Evaluation of Change in the Energy Intensity of Industries in Mexico and Brazil from 1980 to 2005

Topic: Designing of Energy Policies with I-O

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The aim of this paper is to study the changes in the energy intensity for the economic sectors in Mexico and Brazil caused by their structural change into the economic model: a transition from a import substitution model to a neoliberal one. To do so, we compute the matrix of the direct and indirect requirements of energy for the production for both countries and in different years, one in the 80's and the other two decades after, by taking the value prices of the energy sectors as alternative value bases. Then, we use this information to identify and compare the key productivities sectors in each country. Additionally, we evaluate their energetic efficiency by analyzing their intensity and production by each productivity sector. The requirements of energy for both countries increased in these years, but it has been concentrated in few energy sectors, these who are productive and the sectors related to services. Finally, based on this information, we propose some economic policy in order to increase the efficiency in the use of energy and to potentially impulse the growth of the country on a more sustainable way.