Limiting global warming to well below 2°C may result in the stranding of carbon-sensitive assets. This could pose substantial threats to financial and macroeconomic stability. We use a dynamic stochastic general equilibrium model with financial frictions and climate policy to study the risks a low-carbon transition poses to macro and financial stability, and the different instruments central banks (CBs) could use to manage these risks. We show that, even for ambitious climate targets, a carbon price increasing in a gradual and predictable way does not hinder CBs’ mandates. Should a financial crisis originate in the fossil sector, green capital requirements and green quantitative easing policies can provide an effective stimulus, and stabilize financial markets without compromising the objective of price stability. In this context, green financial regulation and green monetary interventions are welfare enhancing compared to market neutral policies. Our results suggest that the involvement of CBs in climate actions is possible if designed in compliance with their mandate.

(with Francesca Diluiso, Matthias Kalkuhl and Jan C. Minx)