The Survival of the Energy-fittest: Evidence from French Manufacturing Firms

In studying the efficacy of climate policy, prior studies have focused on the improvement in energy efficiency or emissions within firms. However, energy intensity at an aggregate level may also change if energy-intensive firms exit, or energy-efficient firms gain market shares from energy-intensive firms. This paper extends the scope of analysis to document the relative contribution of these additional channels of selection and reallocation in reducing aggregate energy intensity and emissions. We find that selection and reallocation are stronger drivers behind the reduction in aggregate energy intensity than within-firm improvement. We provide causal evidence that these mechanisms are driven by energy prices and can be leveraged by policies.