



# ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) POLICY

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## Acronym

| Acronym   | Full Name                                     |
|-----------|-----------------------------------------------|
| AI        | Artificial Intelligence                       |
| ESG       | Environmental, Social, and Governance         |
| F/I/C/D   | Faculty, Institute, Centre, and Division      |
| FTSE4Good | Financial Times Stock Exchange for Good Index |
| GHG       | Greenhouse Gases                              |
| GRI       | Global Reporting Initiative                   |
| ISuRE     | Institute of Sustainable and Renewable Energy |
| SDGs      | Sustainable Development Goals                 |
| UCaMP     | UNIMAS Carbon Management Plan                 |
| UNIMAS    | Universiti Malaysia Sarawak                   |
| USC       | Universiti Sustainability Sarawak             |
| UUCA      | Universities and University Colleges Act      |

## Definition and Interpretations

In this Policy, unless the meaning requires a different contextual meaning

| Term                        | Definition                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Act</b>                  | An Act or Act of Parliament used in conjunction with legislation, which carries the meaning of a law made by Parliament;                                                                                                                                                                                                                                                                 |
| <b>Campus</b>               | The campus in relation to a University or University College, means the Campus or Branch Campus of the University or University College; as specified in an Order made under the Incorporation and Establishment of a University; and the area together with all other buildings or structures thereon, whether in perpetuity or otherwise, by the University or the University College; |
| <b>Delegating Authority</b> | The division or entity of decision-making responsibility delegated to an individual reporting to higher management;                                                                                                                                                                                                                                                                      |
| <b>Equality</b>             | The nature or condition of being equal, focusing on questioning rights, responsibilities, and justice;                                                                                                                                                                                                                                                                                   |
| <b>ESG</b>                  | A framework to assess an organization's sustainability and ethical performance, as well as its business risks and opportunities in those areas;                                                                                                                                                                                                                                          |
| <b>FTSE4Good</b>            | An Index aimed at supporting investors in making ESG investments in Malaysia-listed companies, launched in December 2014;                                                                                                                                                                                                                                                                |
| <b>Federal Constitution</b> | The principal law of the Federation and any law passed after Merdeka Day (Independence Day) which is inconsistent with this constitution, is invalid to the extent of such inconsistency or state law or regulation, state government policy;                                                                                                                                            |
| <b>Green Technology</b>     | Environmentally friendly technologies designed to reduce negative impacts on the planet through sustainable practices and innovation;                                                                                                                                                                                                                                                    |
| <b>GRI</b>                  | An independent not-for-profit organization that leads a global multi-stakeholder process to develop and refine rigorous yet practical sustainability reporting, enabling organizations to understand and act on the full range of their impacts;                                                                                                                                         |

| Term                                | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Higher Education Institution</b> | An educational institution providing higher education leading to the award of a diploma, degree, or its equivalent.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>PTj</b>                          | Main entity responsible at UNIMAS, consisting of Faculties, Centers, Institutes, and Divisions;                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Race</b>                         | A group of people as part of a large nation or tribe;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Religion</b>                     | Belief in God and the attributes and powers of God and acceptance of His teachings and commands and belief in the Almighty;                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Statutory Body</b>               | A body, by whatever name mentioned, incorporated by federal law for the purposes of the Federal Government, excluded local authorities;                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Staff</b>                        | A person employed on a permanent, temporary or contract basis by a statutory body, and paid emoluments by the statutory body, and includes a person seconded to any subsidiary corporation or company of the statutory body or any other statutory body, Ministry, department or agency of the Federal Government or any department or agency of the Government of any State or any company in which the Federal Government or the Government of any state has an interest. In this context, the term 'staff' refers to academic staff and non-academic staff; |
| <b>Student</b>                      | A registered student, other than a student at an institution allied to the University or University College, who is following a course of study, instruction, training or research of any description at the preparatory, undergraduate, postgraduate or post-doctoral level on a full time or part time basis in, by or from the University or University College, and includes distance-learning, off-campus, exchange and non-graduating student;                                                                                                           |

