

WASTE CHARACTERIZATION REPORT OF MARIANO MARCOS STATE UNIVERSITY BATAC CAMPUS AY 2022

The Philippines has attempted to enhance its proper waste management by enacting RA 9003, also known as the Ecological Solid Waste Management Act, which demonstrates a systematic, comprehensive, and ecological waste management program to protect both the public health and the environment. It authorizes the agency continue providing secretariat support to the National Solid Waste Management Commission in the implementation of waste management plan, while also being tasked with prescribe policies to achieve the objectives of the National Ecology Center, which is responsible for information dissemination, consultation, education, and training of various local government units on ecological waste management.

To apply environmental sense of morality for the conservation and protection as well as appropriate treatment of the solid waste generated by the Mariano Marcos State University, effective strategies were organized as early as 2009 through the Integrated Solid Waste Management Framework and revised as Integrated Pollution with the goal to address the growing volume of waste generated to ensure that the campus will be kept as a safe and healthy venue for learning.

The design of the MMSU integrated waste management program (MIWMP) – created in 2009, aims to encourage mutualistic and communalistic relationships among stakeholders in order to make maximum use of inputs, products and waste materials. However, one important component that needs to be considered for a successful waste management program and plan is the collection of accurate data on the volume and composition of waste generated over a period of time.

Thus, pursuant to the objectives of the MIWMP, a waste analysis and characterization study (WACS) was ed in 2022 to determine how efficiently the University manages the waste products and the way they are treated.

The university generates an enormous amount of waste which contributes approximately 187.06 kg/week of solid waste within the 5-collection colleges. This is composed of 99.82% recyclable; 66.83% biodegradable; 19.61% special waste; and 0.8% residual.

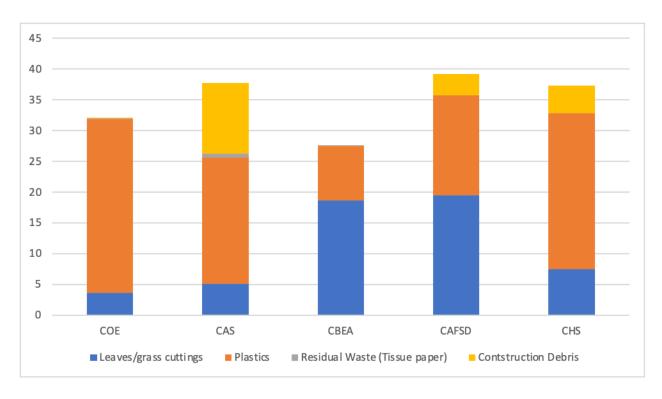


Figure 1. Waste Analysis and Characterization of MMSU-Main Campus (Weekly)

The top major waste from the university is recyclable waste such as papers, plastics, aluminum cans, glass and packing foams. Most of the generated waste constituencies of the university were recyclable wastes which are waste material retrieved from the waste stream that can still be converted into a product with for other purposes or can be sold to junk shop. The second highest volume of generated waste is biodegradable waste, such as food waste, green waste, and grass cuttings which are composted by the university through the Organic Fertilizer Production Center. Additionally, a small quantity of special waste is also generated but requires special handling considering that it may render a harm to human health or the environment such as gloves from laboratories, facemasks, dry cell batteries, demolition debris/construction debris and some dusts of cements. Lastly, the residual waste which cannot be used for other purposes are transported to the municipal disposal site.

As the result of this study, the following are the recommended:

- All colleges must create and innovate more programs aligned to the Integrated Pollution and Waste Management Plan of the University;
- 2. All units or colleges must prioritize programs on waste minimization;
- 3. Strict compliance on "No Plastic Policy" in the University; and
- 4. Fully adopt the "Carry your Own Water Drinking Bottle" in the university.