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The Importance of Generating Electricity through Wind Farms in the Brazilian Electricity Matrix, from 2013 to 2020

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Abstract : Since the 1970s, sustainable development has become increasingly present on the international agenda. The present work has as general objective to analyze, discuss and bring answers to the following question, what is the importance of the generation of electric energy through the wind power plants in the Brazilian electricity matrix between 2013 and 2019? To answer this question, we analyzed the generation of renewable energy from wind farms and the consumption of electricity in Brazil during the period of January 2013 until December 2020. The specific objectives of this research are: to analyze the public data, to identify the total wind generation, to identify the total wind capacity generation, to identify the percentage participation of the generation and generation capacity of wind energy in the Brazilian electricity matrix. In order to develop this research, it was necessary a bibliographic search, collection of secondary data, tabulation of generation data, and electricity capacity by a comparative analysis between wind power and the Brazilian electricity matrix. As a result, it was possible to observe how important Brazil is for global sustainable development and how much this country can grow with this, in view of its capacity and potential for generating wind power since this percentage has grown in past few years.

Keywords: wind power, Brazilian market, electricity matrix, generation capacity

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