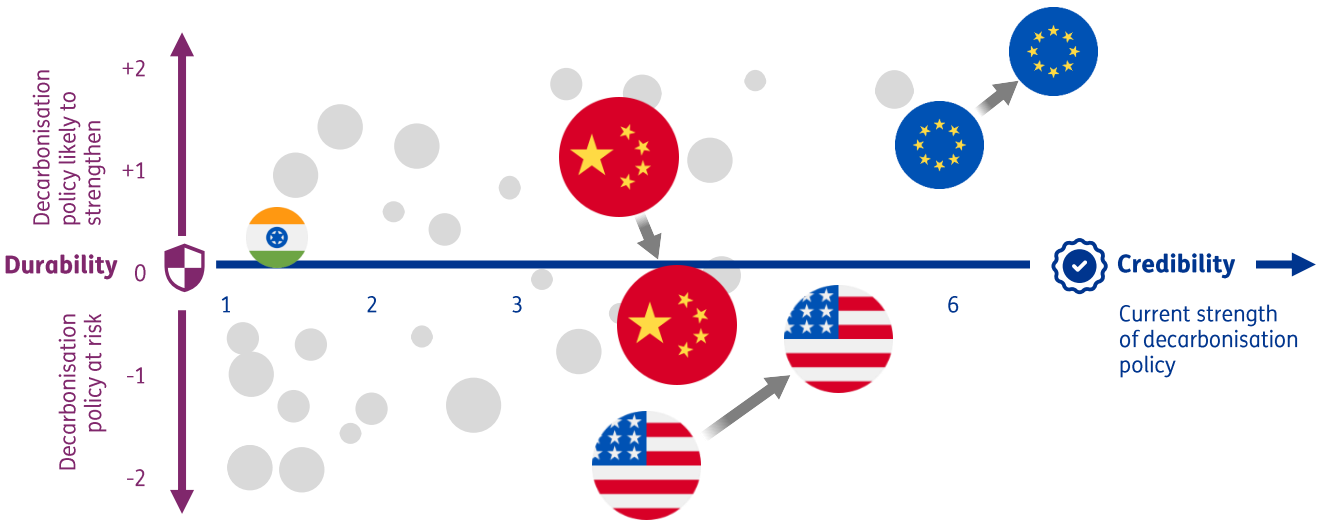
The State of the Transition: Country Overview

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



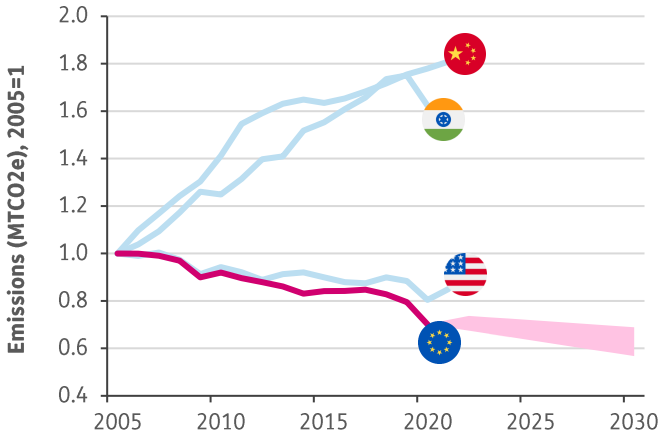
Illustrative

Historically **the EU** has performed well in our **Credibility** & **Durability** methodology, with high scores for both categories. The **Credibility** axis, on the x axis, looks at policy maturity, evaluating countries on their 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.

EU: Strong Historical Progress

Total Emissions (excl. LULUCF), Indexed to 2005



Progress:

- Emissions have been on a downwards trajectory
- The EU successfully achieved a Kyoto target of a 20% reduction in emissions on 1990s level in 2020

Targets:

- Net Zero by 2050
- Reducing GHG emissions by at least 55% by 2030, compared to 1990 levels

Source: Climate Action Tracker Forecasts, Baringa Analysis

EU: Rising Credibility | Rising Durability

Re-running our methodology we see rising pressure for both Credibility & Durability in the EU.

On the Credibility axis. There have been major advancements in EU policy, stimulated by the need to remove Russian gas from the energy mix.

