

The Bio-Regen - a revolution in food waste management

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James Cook University recently became the first University in the world to install a Bio-Regen system at its University Halls kitchen on the Townsville Campus. The Bio-Regen is a device that turns food waste into a liquid bio-fertiliser, which has multiple advantages over commercial composting systems.

In its first four months of operation the Bio-Regen has diverted over 5 tonnes of food waste from landfill, producing 11,000L of bio-fertiliser. The unit is compact, clean, efficient and cost effective, and the end product provides JCU with an income stream from what was previously a costly process to manage - food waste. In JCU's case, the system is expected to provide a payback period of less than two years.

Additionally, the bio-fertiliser end-product provides benefits when added to the campus grounds in the form of soil improvements, improved plant growth and reduced water consumption, due to its unique properties. There is also the capacity to build soil carbon through regular application of the product through irrigation.

Within a University, the Bio-Regen system is a conduit to fostering cross-unit collaboration, bringing together multiple stakeholders, not only for resource recovery and reuse, but also for teaching and learning, research, community building and demonstrating leadership in waste management.

JCU intends to roll out additional units to its eight major kitchens in coming years, diverting up to 100 tonnes of food waste from landfill annually and effectively making the University food waste free.

Note: This abstract is intended to be presented in conjunction with the abstract submitted by Janet Dearden and Emily Hunter titled: *Momentum through change management: food waste recycling at JCU* - regarding pre-implementation planning of the Bio-Regen system. This abstract will make up the second half of a 90 minute presentation session.