| Term                           | Definition                                                                                                                                                                                                                                                                                            |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>University Constitution</b> | The Constitution of Universiti Malaysia Sarawak;                                                                                                                                                                                                                                                      |
| <b>SDGs</b>                    | The Sustainable Development Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity;                                                                                        |
| <b>Vice-Chancellor</b>         | In relation to a University, means the Vice-Chancellor, President, Rector or Director of that University and includes any other person, by whatever name called, who has been appointed as the chief executive officer of the University and “Deputy Vice-Chancellor” shall be construed accordingly; |
| <b>Visitor</b>                 | A person or group of members of the public who come to visit or visit the campus on official business and/or with permission;                                                                                                                                                                         |
| <b>University</b>              | Universiti Malaysia Sarawak (UNIMAS);                                                                                                                                                                                                                                                                 |
| <b>UNIMAS Community</b>        | UNIMAS citizens, from all levels, whether management, administration, academics, executor and students of the University.                                                                                                                                                                             |

# **PART 1**

## **ESG POLICY**

The ESG Policy at Universiti Malaysia Sarawak (UNIMAS) provides for and outlines the following matters;

- i. Introduction
- ii. Policy Statement
- iii. Objectives of the Policy
- iv. Value Proposition of UNIMAS's ESG
- v. Strategic Concerns Driving UNIMAS's ESG Journey
- vi. Mechanism to Implement ESG
  - a. Mechanism of Delegation
  - b. Environmental Responsibility
  - c. Social Responsibility
  - d. Governance Standards
  - e. Strategic Partnership and Stakeholder Engagement
  - f. Financial Commitment
  - g. ESG Reporting
- vii. Implementation and Monitoring
- viii. Continuous Improvement and Innovation
- ix. Legislative Reference Sources
- x. Reviews and Amendments
- xi. Effective Date



## Introduction

Rising global awareness towards sustainable issues has prompted to the Environmental, Social and Governance (ESG). ESG is an initiative to spearhead integrated efforts for sustainability that involves crucial aspects like social and governance. ESG is also define as a framework for evaluating risks and opportunities related to an operational impact on the environmental, social issues, and governance factors. It is long practiced in the industry and corporate sector, and it is now relevant to be implemented amongst and instilled within the higher education level.

Universiti Malaysia Sarawak (UNIMAS) is one of the public higher education institutes in Malaysia, established under the Universities and University College Act (1971) and a Federal Statutory Body, under the purview of Statutory Bodies (Discipline and Surcharge) Act 2000 (Act 605). With the vision to be a leading global university for a sustainable future, and the mission to enhance the social and economic impacts on the global community through the pursuit of excellence in teaching, research, and strategic engagement, UNIMAS is committed to ensure that its operation meets the economic, social and environmental needs of the present without compromising the ability of future generations to meet their own needs, to which what sustainability is all about.

Henceforth, UNIMAS is committed to express its commitment by establishing this policy, entitled “UNIMAS Environmental, Social and Governance (ESG) Policy” (hereinafter referred to as “Policy”).

This Policy outlines UNIMAS’s approach to sustainability and ESG, ensuring that we are accountable, transparent, and responsible in all actions to create long-term value for the university and the community. This is a manifestation of UNIMAS to ensure that and prioritize the operationalization its environmental, social and governance objectives.

## Policy Statement

UNIMAS is committed to operate in an ethical, sustainable, and responsible manner. This ESG Policy outlines our dedication to Environmental, Social, and Governance (ESG) principles in practice. UNIMAS strives to embed sustainability across all aspects of its operations, aligning with the United Nations Sustainable Development Goals (SDGs) and upholding ESG principles at every level.

UNIMAS envisions a future where higher education plays a transformative role in fostering sustainable development. Through the commitment to the principles of ESG, UNIMAS aims to lead by example and further established itself as the reference of ESG Excellence, integrating sustainable practices into every facet of university life—from academic curricula to community engagement, governance, and operational practices. This initiative is in line with the United Nations Sustainable Development Goals (SDGs), in order to generate lasting positive impact for Sarawak, Malaysia and beyond jurisdiction.

UNIMAS's commitment to Environmental, Social, and Governance (ESG) principles is grounded in five UNIMAS values that guide all sustainability initiatives. The values are Exemplary, Collegiality, Integrity, Tenacity, and Equity.

Aligned with the UNIMAS Sustainability Masterplan, these documents aim to outline all sustainability initiatives, benefiting not only the campus but also the surrounding community. UNIMAS, in partnership with its students, staff, alumni, and stakeholders, strives to make the University an exceptional institution.

