

**International Energy Journal, Volume 9, Issue 3, September  
2008**

[HOME](#) | [ABOUT](#) | [LOG IN](#) | [REGISTER](#) | [SEARCH](#) | [CURRENT](#) | [ARCHIVES](#)

[Home](#) > [Volume 9, Issue 3, September 2008](#) > **Sagawa**

## Bagasse Cogeneration in Tanzania: Utilization of Fibrous Sugarcane Waste

*Tomohiko Sagawa, Shinya Yokoyama, Kenji Imou*

### Abstract

*This paper discusses the utilization of bagasse as an energy resource in Tanzanian sugar factories. While the energy potential of bagasse exceeds the energy demand of sugarcane factories, bagasse is used only to meet the energy demand because of inefficient facilities for surplus production. We estimated surplus electricity supply to the grid by assuming the replacement of existing systems with advanced bagasse cogeneration systems. As a result, annual electricity production was estimated to be 216–859 GWh/y. This can compensate for 100% of electricity from fossil-fuelled thermal plants and make up for a deficit of electricity generated by hydro during dry season in Tanzania. Advanced bagasse cogeneration is also expected to contribute to mitigation of CO<sub>2</sub>, which was estimated to be  $1.68 \times 10^8$  kg-CO<sub>2</sub>/y.*

Full Text: Subscribers Only