

How can small hydro energy and other renewable energy mitigate impact of climate change in remote Central Africa: Cameroon case study.

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Abstract Text

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Central Africa owns important renewable energy potential, namely hydro, solar and biomass. This important potential is still suffering from poor development up to the point where the sub region is still abundantly using the fossil energy and biomass as main power source. This is harmful to the climate and the situation is still ongoing. The main cause of the poor use of renewable energy is the poor management of resources by governments who have not taken the necessary measures to boost the renewable energy sector. Since the region is experiencing power shortage, thermal plants are among other solutions planned or under construction. Firewood is heavily used in remote areas without a sustainability program behind. This solution is not environment friendly and hence is not a long term solution.

Given the fact that the region has the highest hydro potential of the continent, up to one-quarter of the world's tropical forest, important oil production with poor purchase power, the aim of this paper is to identify actions for improved access to sustainable, friendly, affordable energy services to users as well as a significant improvement of energy infrastructure in Central Africa and the promotion of small hydro and other renewable energy.

The work will show at first the potential for the three primary energy sources which are solar, biomass and hydro while showing where available the level of development, with an emphasis on small hydro. Then identified obstacles for the promotion of clean energy will be targeted. From lessons learned, suggestions will be made to help the countries develop an approach aiming at developing good clean energy policy to increase the status of renewable energy and better contribute to fight against climate change.

Cameroon has a great renewable energy potential and some data are available on energy. From the overview of institutional structure reform of the Cameroon power sector and assessments, specific suggestions based on the weaknesses of the current management of renewable energy sources will be made for the enhancement of the renewable energy and hence sustain energy access and security in general and in remote areas in particular where the fight against poverty is more difficult. We will use several documents, soft and hard from institutions in the region and abroad, and maps when available.

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