Thus, to achieved these goals, UNIMAS will strengthen its focus on community engagement and digital transformation, such as centralisation of digitalisation and artificial intelligence (AI). Close collaboration with local communities, particularly indigenous and underserved groups by way of implementing programs that promote digital literacy and green skills, empowering these communities to thrive in a sustainable, tech-driven future. Leveraging digital tools and technologies, UNIMAS also aims to enhance its environmental, social, and governance efforts, ensuring that our ESG initiatives are inclusive, data-driven, and impactful. UNIMAS strives to uphold responsible-practices and cultivate a sustainable legacy that empowers our students, University and community as a whole, to shape a better world.

## **Objectives of the Policy**

The objectives of the UNIMAS ESG Policy aim to guide the university's commitment to sustainability by fostering environmental stewardship, promoting social equity, and upholding ethical governance. These goals align with UNIMAS's vision to drive positive impacts locally and globally through transformative practices in education, operations, and community engagement:

- (a) **Enhanced Institutional Sustainability:** Strengthen UNIMAS's role as a leader in environmental stewardship, contributing to global sustainability by reducing its ecological footprint, promoting renewable energy use, and fostering biodiversity.
- (b) **Social Equity and Community Impact:** Develop socially responsible and inclusive practices that benefit students, staff, and the wider Sarawak community, particularly indigenous and underrepresented groups.
- (c) **Educational Transformation:** Integrate ESG principles into curricula to produce graduates who are informed, responsible, and prepared to address global challenges.
- (d) **Operational Excellence and Governance:** Establish governance practices that prioritize transparency, accountability, and ethical leadership, setting a benchmark for higher education institutions in Malaysia.
- (e) **Increased Visibility and Influence:** Position UNIMAS as a model for ESG implementation, enhancing its reputation both locally and internationally as a university dedicated to sustainable development.

## Value Proposition of UNIMAS's ESG

This Policy is crafted to position the University as a leading institution for sustainability within Malaysia's higher education sector.

Further to that, it also serves as:

- (a) A Model of Excellence: Showcasing how ESG can be practically implemented in academia to inspire other universities and institutions;
- (b) A Catalyst for Community Transformation: By prioritizing local partnerships and engagement, UNIMAS ensures that its sustainability efforts resonate beyond campus, positively impacting Sarawak's communities;
- (c) An Academic Hub for Sustainability Leaders: Through specialized ESG training, research, and a sustainability-driven curriculum, UNIMAS fosters the next generation of sustainability-focused professionals and leaders; and
- (d) A Trusted Partner in Global ESG Goals: With its alignment to international frameworks, such as the SDGs, GRI, FTSE4Good, UNIMAS actively contributes to global sustainability while adapting these goals to the local context of Sarawak.

## Strategic Concern Driving UNIMAS's ESG Journey

- (a) Environmental Imperatives: The urgent need to address climate change, reduce emissions, and conserve biodiversity is aligned with the UNIMAS Energy Policy, UNIMAS Environmental Policy, UNIMAS Low Carbon Campus Roadmap 2030 and other relevant policies. These goals not only fulfill global commitments but also reinforce UNIMAS's responsibility to protect Sarawak's unique ecosystem.
- (b) Social Responsibility and Inclusivity: Ensuring that educational and economic opportunities are available to all, particularly in underrepresented communities, strengthens UNIMAS's role in fostering equality, diversity, and inclusion across the region.
- (c) Compliance and Governance Requirements: With increased expectations from stakeholders on transparency and ethics, UNIMAS must ensure that its operations meet or exceed national and international governance standards.
- (d) Educational Alignment with Industry Needs: As industries evolve to prioritize ESG, UNIMAS's role is to prepare students with the knowledge and skills to lead in sustainable practices, positioning them as valuable assets in Malaysia's workforce.
- (e) Financial Sustainability and Resource Management: Efficient resource allocation and sustainable financial practices are essential to maintaining UNIMAS's long-term impact and supporting continuous improvement in its ESG journey. ESG will also serve as the responsible investment platform for UNIMAS to sustain its operation towards a sustainable development

