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Reducing Greenhouse Gass Emissions by Recyclable Material Bank Project of Universities in Central Region of Thailand

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Abstract : This research studied recycled waste by the Recyclable Material Bank Project of 4 universities in the central region of Thailand for the evaluation of reducing greenhouse gas emissions compared with landfilling activity during July 2012 to June 2013. The results showed that the projects collected total amount of recyclable wastes of about 911,984.80 kilograms. Office paper had the largest amount among these recycled wastes (50.68% of total recycled waste). Groups of recycled waste can be prioritized from high to low according to their amount as paper, plastic, glass, mixed recyclables, and metal, respectively. The project reduced greenhouse gas emissions equivalent to about 2814.969 metric tons of carbon dioxide. The most significant recycled waste that affects the reduction of greenhouse gas emissions is office paper which is 70.16% of total reduced greenhouse gasses emission. According to amount of reduced greenhouse gasses emission, groups of recycled waste can be prioritized from high to low significances as paper, plastic, metals, mixed recyclables, and glass, respectively.

Keywords : recycling, garbage bank, waste management, recyclable wastes, greenhouse gases
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