

ONLINE SEMINAR: THRESHOLD POLICY EFFECTS AND DIRECTED TECHNICAL CHANGE IN ENERGY INNOVATION (+ Lionel Nesta and Francesco Vona), speaker Elena Verdolini (Università di Brescia)

Join Zoom Meeting

<https://us02web.zoom.us/j/86396463775?pwd=WklhZFdyV0Vuc20vRDJRZGxiS0pZQT09>

Meeting ID: 863 9646 3775

Passcode: hBtt1E

Read the abstract:

This paper analyses the effect of environmental policies on the direction of energy innovation in a sample of 33 countries over the period 1990-2012. We bring forward two novelties. First, we use threshold regression models to allow for discontinuities in policy effectiveness depending on a country's relative competencies in renewable and fossil fuel technologies. Second, we study separately the impact of market-based and command and control policy instruments. We show that the dynamic incentives of market-based and command and control policy instruments differ in important ways, which have been so far overlooked in the theoretical literature on the topic. Specifically, when the level of relative competencies is low, command-and-control policy instruments are more effective than market-based policy instruments in directing innovation towards renewable technologies. We discuss the dynamics behind these findings, and use simulation to illustrate how optimal policy choice would have accelerated the switch from fossil to renewable innovation in our sample. These results provide important guidance for the choice of policy portfolios to promote the transition towards carbon-neutral economies.