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Study by Modelling the Scenarios of CO_2 Emissions Mitigation Related to Households Energy Demand in Dakar

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Abstract: The reduction of greenhouse gas (GHG) emissions is an objective of the United Nations Framework Convention on Climate Change and the Kyoto Protocol to fight against climate change related primarily to CO_2 emissions from fossil fuels. Many scenarios have been developed based on simulation of CO_2 emissions and their reductions. But none of them was interested in traditional use of domestic fuels from biomass in relation to African Climate Change. The objective of this present study is the mitigation of CO_2 emissions from domestic fuel from a model of energy planning. This modelling was done along three axes: the simulation of future demand for domestic fuels; proposals of intervention strategies and assessment of environmental impacts of strategies. The Scenarios or the case studies in this model correspond to either a strategy or a combination of defined strategies. The data needed to run the model are three categories: data on population, data on household consumption and data relating to wood carbonization. The simulations were performed, first with the input of the model to see the evolution of future demand for household fuels in the Dakar region and then from the identified strategies to assess their impacts.

Keys word: *greenhouse gas, Climate Change, CO_2 emissions, mitigation, modelling, household,*

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