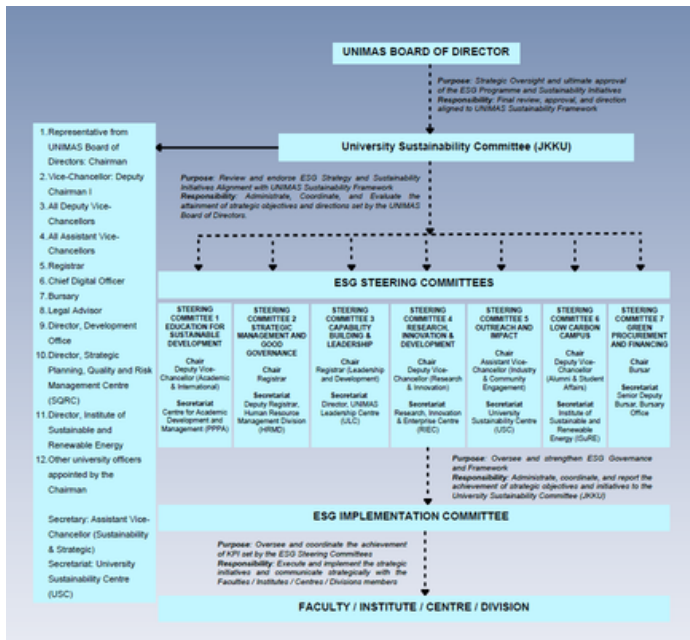
## Mechanism to Implement ESG

UNIMAS is committed to integrating ESG principles across all areas of its operations. To achieve this, UNIMAS has established several mechanisms and delegated authority to ensure effective governance and accountability in implementing its ESG initiatives.

### A. Mechanism of Delegation

#### 1. ESG Delegation of Authority and Responsibilities

#### UNIMAS Sustainability Governance Structure



To ensure the effective implementation of ESG principles and sustainability initiatives, UNIMAS has restructured its delegation of authority to align with the new Sustainability Governance Structure. The structure ensures alignment with strategic goals and promotes effective collaboration across various levels of the university.

The responsibilities are distributed as follows:

### 1. UNIMAS Board of Directors

**Purpose:** Strategic oversight and final approval of ESG programs and sustainability initiatives.

**Key Responsibility:** Final review, approval and direction aligned to UNIMAS Sustainability Framework.

### 2. University Sustainable Committee (JKKU)

**Purpose:** Review and endorse ESG strategies to align with the UNIMAS Sustainability Framework.

**Key Responsibility:** Administrate, coordinate and evaluate the attainment of strategic objectives and directions set by the Board of Directors.

#### Membership:

- Representative from UNIMAS Board of Directors: Chairman
- Vice-Chancellor: Deputy Chairman I
- All Deputy Vice-Chancellors
- All Assistant Vice-Chancellors
- Registrar
- Chief Digital Officer
- Bursary
- Legal Advisor
- Director Strategic Planning, Quality and Risk Management Centre (SQRC)
- Other university officers appointed by the Chairman

**Secretary:** Assistant Vice-Chancellor (Industry, Community Engagement and Sustainability)

**Secretariat:** University Sustainability Centre (USC) / Strategic, Planning, Quality and Risk Management (SQRC) / Institute of Sustainable and Renewable Energy (ISuRE)

### 3. ESG Steering Committees:

o The JKKU is supported by six specialized committees, each focusing on a key pillar of sustainability:

#### • **Steering Committee 1: Capability Building and Leadership**

- **Chair:** Registrar
- **Secretariat :** UNIMAS Leadership Centre (ULC)
- **Responsibilities:** Builds leadership capacity and develops sustainability-aligned talent management programs.

