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Global Emissions, Trade and Innovation: The Tragedy of the Locals

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A B S T R A C T

This paper looks at the production of locally and globally polluting goods in a trade model with two countries, North and South, one with high environmental concerns and the other with cheap and unregulated fossil fuel resources. In this asymmetric setting, trade and path dependency in innovation cause the North to specialize in non-polluting production and the South in energy-intensive goods, produced with fossil fuels that cause global environmental spillovers. We show that the North can stop the use of fossil fuels with two opposite strategies: either combining innovation and trade policies to redirect the competitive advantage of the South towards clean production, or compensating the South for the forgone revenue derived from giving up fossil fuels, with a systematic transfer scheme. These two policies have opposite implications in terms of costs and environmental outcomes for the North, and the choice between the two depends on the time preferences, valuation of the environment and starting point of the policy.

KEYWORDS Resource endowments; technical change; international trade; comparative advantage

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