



# ENVIRONMENTAL SUSTAINABILITY *Report* 2022



Copyright@2022 by UiTM Green Centre and Sustainable Campus Committee Sarawak

**Published By**

Perpustakaan Tun Abdul Razak  
Universiti Teknologi MARA Cawangan Sarawak  
Jalan Meranek, 94300 Kota Samarahan  
Sarawak

**Published Date**

31 October 2023

**Chief Editor**

Ts. Dr. Nurzawani Md Sofwan

**eISBN: 978-967-0828-66-4**

**Disclaimer**

The work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material concerned, specifically the rights of translation, reprinting, reuse of illustration, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. The use of general descriptive names, registered name trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give warranty, express or implied, with respect to the material contained herein or for any errors or commissions that have been made. The publisher remains neutral with regard to jurisdictional claims in published map and institutional affiliation.

Design and Visual Development by Ts Madeleine Elna Perreau

# TABLE OF CONTENT

## 01

### ORGANISATION'S PROFILE

Description	
Organisation Setup	
The Organisation's Core Values	
The Organisation's Core Business	

## 02

### ENVIRONMENTAL POLICY

Environmental Policy	7
Sustainable Development Goal Policy	8
Energy Management Policy	9
Bring-Your-Own-Container Policy	10
Dissemination of Environmental Policy	10
Relevancy to Current Global Status on the Environment	11
Generation of Waste	12
Wastes Treatment and Disposal Methods	13
Potential Strategies & Planning	15

## 03

### ENVIRONMENTAL MANAGEMENT PLAN

Potential Environmental Impacts	18
Environmental Management Plan	20

## 04

### ENVIRONMENTAL QUALITY STANDARDS

Environmental Quality Standards	21
Aspects Prioritisation	22
Environmental Objectives and Targets	24
Environmental Projects and Programmes	25

## 05

### ENVIRONMENTAL PROGRAM AND IMPLEMENTATION

Green Initiatives Survey	28
Affordable Automated Smart Agriculture System (AASAS)	33
Carbon Footprint Monitoring	36
Portable Water Treatment Plant Project	38
Biological Treatment for Polluted Water	39
Establishing Memorandum of Understanding with Industry Expert	39
Research on Sewerage Treatment Plant	40
Establishing Local Fertilizer From Poultry Project	40
Aquaponic Project	42
Bamboo Garden	43
Trainer For Green Projects For Suppliers and Contractors in Sarawak	44

## 06

### ENVIRONMENTAL REVIEW AND CONTINUAL IMPROVEMENT

Research on Internet of Things (IoT)	46
Research on Water Treatment	47
Monitoring of Electric Usage	
Hydroponic Project	48
Air Quality	48
e-Reporting System of Sustainable Initiatives	49

## 07

### RECOGNITION

Green Sustainable Campus Awards (AKLH) 2021	48
TIMES for Higher Education Awards UiTM 2021	51
10th Premier of Sarawak Environmental Award 2021/2022	52
Green Sustainable Campus Award (AKKH) 2022	53

Conclusion	54
List of Committed Writers	55
Editorial Board Members	57

# Research on SEWERAGE TREATMENT Plant

A sewerage treatment plant (STP) is a process of removing contaminants from wastewater through physical, chemical and biological processes to remove contaminants known as effluent. For the system to be effective, the system requires both oxygen and food for the bacteria and protozoa to consume in the biodegradable solution of organic contaminants and the binding of the much less soluble fractions into sludge where it settles to the bottom of the tank. The research was done to evaluate and identify the condition and problem of all STPs in UiTM Sarawak, to conduct research on STP with the best method and approach to produce a system to maintain industry standards, and to come out with a guideline for the operation of the STP. The research was completed, and the findings were published in three different publications, two



*Figure 5.14 Site Visit To Sewage Treatment Plant At UiTM Sarawak*

indexed journals, specifically in the Journal of Asian Scientific Research and one in the International Journal of Environment and Waste Management indexed by Scopus.

## Establishing LOCAL FERTILIZER from Poultry Project

SDG 12 recognises that long-term development and economic growth depend on changing how we produce and consume goods. It demands more efficient and environmentally friendly management of materials across the lifecycle, through production, consumption, and disposal. The food supply chain is the pathway by which food moves from farms to our plates. Food is produced, stored, processed, and distributed before being sold by retailers to consumers

## **Editorial Board Members**

### **Honorary Patron**

Profesor Dato Dr. Jamil Haji Hamali

### **Advisor**

Yussri Sawani

### **Chief of Editor**

Ts. Dr. Nurzawani Md Sofwan

### **Authors**

Ts. Dr. Nurzawani Md Sofwan

Ts. Hemyza Budin

Sr. Dr. Ahmad Faiz Abd Rashid

Mohd Yazid Mohd Anas Khan

Nur Afisha Yusuf

Nur Ain Abu Bakar

Wan Juliana Emeih Wahed

Sr. Dr. Asmah Alia Bohari

Affidah Morni

Aiza Johari

Ts. Madeleine Elna Perreau

### **Contributors**

Assoc. Prof. Dr. Hasmah Mohidin

Assoc. Prof. Dr. Juferi Idris

Muhamad Syukrie Abu Latip

Hamzah Mohamad

Ts. Dr. Siti Kartina Abdul Karim

Adib Sarkawi

Mohamad Husaini Mohd Saleh

Muhammad Nazmi Nazarudin

Mohd Razif Mohd Rathi



ENVIRONMENTAL SUSTAINABILITY REPORT 202



e ISBN 978-967-0828-66-4



PERPUSTAKAAN TUN ABDUL RAZAK, UiTM CAWANGAN SARAWAK

(online)

