

Preserving Eastern or Offshore Oil for Preventing Green Paradoxes?

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Abstract This paper deals with possible foreign reactions to unilateral carbon supply reducing policies. It differentiates between demand side and supply side reactions as well as between intra- and intertemporal shifts of greenhouse gas emissions. Ritter & Schopf (2013) integrate stock-dependent marginal physical costs of extracting fossil fuels into Eichner & Pethig's (2011) general equilibrium carbon leakage model. Using this model, we change the policy instrument from an emissions trading scheme to a deposit preserving system. Thereby, we distinguish between purchasing high-value and low-value reserves. The results are as follows: In case of eastern oil kept underground, the *weak* and the *strong green paradox* arise under similar conditions to those derived by Ritter & Schopf (2013). In case of offshore oil kept underground, there is intra- and there can be intertemporal carbon leakage, but neither the present emissions nor the cumulative climate damages increase.

Keywords Natural Resources · Carbon Leakage · Green Paradox

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