

Energy Usage in Isolated Areas of Honduras

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Abstract : Currently, the raise in the demand of electrical energy as a consequence of the development of technology and population growth, as well as some projections made by 'La Agencia Internacional de la Energía' (AIE) and research institutes, reveal alarming data about the expected raise of it in the next few decades. Because of this, something should be made to raise the awareness of the rational and efficient usage of this resource. Because of the global concern of providing electrical energy to isolated areas, projects consisting of energy generation using renewable resources are commonly carried out. On a socioeconomically and cultural point of view, it can be foreseen a positive impact that would result for the society to have this resource. This article is focused on the great potential that Honduras shows, as a country that is looking forward to produce renewable energy due to the crisis that it's living nowadays. Because of this, we present a detailed research that exhibits the main necessities that the rural communities are facing today, to allay the negative aspects due to the scarcity of electrical energy. We also discuss which should be the type of electrical generation method to be used, according to the disposition, geography, climate, and of course the accessibility of each area. Honduras is actually in the process of developing new methods for the generation of energy; therefore, it is of our concern to talk about renewable energy, the exploitation of which is a global trend. Right now the countries' main energetic generation methods are: hydrological, thermic, wind, biomass and photovoltaic (this is one of the main sources of clean electrical generation). The use of these resources was possible partially due to the studies made by the organizations that focus on electrical energy and its demand, such as 'La Cooperación Alemana' (GIZ), 'La Secretaria de Energía y Recursos Naturales' (SERNA), and 'El Banco Centroamericano de Integración Económica' (BCIE), which eased the complete guide that is to be used in the protocol to be followed to carry out the three stages of this type of projects: 1) Licences and Permits, 2) Financial Aspects and 3) The inscription for the Protocol in Kyoto. This article pretends to take the reader through the necessary information (according to the difficult accessibility that each zone might present), about the best option of electrical generation in zones that are totally isolated from the net, pretending to use renewable resources to generate electrical energy. We finally conclude that the usage of hybrid systems of generation of energy for small remote communities brings about a positive impact, not only because of the fact of providing electrical energy but also because of the improvements in education, health, sustainable agriculture and livestock, and of course the advances in the generation of energy which is the main concern of this whole article.

Keywords : energy, isolated, renewable, accessibility

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