



BANK OF ENGLAND

Long term Energy Scenarios for the
Clean Energy Transition Conference



Climate change: impact on the economy and financial system

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Agenda

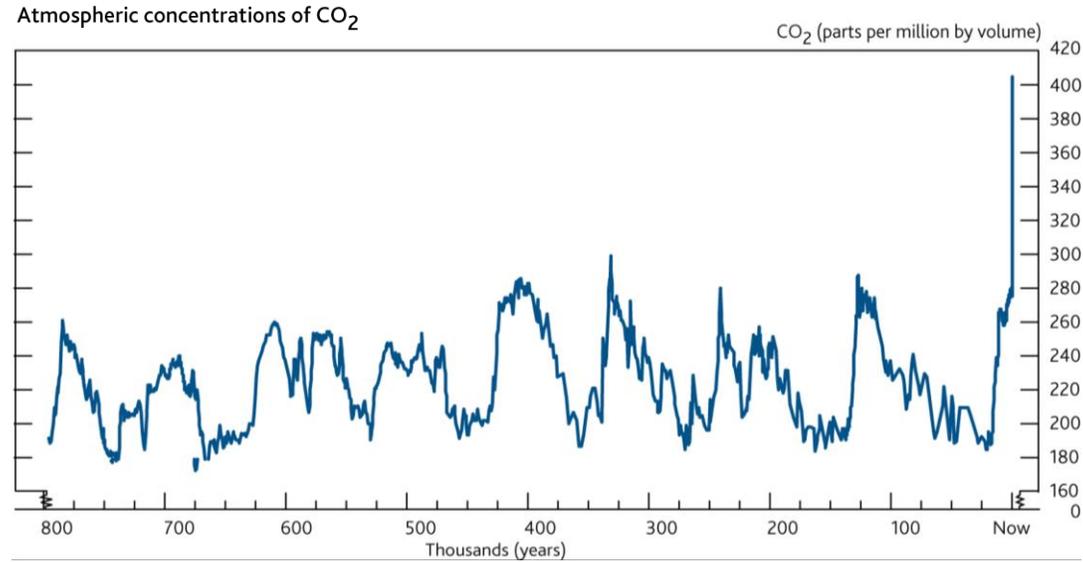
- 1) Relevance of climate change to central banks
- 2) Climate-related risks to the economy and financial system
- 3) Scenarios for central banks and supervisors

What do central banks do?

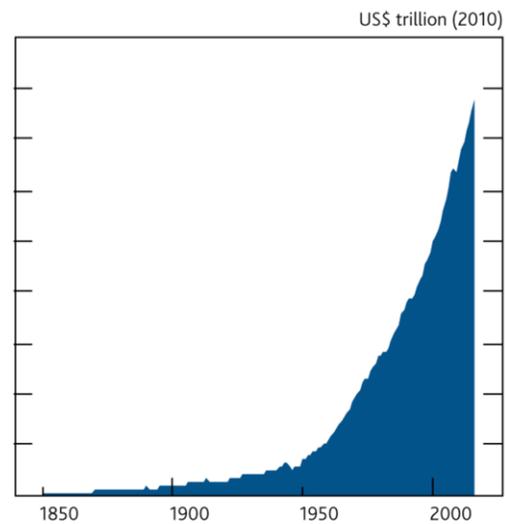


- Print bank notes and store gold
- Wholesale payments
- Regulate financial firms
- Assess financial stability risks
- Set interest rates in the economy

