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Identifying Barriers to Wind Energy Diffusion in Colombia:*A Function Analysis of the Technological Innovation System and the Wider Context**Hans-Erik Edsand*

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Abstract

By utilizing only half of its total technical wind energy potential, Colombia would be able to supply the entire country's demand for electricity. Yet, Colombia has an installed capacity of 19.5 MW from wind power, representing about 0.4 percent of the total technical potential. In this paper, the slow diffusion of wind energy in Colombia is analyzed, by evaluating the functions of the Technological Innovation System (TIS) along with the influence of the wider context (Landscape Factors). A combination of expert evaluations (structured and semi-structured interviews) and a history event analysis revealed existing weaknesses in the TIS functions and influence from the wider context (landscape level). Several factors at the landscape level were found to have a significant influence on the TIS functions for wind energy in Colombia. Policy recommendations are provided to address barriers in order to advance the diffusion of wind energy in Colombia.

Keywords: Renewable Energy Technologies; Wind Energy; Technological Innovation System Function Approach; Landscape Factors; Colombia

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