SETIA SPICE DRIVES FOOD WASTE TRANSFORMATION WITH UNIVERSITI SAINS MALAYSIA, AL ANSAR INTEGRATED

PENANG – Setia SPICE Convention Centre & Arena (Setia SPICE) has marked a significant milestone in sustainable event management, transforming event food waste into value through a collaboration between industry, academia, and enterprise that benefits all.

Earlier today, Setia SPICE officially launched a strategic sustainability collaboration with Universiti Sains Malaysia (USM) and Al Ansar Integrated Sdn Bhd (Al Ansar Integrated), marking the beginning of a partnership to transform the convention centre and arena's food waste into valuable resources.

Setia SPICE is transforming event food waste into value through a closed-loop system powered by Black Soldier Fly Larvae (BSFL) technology, supporting the circular economy, agro-industry and food security.

At Setia SPICE, food waste is segregated and weighed before being sent for processing. The waste becomes feed for the larvae, which mature within 10 to 14 days and are then used as livestock feed.

Speaking at the launch ceremony of the sustainability collaboration, Chan Ching Hiong, Divisional General Manager of S P Setia Bhd, said that in 2025, Setia SPICE generated over 8.4 metric tonnes of food waste from 57 banquet events.

"Food waste does not simply disappear. In landfills, globally food waste contributes 8-10% of global greenhouse gas emissions, contaminates soil and water, and accelerates methane emissions. This reality compelled us to seek practical, scalable solutions, leading us to USM as a scientific and research partner for BSFL.

To date, Setia SPICE has completed two pilot deliveries using BSFL technology, contributing over 319.5 kilograms of food waste. Moving forward, we aim to establish scheduled collections for all eligible events, ensuring food waste at Setia SPICE is managed responsibly," Chan said.

Research shows that BSFL is rich in protein and beneficial fats, offers an improved amino acid profile, reduces harmful pathogens such as E. coli and Salmonella, and supports livestock gut health due to its antimicrobial properties. Additionally, the residual by-product, known as frass, serves as a nutrient-rich organic fertiliser, further reinforcing the circular nature of this solution.

This programme demonstrates the circularity of food waste, where food waste is transformed into a valuable resource through black soldier fly larvae. The larvae are processed into animal feed for poultry, and the resulting poultry products are indirectly served and consumed at the events as food, completing a full circular loop from waste back to nourishment.

The collaboration is expected to generate valuable research data and practical insights for USM, while supporting Al Ansar Integrated in scaling sustainable feed production for the agro-industry. Concurrently, it opens pathways for new economic opportunities within the agro and waste management sectors, contributing to a more resilient and sustainable ecosystem.

This initiative underscores Setia SPICE's long-standing commitment to sustainability, which has been embedded in its operations since inception — from energy efficiency and resource optimisation to responsible waste management. The collaboration aligns with broader national and global sustainability agendas, including the United Nations Sustainable Development Goals (SDGs) 2030.

Beyond this partnership, Setia SPICE continues to expand its sustainability efforts through collaborations such as food waste composting initiatives with local retail mall and upcoming projects with local authorities to convert food waste into methane and biofuel.

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