

A native and endogenous version of GHG trading

Joint work with E. Biffis and K. Selazadeh Nobari.

We study the problem of optimal climate risk mitigation with short-term emission reduction targets and long-run temperature stabilization goals in the presence of firms generating greenhouse gases with different temporal persistency and warming potential. We investigate how the pervasive notion of carbon equivalence may undermine climate risk mitigation efforts when carbon markets can be used to trade short-lived gasses against long-lived ones. The findings are used to demonstrate the vulnerability of certain emission metrics and carbon accounting standards to greenwashing and to support the reporting of emissions in disaggregated form and native units of measure.