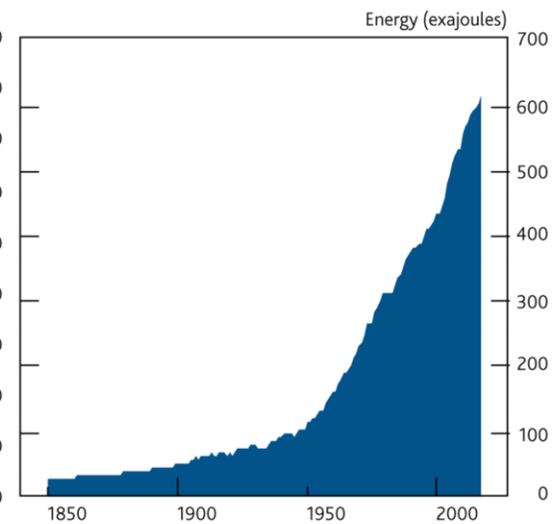
Historical context



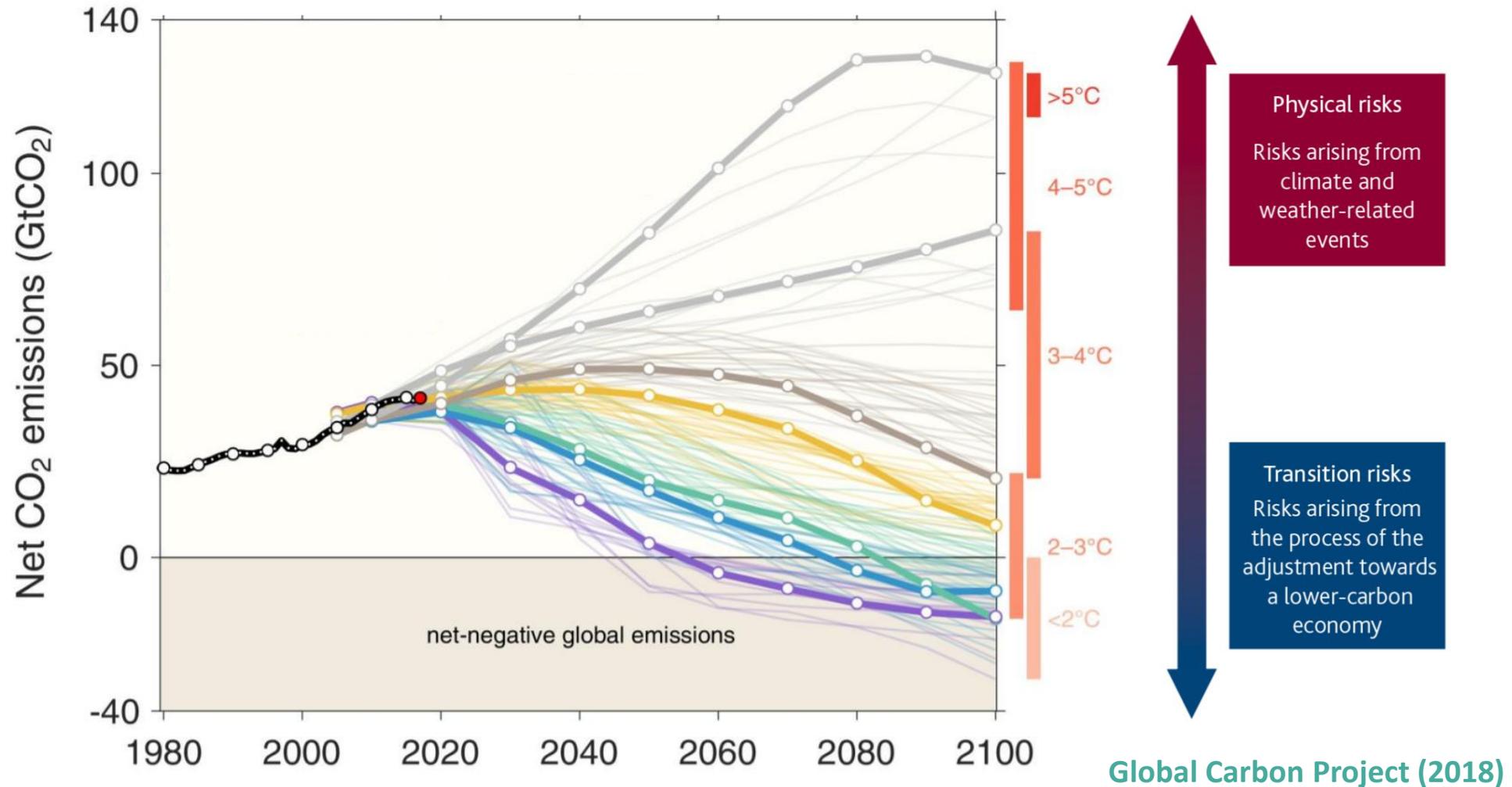
Global GDP
A hundredfold increase



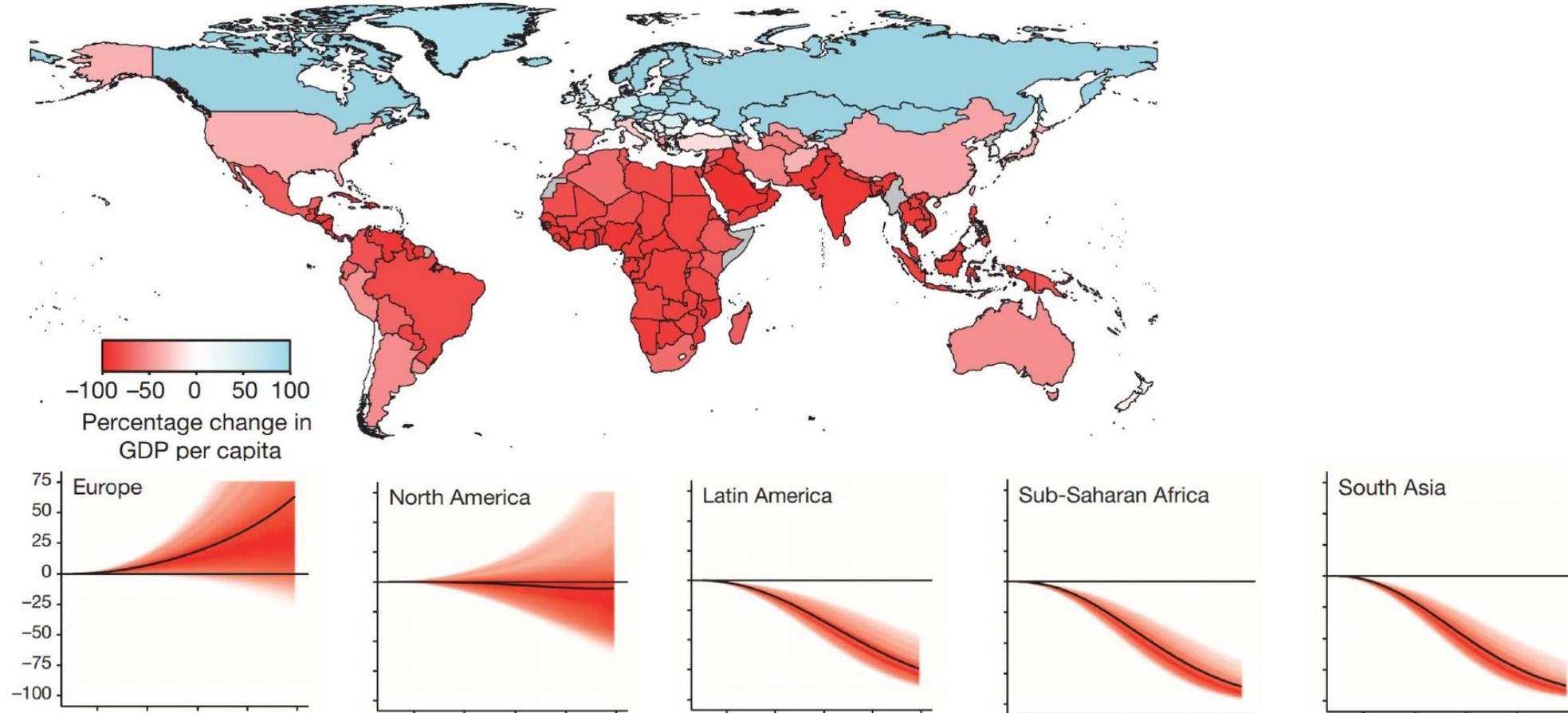
Global energy use
A twentyfold increase



