



# Stranded assets and environment-related risks

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## Agenda

- **What are stranded assets?**
- **How might assets become stranded?**
- **Who is exposed and what are the implications for investors, businesses and governments?**
- **What are the systemic implications?**
- **What might this mean for emerging production regions?**



## What are stranded assets in the environmental context?

- The unanticipated or premature write-down, downward revaluation or conversion to liabilities of assets ('asset stranding') is a feature of the creative destruction that drives forward capitalism.
  - Regularly results from changes in technology and regulation.
- But a confluence of recent developments have introduced new risk factors for environmentally unsustainable assets that may make them more prone to stranding.
  - Environmental challenges (e.g. climate change, water constraints)
  - Changing resource landscapes (e.g. shale gas, fertilisers)
  - New government regulations (e.g. carbon pricing, air pollution regulation)
  - Falling clean technology costs (e.g. solar and onshore wind)
  - Evolving social norms (e.g. divestment) and consumer behaviour
  - Litigation and changing statutory interpretations (e.g. changes in the application of existing laws and legislation)
- These risks are poorly understood and are rarely properly considered in decision making, especially amongst investors.



## Why does this matter?

- Size of potential value at risk and risk at a variety of levels, sectors and geographies. E.g. listed and unlisted, equity, debt, sovereign, business models, and development strategies.
- Socially inefficient asset stranding, e.g. lock in, inefficient transitions, and optimising the process of transition to a low carbon economy. Preference for a smooth process of value destruction being offset by value creation.
- Understanding potential risks allows for risk management and hedging strategies – importance for asset owners and fund managers. More capital available for green technologies and infrastructure.
- Implications for business strategy of companies exposed to these risk factors or dependent on other companies exposed to these risk factors.
- Political economy - who are the winners and losers? Developing credible and attractive low carbon/green growth pathways.



## Criticisms of the stranded assets hypothesis

- Short term valuations insulate investors from these long term risks.
  - Counter argument: Many of these risks are actually quite immediate. Moreover, long term risks eventually become short term ones.
- Market is already pricing in these risks.
  - Counter argument: Vast quantities of evidence shows agents are not.
- This is just the same as asset stranding and creative destruction elsewhere in the economy. What's new?
  - Counter argument: confluence of related risk factors is significant; drivers, consequences and responses to such stranding are still not understood.
- Markets will have time to readjust.
  - Counter argument: possibly, though depends on time horizons; exits always appear bigger than they actually are and liquidity could be a major problem under certain scenarios.



## Systemic risk

- Levels of exposure across different parts of the financial and economic systems likely to be very significant.
  - Listed equities are the only area where we currently have ok data.
- Bank of England tests:
  - Exposures of financial institutions to carbon-intensive sectors are large relative to overall assets;
  - Impact of policy and technology is not already being priced into the market, either through lower expected returns or higher risk premia;
  - Subsequent correction would not allow financial institutions to adjust their portfolios in an orderly manner.
- Asks for central bankers and financial regulators:
  - Track exposure; stress testing; macro-prudential tools to deflate exposure.



## Bringing this back to emerging production regions

- Investors in assets being developed in emerging production regions need to be aware of the convergence of environment-related risks underway.
  - Discontinuity is the new normal.
- Assets in high cost production areas are *always* going to be more exposed to risk and uncertainty.
- Country development plans need to be created that are not dependent on excessively high hydrocarbon prices. What are the alternatives?
- Commission work to understand whether risks are material, when they might be material, and what you can do to mitigate such risks.