

DOST-ITDI Launches the BEC Laboratory to Provide Data-Driven Proof for Alternative Packaging Materials in the Philippines

Bicutan, Taguig City — The Department of Science and Technology (DOST), through the Industrial Technology Development Institute (ITDI), has officially launched the Biodegradability, Ecotoxicity, and Compostability (BEC) Laboratory on February 20, 2026, at the Environment and Biotechnology Building of ITDI in Bicutan, Taguig City.

Located at the ITDI Science Complex in Taguig City, this facility provides the Philippine industrial sector with a specialized hub for scientific evaluation. This infrastructure enables manufacturers and importers to obtain the specific data needed to validate material performance, effectively shifting the industry standard from simple claims to evidence-based verification.

The laboratory serves as a vital resource for companies working to align with the Extended Producer Responsibility (EPR) Act of 2022 (RA 11898) and the Ecological Solid Waste Management Act of 2000 (RA 9003). Local businesses can now access complete verification of their product claims within the country, significantly reducing the industry's previous reliance on overseas testing. This domestic capability ensures that alternative packaging materials undergo thorough assessment before



During the BEC Laboratory launching ceremonies led by DOST Secretary Renato U. Solidum Jr., Undersecretary for R&D Leah Buendia, ITDI Director Annabelle V. Briones joined by other ITDI officials and BEC project leader Gelito Joseph Sikat.

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entering the market.

DOST Secretary Renato U. Solidum Jr. said, "The launch of the BEC Laboratory marks a critical shift in how the Philippines manages its material footprint. For too long, our industries have relied on overseas testing to validate environmental claims; now, we bring that high-level scientific capability home to Taguig."

By providing local manufacturers with the tools to measure biodegradability, ecotoxicity, and compostability, we are replacing mere 'green claims' with hard, verifiable data. This facility is not just a laboratory; it is a vital pillar for the successful implementation of the Extended Producer Responsibility (EPR) Act. Through science and technology, we are ensuring that 'sustainable' innovation is synonymous with 'proven' environmental safety—protecting our soil, our water, and our future," Solidum stated further.

The BEC Laboratory is established to harness science and technology, create meaningful change, and promote a more sustainable future. The facility offers technical evaluation across three primary scientific pillars to help stakeholders verify the environmental interaction of their products:

Biodegradation: Evaluation of how materials break down in various environments, including soil-based systems and high-solids anaerobic digestion.

Compostability: Verification of material disintegration at a laboratory scale, featuring mass balance analysis and quality assessments of the final compost.

Ecotoxicity: Evaluation of the biological impact of materials on soil health, utilizing indicators such as earthworm reproduction and seedling growth to ensure environmental safety after degradation



DOST Secretary Renato U. Solidum Jr. and ITDI Director Annabelle V. Briones led the visitors during the BEC facility tour.

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The laboratory acts as a technical partner for government agencies and LGUs that are increasingly requiring proof of biodegradability for commercial materials. By providing a reliable venue for product testing and material characterization, the facility helps companies navigate these regional mandates and ensures that verifiable results back sustainable material innovation. **(DDGotis, ITDI-TSD; GJMSikat, ITDI-EBD; Photo Credits: IEVillamar, ITDI-TSD)**

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