Analysis of the main drivers of CO2 emissions changes in Colombia (1990?2012) and its political implications

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In this study, an Index Decomposition Analysis-Logarithmic Mean Divisia Index (IDA-LMDI) model was developed to find the drivers behind the changes in CO2 emissions between 1990 and 2012 in Colombia. The results facilitate the assessment of the impact in Colombia of the main measures regarding the mitigation of CO2 emissions. Likewise, it allows us to analyze whether the recent measures implemented by the Colombian authorities to mitigate emissions are moving in the right direction. To carry out the decomposition analysis, six effects were taken into consideration: carbonization, the substitution of fossil fuels, the penetration of renewable energy, energy intensity, wealth and population. The effects of income and population appear as drivers of emissions for the period analyzed. A stylized analysis allows richer conclusions to be extracted regarding a battery of recommendations for emission mitigation policies that are compatible with economic growth in Colombia. © 2017 Elsevier Ltd

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