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Review

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Ya-Juan Liu, Jun Gu, Yu Liu

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**Energy-self sufficient biological municipal wastewater reclamation:
present status, challenges and solutions forward**

Ya-Juan Liu^{a*}, Jun Gu^{b*}, Yu Liu^{b,c**}

^aSchool of Chemistry and Environmental Engineering, Shanxi Datong University,
Xingyun Street, Datong City, Shanxi Province, PR China, 037009

^bAdvanced Environmental Biotechnology Centre, Nanyang Environment & Water
Research Institute, Nanyang Technological University, 1 Cleantech Loop, Singapore
637141

^cSchool of Civil and Environmental Engineering, Nanyang Technological University,
50 Nanyang Avenue, Singapore 639798

*Co-first author; **Corresponding author: Yu Liu. Email: cyliu@ntu.edu.sg

Abstract

Almost all present biological processes for treating municipal wastewater have been developed based on the philosophy of biological oxidation with high energy consumption and generation of waste sludge. Given such a situation, the fundamental question of what are the possible ways towards energy-self sufficient biological reclamation of municipal wastewater needs to be addressed urgently. Therefore, this review aims to offer a critical view and a holistic analysis of biological treatment processes with the focus on energy-self sufficiency which indeed is a game changer in the future technology development. The way towards energy self-sufficient operation of biological processes is to maximize energy recovery, while to minimize energy

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