



Assessment of wind energy potential at abandoned mining sites in Korea

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Currently, about 84% of mining sites in Korea are abandoned after mine closure. Therefore, there is deep public concern about usage of the abandoned mining sites. This study presents a new idea to use the abandoned mines as wind power plants. An assessment of wind energy potential at abandoned mining sites in Korea was performed. The Gangwon province was selected as a study area because it has abundant wind resource as well as many abandoned mines. For the abandoned mines, both electric power production and economic effects were analyzed using RETScreen software. As a result, we revealed that the Sewon iron mine can produce 1.76 MWh per year. Other 46 mining sites that have high wind energy potential were determined and proposed in this study.