- **Steering Committee 2 : Research and Innovation**
  - **Chair :** Deputy Vice-Chancellor (Research & Innovation)
  - **Secretariat :** Research, Innovation & Enterprise Centre (RIEC)
  - **Responsibilities :** Drive sustainability-focused research and fosters innovative
- **Steering Committee 3: Outreach and Impact**
  - **Chair :** Assistant Vice-Chancellor (Industry, Community Engagement and Sustainability)
  - **Secretariat:** University Sustainability Centre (USC)
  - **Responsibilities:** Enhances community engagement and strengthens industry partnership for sustainability initiatives.
- **Steering Committee 4: Low Carbon Campus**
  - **Chair :** Deputy Vice-Chancellor (Alumni & Student Affairs)
  - **Secretariat:** Institute of Sustainable and Renewable Energy (ISURE)
  - **Responsibilities:** Implements carbon reduction strategies and Low Carbon Campus initiatives.
- **Steering Committee 5 : Education for Sustainable Development**
  - **Chair :** Deputy Vice-Chancellor (Academic & International)
  - **Secretariat:** Centre for Academic Development and Management (PPPA)
  - **Responsibilities:** Embeds sustainability principles in academic programs and promotes sustainable education practices.
- **Steering Committee 6 : Strategic Management and Good Governance**
  - **Chair :** Registrar
  - **Secretariat:** Deputy Registrar, Human Resource Management Division (HRMD)
  - **Responsibilities :** Strengthens governance systems and aligns administrative process with ESG goals.

#### **4. ESG Implementation Committee :**

**Purpose:** Oversees and coordinates the achievement of KPIs set by the ESG Steering Committees.

**Key Responsibilities:** Implements ESG strategies across faculties, institutes, and divisions while ensuring effective communication and alignment.

#### **5. Faculty, Institute, Centre, and Division (F/I/C/D):**

**Key Responsibilities:** Operationalize ESG initiatives at the ground level and ensure measurable progress toward strategic objectives.

## **2. Environmental Responsibility**

As part of the commitment to environmental sustainability, UNIMAS aligns its environmental initiatives with the goals outlined in the UNIMAS Low Carbon Campus Roadmap 2030. These targets are designed to significantly reduce the university's environmental footprint and support global efforts to combat climate change. The strategy focuses on energy, water, biodiversity, and waste management, with specific, measurable targets to be achieved by 2030.

### **(a) Energy**

UNIMAS is committed to reducing energy consumption and increasing the share of renewable energy. Currently, the University's renewable energy efforts are centred and depends on the solar technology. Further expansion of solar energy capacity will be prioritized. Energy-efficient technologies and policies will also be adopted to achieve these ambitious goals.

### **(b) Greenhouse Gas (GHG) Emissions**

UNIMAS aims to reduce its greenhouse gas emissions compared to 2022 levels. This will be achieved through solar energy initiatives, energy efficiency improvements and sustainable operational practices that reduce the overall carbon footprint of the university.

### **(c) Water**

UNIMAS is committed to a responsible approach of water management, striving to reduce water consumption and improve water usage efficiency across the Campus. Water conservation initiatives will include the implementation of water-saving technologies and efforts to minimize water wastage through improved monitoring and management

### **(d) Biodiversity**

UNIMAS is dedicated to conservation of biodiversity, as laid down in the groundwork for the Biodiversity Nexus 2025 Initiative, which will focus on preserving local ecosystems and promoting education on biodiversity conservation. As part of this initiative, UNIMAS will engage in conservation programs, build partnerships with local and international organizations, and ensure that its operational sites align with environmental best practices to safeguard biodiversity in Sarawak and beyond.

**(e) Waste**

UNIMAS aims to significantly reduce waste generation and production compared to previous levels. This will be accomplished through enhanced waste management practices, including expanded recycling programs, sustainable material use, and waste reduction initiatives across the University.

**3. Social Responsibility**

UNIMAS is committed to foster a socially responsible and inclusive environment for all stakeholders. Our social strategy is grounded in promoting fair employment practices, ensuring a safe and healthy work environment, developing talent and maintaining strong relationships with local communities. UNIMAS's approach to social responsibility encompasses in the following key areas:

**(a) Employment**

UNIMAS strives to create a fair and supportive workplace, offering equitable employment opportunities and competitive benefits to its staff. UNIMAS is committed to foster a culture of transparency, fairness and the value of respect in all employment practices.

**(b) Occupation Safety and Health**

The health and safety of UNIMAS staff, students, and visitors are top priorities. UNIMAS will continue to adhere to stringent occupational safety and health standards, implementing proactive measures to ensure a safe and secure environment for all. Regular training, safety audits, and risk management protocols will be in place to maintain the highest safety standards.

**(c) Training and Talent Development**

UNIMAS is dedicated to the continuous development of its staff and students. A strong emphasis is placed on providing training programs, career development opportunities, and initiatives aimed at promoting talent excellence. This includes enhancing skills related to sustainability, green technology, and innovation, aligning with the university's broader environmental goals. As part of this commitment, UNIMAS aims to increase the number of staff and students specializing in sustainability and green technology, strengthening the university's capacity to address global sustainability challenges.

