

Accepted Manuscript

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PII: S1004-9541(17)30704-8
DOI: doi:[10.1016/j.cjche.2017.09.020](https://doi.org/10.1016/j.cjche.2017.09.020)
Reference: CJCHE 937

To appear in:

Received date: 5 June 2017
Revised date: 18 August 2017
Accepted date: 22 September 2017

Please cite this article as: Wangliang Li, Changbo Lu, Gaojun An, Yuming Zhang, Yen Wah Tong, Integration of High-Solid Digestion and Gasification to Dispose Horticultural Waste and Chicken Manure, (2017), doi:[10.1016/j.cjche.2017.09.020](https://doi.org/10.1016/j.cjche.2017.09.020)

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Energy, Resources and Environmental Technology

Integration of High-Solid Digestion and Gasification to Dispose Horticultural Waste and Chicken Manure^{*}

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^{*} Supported by the National Research Foundation Singapore under its Campus for Research Excellence and Technological Enterprise (CREATE) programme.

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Abstract

To realize full energy recovery from grass and chicken manure (CM), the integration of high-solid anaerobic digestion (HSAD) and gasification was investigated experimentally. The anaerobic biodegradability of grass can be enhanced through codigestion with CM. When the volatile solids (VS) ratio of CM to grass was 20:80, C/N ratio calculated to be 21.70, the cumulative biogas yield was the highest, 237 ml·g⁻¹ VS. The enhancement of biogas

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