Abstract

Today electricity is the basic requirement for the development of any country. In this modern world, on one hand many places are developed or developing very rapidly and on the other hand, some places are still there, where electricity is not more than a dream. In most of the cases this situation is due to the remoteness of these places from the main grid. Also the population of these places are scattered over a very large area. The extension of the grid to these individual places requires a big investment due to the low population density over these areas. The solution for this problem is that the electricity should be generated locally in these areas. Also the setup of conventional power plants is not economical at these places. In this paper, different possibilities of decentralized power generation using renewable energy are reviewed, based on the availability of renewable resources and load demand. The resources may be solar, wind, biogas, biomass, micro-hydro, individual as well as hybrid basis.


**Index Terms**

Computer Science  Applied Sciences

**Keywords**