**(d) Sustainability-Driven Curriculum**

UNIMAS integrates sustainability across its academic courses, ensuring that students are equipped with the knowledge and skills to contribute to global sustainability. As of 2024, a total of 1,966 courses at UNIMAS have been mapped to the SDGs 1 to 17, ensuring that UNIMAS's educational programs support and promote sustainability across a wide range of disciplines.



**(e) Diversity, Equity, and Inclusion**

UNIMAS values diversity and is committed to creating an inclusive environment where people of all backgrounds can thrive. UNIMAS will continue to promote equity and inclusion across all university operations, ensuring equal opportunities for students, staff, and stakeholders regardless of gender, race, ethnicity, or socioeconomic background. Initiatives supporting diversity in leadership, decision-making, and student admissions will be prioritized.

**(f) Non-Discrimination and Rights of Indigenous People**

UNIMAS places a high emphasis on the notion of equality rights in order to condemn discrimination and injustice against people and to uphold human rights. Religion, ethnicity, descent, location of birth, and gender are all examples of the right to equality. Numbers of Policies are applicable in UNIMAS, such as Gender, Religion, Nation, And Age Equality And Protection Policy For UNIMAS Citizens, UNIMAS' Equality Policy Ensures Quality Education and Inclusive Policy for Persons with Disabilities reinforces our commitment to safeguarding the rights and dignity of all individuals.

**(a) Local Communities Engagement**

UNIMAS engages with local communities to co-develop programs that support their growth and well-being, with a focus on partnering with indigenous groups to enhance educational opportunities and promote sustainable livelihoods. We aim to increase community projects targeting initiatives that uplift underserved populations in Sarawak, including digital literacy and green skills development. By fostering strong relationships, UNIMAS ensures its initiatives reflect the needs and aspirations of those it serves.

**4. Governance Responsibility**

UNIMAS is committed to uphold the highest standards of governance to ensure transparency, accountability, and ethical practices throughout its operations. UNIMAS's governance strategy focuses on maintaining strong economic performance, ensuring ethical market practices, promoting sustainable procurement, and preventing corruption.

The following key areas are central to UNIMAS's governance framework:

**(a) Economic Performance**

UNIMAS recognizes the importance of financial sustainability in achieving its academic and institutional goals. The university is committed to responsible financial management, ensuring that resources are allocated efficiently to support research, education, and community engagement. This includes transparent reporting on financial performance and aligning economic activities with the long-term sustainability goals of the institution.

**(b) Market Presence**

As one of the higher educational institutions in Sarawak and Malaysia, UNIMAS seeks to strengthen its market presence by expanding its influence in research, education, and innovation. UNIMAS will continue to establish partnerships with industries, government agencies, and other educational institutions to enhance its competitiveness, both locally and globally, while aligning these partnerships with ESG principles.

### **(c) Procurement Practices**

UNIMAS is committed to ethical and sustainable procurement practices. This involves working with suppliers and contractors who align with the university's sustainability goals and ensuring that procurement decisions are made with a focus on environmental and social responsibility. UNIMAS will also encourage the use of locally sourced materials and services to support the local economy and reduce environmental impact.

### **(d) Anti-Corruption**

UNIMAS upholds its Policy Prohibition Policy on Receiving Gifts, maintaining a zero-tolerance stance toward corruption and unethical behavior. The institution is committed to ensuring 100% compliance with anti-corruption training and its internal policies, reinforcing a culture of integrity across all levels of the organization.

### **(e) Regulatory Compliance**

UNIMAS ensures that all activities meet or exceed local, national, and international regulations, including environmental, labor, and academic standards, fostering a culture of legal and ethical integrity. We actively monitor changes in regulatory frameworks to remain compliant and continuously improve our practices. By promoting a proactive approach to compliance, we aim to mitigate risks, enhance our reputation, and contribute to the sustainability of our community.

