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**Wang, Ya-Fen; You, Sheng-Jie; Xiang, Hou-Yun**  
**Investigation of Methane and Nitrous Oxide Greenhouse Gases Emissions on Wastewater Treatment Plant**

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## **Investigation of Methane and Nitrous Oxide Greenhouse Gases Emissions on Wastewater Treatment Plant**

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### **ABSTRACT**

The study will use the model factory test and plant sample analysis to estimate greenhouse gas emission coefficient on Taiwan wastewater plants. The project confirmed the generated greenhouse gases source and mechanism by reference data. Finally, propose feasible control strategies to get the best available techniques Taiwan factory waste water reduction of greenhouse gases, for obsolete wastewater treatment plant operation, reference plan and implement greenhouse gas reductions at the future.

In order to find out the generation mechanism of greenhouse gases, model factory test use CH<sub>4</sub>, N<sub>2</sub>O, other greenhouse gas measuring equipment to monitor biological wastewater treatment emissions of three sections hypoxia aerobic (TNCU) and anoxic / aerobic (MLE) on laboratory. The study also monitor Taiwan representative WWTP to confirm the source of CH<sub>4</sub>, N<sub>2</sub>O and other greenhouse gases. In addition, the establishment of emission coefficient and compared with laboratory module data. Eventually, proposed feasible control technology by monitoring Taiwan representative WWTP and analysis CH<sub>4</sub>, N<sub>2</sub>O, other greenhouse gases mechanism and control measures.