



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	48
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 Water Treatment

The findings from the research are proposed to be expanded and applied to the river rehabilitation projects for Sarawak rivers. The project is still at the proposal stage, and the researchers have already presented it to the representatives of the Sarawak State Government for approval.

Monitoring of Electric Usage

Computerized systems for facility and building management are used to monitor electric usage in the buildings. For facilities management, a system known as Tomms is used to help the Facility Unit plans more effective and sustainable planning, to be in line with the Facility Management System (FMS) approach (Figure 6.4). For building management, UiTM Sarawak uses Pegasus software to monitor and control building services such as mechanical ventilation systems, lighting and fire prevention systems. A smart meter at the main switch is also installed to obtain electricity consumption readings in each building to monitor electricity consumption.



Figure 6.4 Facility Management System Using Tomms Dan Building Management System Software

Hydroponic Project

At present, UiTM Sarawak successfully established mini hydroponics for herbs and aquaponic (a combination of aqua and plant) in research activities. In the future, UiTM Sarawak has agreed to start a project on chilies production, based on fertigation systems. It was found that there is a demand of organic products by the local residents in which UiTM Sarawak plans to explore further and becomes one of the producers in this area.

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)

