

Analysis of Electricity Demand at Household Level Using Leap Model in Balochistan, Pakistan

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Abstract : Electricity is vital for any state's development that needs policy for planning the power network extension. This study is about simulation modeling for electricity in Balochistan province. Baseline data of electricity consumption was used of year 2004 and projected with the help of LEAP model up to subsequent 30 years. Three scenarios were created to run software. One scenario was baseline and other two were alternative or green scenarios i.e. solar and wind energy scenarios. Present study revealed that Balochistan has much greater potential for solar and wind energy for electricity production. By adopting these alternative energy forms, Balochistan can save energy in future nearly 23 and 48% by incorporating solar and wind power respectively. Thus, the study suggests to government planners, an aspect of integrating renewable sources in power system for ensuring sustainable development and growth.

Keywords : demand and supply, LEAP, solar energy, wind energy, households

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