### **(f) Ethical Leadership**

UNIMAS prioritizes ethical leadership in its governance practices, with oversight provided through dedicated steering-committees and secretariats. The Steering-Committee 4: Low Carbon Campus, led by the Deputy Vice-Chancellor (Alumni and Student Affairs), and supported by the Institute of Sustainable and Renewable Energy (ISURE), focuses on environmental sustainability initiatives. The Steering-Committee 1: Capability Building and Leadership, led by the Registrar and supported by UNIMAS Leadership Center (ULC), addresses social equity, innovation, and inclusivity. Additionally, Steering-Committee 2: Research and Innovation, chaired by Deputy Vice-Chancellor (Research and Innovation) and supported by Research, Development, Innovation, Commercialisation and Enterprise Centre (RDICE), focuses on driving sustainability-focused research and fosters innovative. The Steering-Committee 3: Outreach and Impact, chaired by the Assistant Vice-Chancellor (Industry, Community Engagement and Sustainability) and supported by the University Sustainability Centre (USC), ensures effective collaboration with UNIMAS' stakeholders to maximize the outreach and impact of sustainability initiatives. Whereas, The Steering Committee 5: Education for Sustainable Development, led by Deputy Vice-Chancellor (Academic & International) and supported by Centre for Academic Development and Management (PPPA), embeds sustainability principles in academic programs and promotes sustainable education practices. The Steering-Committee 6: Strategic Management and Good Governance, which is also led by the Registrar and supported by Deputy Registrar, Human Resource Management Division (HRMD), ensures strong governance systems and aligns administrative process with ESG goals.

By collectively monitoring sustainability initiatives, guiding practices related to resource allocation, and engaging stakeholders effectively, UNIMAS reinforces its commitment to ethical decision-making, integrity, and building trust within the UNIMAS community.

#### **(g) Transparency in Governance**

UNIMAS commits to upholding transparency in decision-making and ethical leadership. This includes open communication with stakeholders, adherence to international governance standards, and ensuring all governance activities are conducted with integrity and accountability.

### **5. Strategic Partnership and Stakeholder Engagement**

UNIMAS is committed in engaging with a wide range of stakeholders, including students, staff, local communities, government agencies, and industry in order to shape and refine its ESG policy. Government, students, and industry are key stakeholders due to their high influence on and dependence upon the University's strategic direction. Administrative and academic staff are also crucial to the university's operations, while communities and strategic partners play a supportive role. Alumni, the public, and Non- Governmental Organisation (NGOs) are important contributors, whether directly or indirectly, to the overall ESG implementation.

To foster ongoing collaboration and feedback, UNIMAS will:

#### **(a) Stakeholders Involvement**

Establish regular engagement with students, staff, local communities, and government bodies to discuss and shape our ESG strategies.

#### **(b) Community and Indigenous Engagement**

Work closely with local communities, including indigenous groups, to co-develop initiatives that reflect their needs and aspirations, particularly in areas such as education, sustainable livelihoods, and cultural preservation.

### **6. Financial Commitment**

UNIMAS is committed to ensuring the success of its sustainability efforts by allocating a significant amount of its annual operating budget to support ESG initiatives. This financial commitment will enable the university to advance its environmental, social, and governance goals, ensuring ongoing progress in alignment with UNIMAS's sustainability vision.

### **7. ESG Reporting**

ESG Reporting is a disclosure of ESG data, which shall communicate the commitment to sustainability and responsible practices to the stakeholders. This reporting shall provide insight into the institution's broader impact on society and environment. This report shall be the demonstration of UNIMAS to transparency and responsive practice, fostering trust and credibility to its stakeholders. The implementation of the reporting shall be as follow:

**(a) Annual Reporting**

UNIMAS will publish an annual ESG report that provides a transparent account of the university's sustainability performance. This annual ESG report will be made available to all stakeholders, including students, staff, and the public.

**(b) Report Coverage**

The annual ESG report will cover specific sustainability metrics and data related to UNIMAS's operations unless otherwise stated. The content of the report will focus on the impacts of UNIMAS across the identified material topics.

**(c) Information Reliability**

All data included in the report is collected, verified, and validated internally by the respective departments. As part of our commitment to data quality, we continuously strive to improve data collection and analysis processes, ensuring the precision and integrity of future disclosures.

**Implementation and Monitoring**

UNIMAS will oversee the implementation of this Policy. Key performance indicators (KPIs) will be developed to measure our progress and ensure accountability. Regular reviews and updates to this Policy will be conducted to adapt to evolving best practices and regulatory requirements.

