
A critical look at rice husk gasification in Cambodia : technology an sustainability

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Abstract

In recent years, many Cambodian enterprises have installed rice husk gasifiers to substitute diesel in the electricity production to run rice mills machinery, or to provide electricity for villages. This study provides a critical look at rice husk gasification by assessing the sustainability of deploying this technology in Cambodia, expressed through environmental, economic and social impacts, and evaluates if it can be applied in Vietnam. Results show that gasification technology works in Cambodia and contribute to the development of the rice-milling sector, however environmental issues are severe and should be treated. We observe that increase in rice husk demand also leads to increase in price of rice husk, therefore new investors should consider the effect of new rice husk market for their activities. We conclude that this technology would not be suitable for Vietnam and suggests studying other alternative technologies to convert rice husk into energy, such as steam engine or steam turbine, gasifier stove, briquetting or co-firing.

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