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VIABILIDADE ECONÔMICA PRÉVIA DO USO DE UMA REDE DE CÉLULAS A COMBUSTÍVEL DE HIDROGÊNIO EM UMA COMUNIDADE REMOTA

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Abstract.

The subject of this study is to analyze economic performance of some scenarios with the production and the use of hydrogen as energy carriers in residential applications in combination with renewable energy .

Also made a sensitivity analysis into the required economic conditions necessary for making H2 residential systems competitive.

A case study is simulated in a brazilian residential community in a remote local in Amazonas.

The “net present value” and the cost of primary energy are the two parameters used to compare economic performances of the systems with actual and expected costs in the long term.

Palavras-chave : *Células a Combustível, Comunidade Amazônica, Viabilidade Econômica*