There are two sources of climate-related risks



Physical impacts on economy are large, non-linear, vary by region



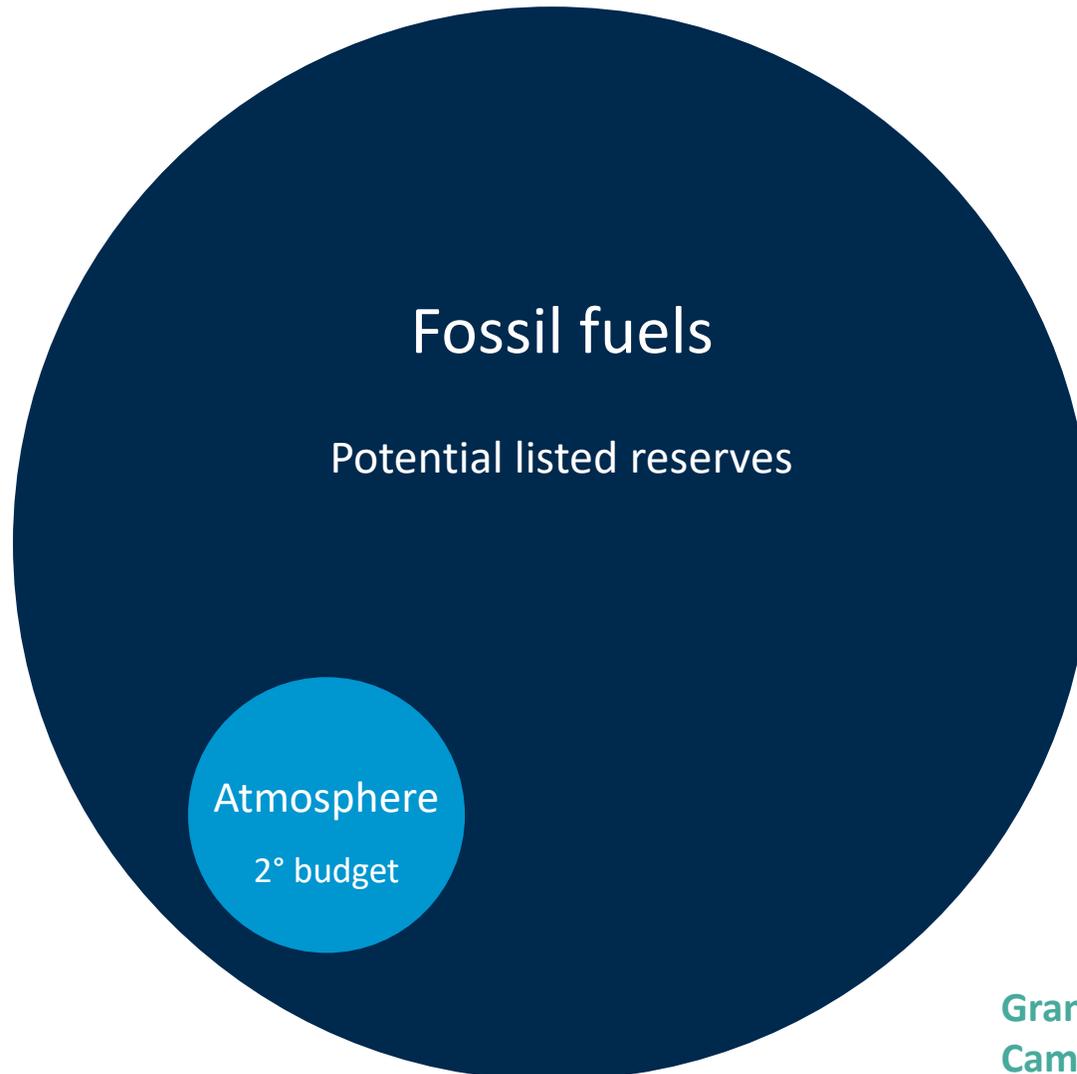
Source: Burke, Hsiang and Miguel, 2015

