Overcoming the Difficulties of Developing and Transferring an Input-Output Model for Electricity Consumption Forecasts to the Users

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This paper relates an ongoing experience of developing and transferring the knowledge required to understand and operate a regionally disaggregated supply and use input-output model. This R&D project is financed by ANEEL, the Brazilian regulatory agency for electricity generation and distribution, and it is conducted in partnership between an electricity utility company, CPFL, and the Department of Economics at the University of São Paulo (FEA/USP) in Brazil. A brief account of the model theoretical structure is provided, from which three major improvements are expected: a) a better impact assessment of structural economic changes on the consumption of electricity; b) analyses tailored to the specific regional boundaries of the CPFL area of operation; and c) the identification of direct and indirect changes on electricity consumption accruing from regional development. In order to establish an in-company team capable of applying the model in response to their day to day managerial demands, a training program was devised in order to make them as familiar as possible with the necessary input-output theoretical background, and also skillful enough so as to efficiently apply the model. The paper relates the challenges that have been found in doing so, which means not only transferring academic knowledge to an audience not familiarized to input-output economics within a time schedule severely constrained by the pressure of daily work, but also to match this knowledge to the company technical interests.