

DRAFT WORKING PAPER

Embodied Energy in Interprovincial Trade and China's Energy Productivity

Potential

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Abstract

This paper evaluates the effect of accounting for the embodied energy in trade between provinces when assessing China's energy intensity targets. We use a multi-regional input output model to describe embodied energy trade flows between provinces and sectors. This provides a detailed picture of these flows, and is the first time such information has been used to assess provincial energy intensity performance. Our results show these flows have a significant impact on the interpretation of China's energy intensity targets, lowering energy intensity for embodied energy exporters and increasing it for importers. This knowledge has particular relevance for fostering greater energy productivity in China, a concept that can align development, energy security and environmental agendas.

Keywords

Energy efficiency, embodied energy, trade.

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