Most notably the EU's REPower EU plan represents an acceleration in previous decarbonisation proposals. The 2030 target for RES generation has risen from 40% under the Fit for 55 plan to 45% under the REPower EU plan. This amounts to an additional 169 GW of Renewable generation by 2030.

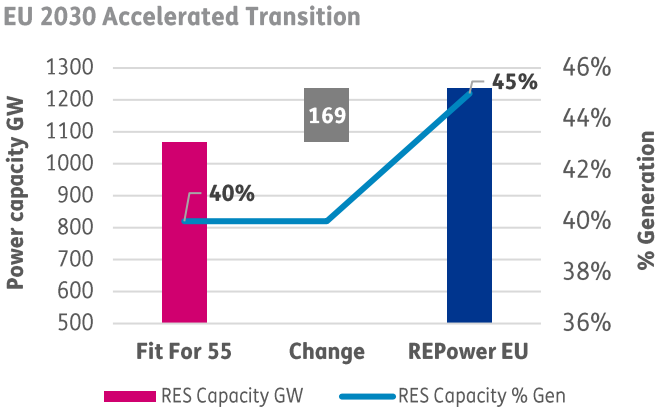
Whilst implementation challenges remain, most notably around the deliverability of this ambition giving the existing renewable pipeline, this represents a serious upgrade in ambition.

Crisis driving transition policies

REPower EU supports climate commitments but credibility challenges remain.

REPower EU spurs transition

- The dramatic decrease in availability of Russian gas (**reduced 76% Feb-Aug 2022**) and the price of gas (**up 1030% on 2019**) has created unprecedented constraints on the EU's gas (and power) supply.
- Three main policy objectives:
  - Diversify energy supply
  - Reduce consumption and increase energy efficiency
  - Accelerate clean energy
- Upgrades renewable emery commitment from 40% of capacity by 2030 to 45%. This represents a c.169 GW increase in RES deployment.



But implementation challenges remain

Reliance on individual member states:

- Member state level support needed to direct and manage investment, raise funds, and implement domestic policies.
- Increased the binding Energy Efficiency Target from 9% to 13% needs domestic implementation.

Reliance on consumer action:

- Social pressure to comply and 'play your part'.
- Challenge over EU estimates that short-term behavioural changes could cut gas and oil demand by 5%.

Insufficient renewable pipeline

- An aspiration gap exists between 2030 GW target and credible GW pipeline.
- Insufficient supply chain, grid constrains and permitting rules undermine speed of development.

Crisis driving transition policies

Russian invasion strengthens political support for decarbonisation

On the Durability axis we also see a strengthening of political support, stimulating the policy progress on the credibility axis.

Crisis driving transition policies

Risk	Impact RAG	Transition Response	Commentary
Gas and power price shock	High	Positive	**Soaring gas prices have resulted in a scramble for LNG and reduced fossil fuel demand through efficiency and consumption reduction targets** • With gas and power prices having risen to record highs the economics of renewable development have increased considerably, stimulating the development pipeline. • The risks of a major shift to gas alternatives such as coal have been managed, with coal consumption up just 7% YoY. This is smaller than feared and expected to be short lived given the exceptional situation.
Energy security	High	Positive	**The weaponisation of Russian gas has emphasised the geostrategic imperative of energy security. This means an accelerated transition due to the inability of source fossil fuels domestically.** Renewable energy seen as method to secure energy independence. REPower EU contains 169 GW of additional RES capacity by 2030 and a doubling of the heat pump installation rate.
Stagflation	Medium	Neutral	**Stagflation resulting in significant increased public debt and interest rates.** Growth and inflation risks are being mitigated through strong intervention in the retail market with governments effectively capping energy prices to protect consumers. The corresponding higher debt does create financial stability risks in the future, however. Debt to finance the Just Transition Mechanism established to provide targeted support to mobilise at least €100 billion over 2021-2027. Reducing frictions with poorer member states.
Political tension	Medium	Neutral	**Energy crisis exacerbating existing tensions within EU countries.** EU solidarity through debt mutualisation has strengthened coherence between the states and kept political tension to a minimum. Calls by Poland to suspend the EU's carbon trading scheme and Hungary to abandon sanctions on Russia have been kept to the fringes.

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

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