**TITLE: SOLOW MEETS LEONTIEF: ECONOMIC GROWTH AND**

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**ABSTRACT:**

This paper analyzes the impacts of changes in the economic growth on the consumption of energy using an integrated macroeconomic growth model (Solow, 1956, 1988) with an input-output model (Leontief, 1936). The database used in this paper were the input- output matrix from IBGE for the years 1990 to 1996, the input-output matrix estimated by Guilhoto and Sesso for the years 1997 to 2003 and the energy consumption from the National Energy Report (BEN). The present paper implements the integration between the models by calibrating the growth module, which incorporates energetic inputs (renewable and nonrenewable) in the production function. The integration enables us to implement shocks by the supply side (capital, labor, renewable and nonrenewable energy) in the input-output model, allowing us to verify the behavior of energy consumption for each sector in the input-output matrix. Furthermore, the flexible structure of the model also makes possible the construction of some experiments, such as, changes in the technological progress, extraction and regeneration rates of both renewable and nonrenewable resources and population growth.