

International Energy Journal, Vol. 1 No. 2, December 2000[HOME](#) | [ABOUT](#) | [LOG IN](#) | [REGISTER](#) | [SEARCH](#) | [CURRENT](#) | [ARCHIVES](#)[Home](#) > [Vol. 1 No. 2, December 2000](#) > **Yeoh****Production of Fuel Ethanol from Oil Palm Wastes***H.H Yeoh, K.O Lim***Abstract**

The potential of producing glucose from oil palms lignocellulosic wastes which include oil palm trunks (OPT), fronds, empty fruit bunches (EFB) and palm pressed fibers (PPF) by sulphuric acid hydrolysis was investigated. The glucose obtained was then fermented using the yeast *Saccharomyces cerevisiae*. From the total amount of oil palm wastes available, as well as the value of glucose yield obtainable and the fermentation efficiency found, the total amount of ethanol that can be produced can be estimated. Thus, the total energy in the front of ethanol obtainable from these oil palm wastes can be calculated. The results of this study showed that the total energy in the form of ethanol obtainable from the oil palm wastes approximately 1.32×10^{17} J. This is about 20% of the total energy requirements of the transportation sector in Malaysia in the year 2000. This percentage can be further increased if the xylose fractions from these wastes are also utilized to produce ethanol.

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