

Feasibility Study of Potential and Economic of Rice Straw VSPP Power Plant in Thailand

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Abstract : The potential feasibility of a 9.5 MWe capacity rice straw power plant project in Thailand was studied by evaluating the rice straw resource. The result showed that Thailand had a high rice straw biomass potential at the provincial level, especially, the provinces in the central, northeastern and western Thailand, which could feasibly develop plants. The economic feasibility of project was also investigated. The financial feasibility is also evaluated based on two important factors in the project, i.e., $NPV \geq 0$ and $IRR \geq 11\%$. It was found that the rice straw power plant project at 9.5 MWe was financially feasible with the cost of fuel in the range of 30.6-47.7 USD/t.

Keywords : power plant, project feasibility, rice straw, Thailand

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