Physical impacts also translate into financial risks



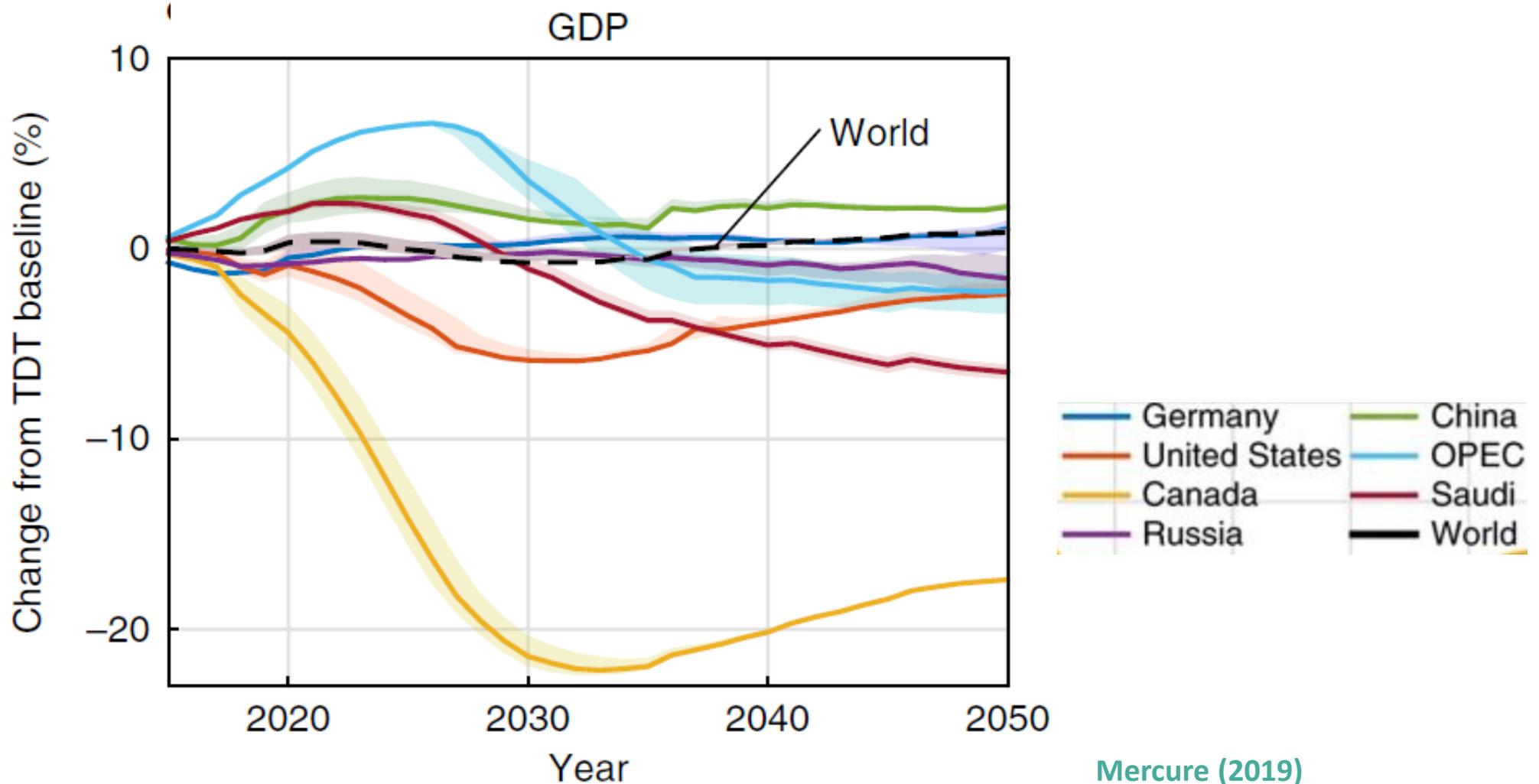
Bank of England (2018)

Transition risk: comparing listed reserves to carbon budgets



Grantham Institute (2013)
Cameron Hepburn, INET (2014)

Wider macroeconomic impacts from transition risk



What makes climate-related risks different?

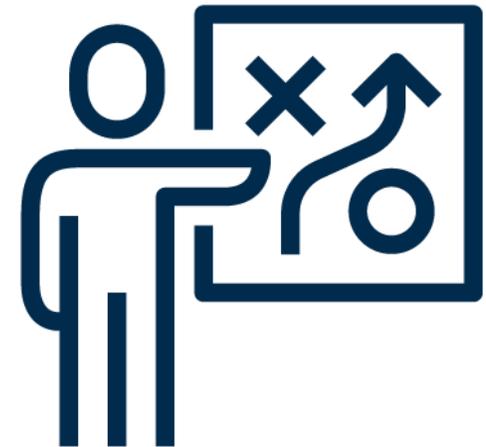
**Far reaching,
non-linear and
irreversible**



