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A bottom-up methodology for long term electricity consumption forecasting of an industrial sector -Application to pulp and paper sector in Brazil

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Abstract

Long term annual electricity consumption forecasting is very important for country's energy planning. These forecasts are influenced by several factors (political, technological, social, environmental and economic), and brings with itself a high uncertainty degree in its results and difficulties in the evaluation of such factors over them. A methodology that eases to take into account these factors aiming improve the results and help understanding the electricity consumption annual trajectory till the forecast horizon is, therefore, very much useful and desired. So, we propose a modelling structure using the bottom-up approach to cope with these matters and to evaluate the trajectory of long term annual electricity consumption of a sector of the Brazilian industry up to 2050 considering energy efficiency (EE) scenarios. It is important to emphasize that Brazil

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