

## Scale, Technique and Composition Effects of CO2 Emissions under Trade Liberalization of EGS: A CGE Evaluation for Argentina

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**Abstract :** Current literature about trade liberalization of environmental goods and services (EGS) raises doubts about the extent of the triple win-win situation for trade, development and the environment. However, much of this literature does not consider the possibility that this agreement carries technological transmissions, either through trade or foreign direct investment. This paper presents a computable general equilibrium model calibrated for Argentina, where there are alternative technologies (one dirty and one clean according to carbon emissions) to produce the same goods. In this context, the trade liberalization of EGS allows to increase GDP, trade, reduce unemployment and improve the households welfare. However, the capital mobility appears as the key assumption to jointly reach the environmental target, when the positive scale effect generated by the increase in trade is offset by the change in the composition of production (composition and technical effects by the use of the clean alternative technology) and of consumption (composition effect by substitution of relatively lesspolluting imported goods).

**Keywords :** CGE modeling, CO2 emissions, composition effect, scale effect, technique effect, trade liberalization of EGS

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