A Hybrid Input-Output Proposal to Identify Key Sectors for the Production and Distribution of Electricity

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This analysis explores the possibility of merging into a "hybrid" proposal two standard I-O methods that have been quite often used to identify key sectors, i.e. the Classical Multiplier Method and the Hypothetical Extraction Method. In the context of the latest revision of the European Union Energy Efficiency Plan, we use this proposal to single out key sectors that serve as tools for boosting all the potential energy savings in the economic system and, more specifically, in the production and distribution of electricity resources. Using the main distinctions and complementarities of the two traditional I-O key sector approaches, this hybrid formulation allows us to disaggregate the backward stimuli of the electricity sector in three indicators: the total, the internal and the external backward indicators. This "hybrid" proposal provides additional insights about the structure of the industrial linkages that participate in the production and distribution of electricity. Our results reveal that the explanation for the intensity of the backward effects of the electricity sector depends not only on the rest of energy sectors but also on some of the manufacturing industries. In our view, these findings may be important for conceiving a more balanced and cost-effective design of energy efficiency policies.