Abstract

Different eolic energy project valuation methodologies were assessed for the Colombian case, namely the discounted cash flow and real option approaches, the latter applied by estimating option extended values and including a real expansion possibility. In order to estimate volatility, which is a fundamental real option valuation parameter, the prices of the factors most outstandingly affecting it, namely electric power and winds, were simulated. It is concluded that the projects in question would not be considered viable through traditional valuation methods, but their actual feasibility comes clear by applying the real option approach, all the more when taking into account current tax and other incentives such as Emission Reduction Certificates.

Keywords

Real options, volatility, discounted cash flow, present net value, extended value, eolic energy.