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Turning Food Waste into Different Forms of Energy Use for Climate Change Mitigation in Hong Kong Turning Food Waste into Different Forms of Energy Use for Climate Change Mitigation in Hong Kong

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As the global population continues to grow, the growing demand for food and the environmental impact of this demand is a growing problem. Most food in Hong Kong is shipped to the country, which has a profound effect on the heart rate of nature. The carbon footprints and footprints (CF and WF) of Hong Kong's typical food were measured from available sources and compared to the acceptable food intake to reflect environmental sustainability According to the United Nations Food and Agriculture Organization, about one billion tons of food produced annually or wasted each year. At all stages in the food system, including production, processing, packaging, transportation, storage, and re-packaging, there are environmental costs that are closely related to climate change and environmental sustainability. Sustainable foods are defined as those that meet the guidelines for healthy eating while simultaneously reducing environmental impacts. and future environmental predictions. The most common indicators of food-related food impacts are food intake by carbon footprint (CF), water volume (WF), and food waste environment represents a small portion of municipal solid waste. Proper management and recycling of food waste is needed to reduce its environmental burdens and reduce the risk to human health. Food waste is an uninfected source of great energy production. The use of food waste to convert energy currently represents a challenge for a variety of reasons. This includes its distinctive songs of global adaptation, high humidity content and low calorific value, which creates a barrier to dynamics, and large industrial systems in operation. Although much research has been done on the conversion of food waste into renewable energy, there is a lack of comprehensive and systematic reviews of published literature. At present, food waste is an important source of energy. Among the available treatments for food waste, anaerobic digestion is a good way to convert food waste into energy in the form of biogas. Nowadays, there has been a growing interest in using anaerobic digestion in waste disposal treatments because these renewable energies can replace fossil fuels for energy production and reduce greenhouse gas emissions and reduce climate change. However, converting biogas into different energy sources can have different effects on climate change. Therefore, it is important to measure the impact and identify the one you like. In this study, options for converting food waste into various forms of energy use, including electricity and heat, city gas for domestic use, and biogas fuel for automotive use, were evaluated using a life cycle test (LCA). This test is based largely on specific data in Hong Kong. The results show that biogas fuel instead of fuel consumption is more profitable than other alternatives in terms of climate change. It is estimated that converting one-third of the daily food waste generated in Hong Kong to biogas fuel could reduce ~ 1.9% of greenhouse gas emissions in the transportation sector. The findings highlight the importance of changing biogas consumption of automotive fuel to reduce greenhouse gas emissions.

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