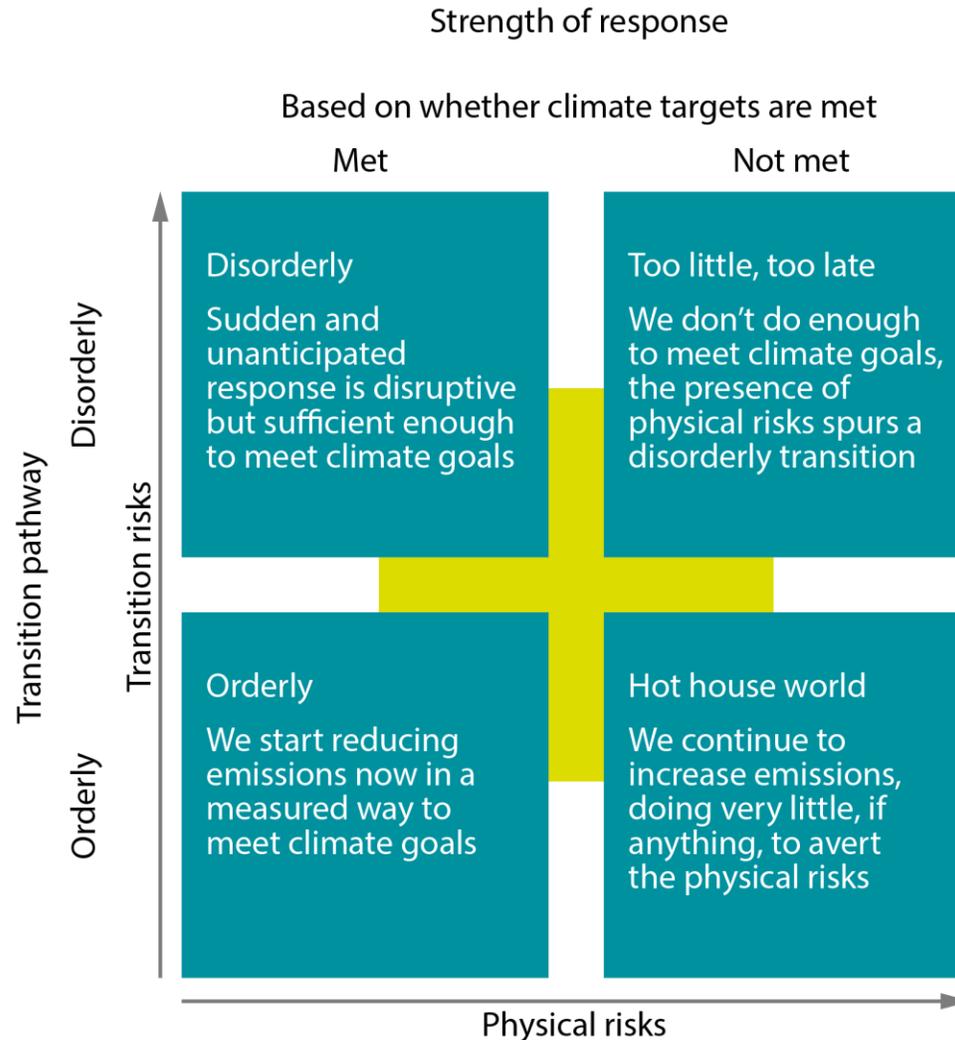
**Foreseeable,
although
uncertain**



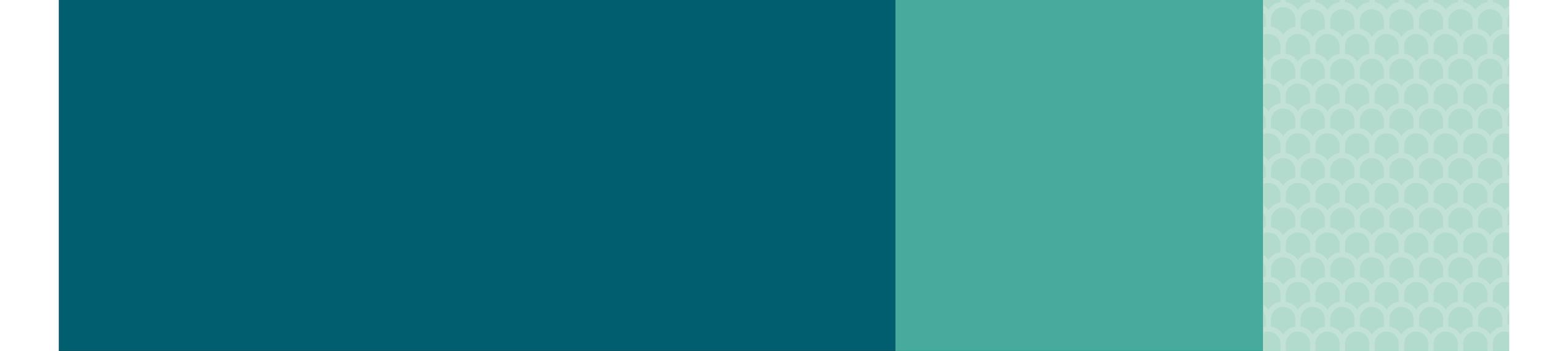
**For action today
to minimise
future risks**



Central banks also need scenarios



Network for Greening the
Financial System (2019)



Thank you

Questions