By adhering to this ESG Policy, UNIMAS aims to create long-term value for our stakeholders, contribute to a sustainable future, and enhance our reputation as a responsible corporate citizen.

**Continuous Improvement and Innovation**

UNIMAS is committed to driving continuous improvement in our sustainability efforts through innovation and research. As part of this commitment, we will actively incorporate research on sustainability and ESG best practices into our strategies. Our support for cross-disciplinary research on renewable energy, biodiversity, and social justice will drive long-term sustainability. By fostering a culture of innovation, UNIMAS aim to keep our practices at the forefront of sustainability, benefiting both the university and the wider community.

**Legislative Reference Sources**

The reference sources are as follows: -

- (a) Federal Constitution of Malaysia 1957;
- (b) Universities and University Colleges Act (UUCA) 1971 (Amendment) 2009, 2012, 2019 and 2024 [Act 30];
- (c) Statutory Bodies (Discipline and Surcharge) Act 2000 [Act 605];

- (d) Constitutions of the Universiti Malaysia Sarawak 1998 (Amendment) 2010, 2012 and 2024;
- (e) United Nations Global Compact, Report on ESG, 2004;
- (f) Global Reporting Initiative, 1997;
- (g) UNIMAS Sustainability Master Plan;
- (h) UNIMAS Low Carbon Campus Roadmap 2030;
- (i) UNIMAS Strategic Plan; and
- (j) Any other instructions from time to time issued by the relevant authority.

### **Reviews and Amendments**

This Policy is subject to change from time to time to remain in compliance with changes in Malaysian Laws, including the 1957 Federal Constitution; the Universities and University Colleges Act (AUKU) 1971, with amendments in 2009, 2012, 2019, and 2024; the Constitution of Universiti Malaysia Sarawak 1998, with amendments in 2010, 2012, and 2024; as well as government policies introduced through circulars, circular letters, or regulations issued by the Malaysian Government.

### **Effective Date**

This Policy becomes fully effective on the day it is authorised by the Universiti Malaysia Sarawak (UNIMAS) Board of Directors Meeting on XXX.

## **PART 2: ESG Reporting and Evaluation Mechanism**

### **Introduction**

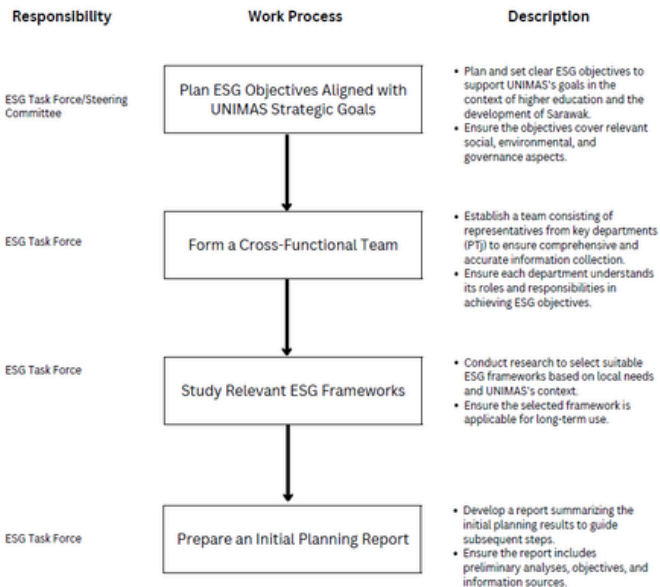
The ESG Reporting and Evaluation Mechanism at UNIMAS provides a structured framework to monitor, evaluate, and communicate the university's sustainability performance. Designed to align with global standards such as the Global Reporting Initiative (GRI) and the Sustainable Development Goals (SDGs), this mechanism ensures transparency, accountability, and continuous improvement in the implementation of ESG principles.

This comprehensive process integrates planning, stakeholder engagement, materiality assessment, data collection, implementation, monitoring, and communication. Each stage is designed to enhance ESG integration across all university functions, enabling UNIMAS to achieve its strategic sustainability goals while fostering a culture of collaboration and innovation.

The mechanism not only strengthens institutional accountability but also supports UNIMAS in addressing local and global sustainability challenges, ensuring a lasting positive impact on Sarawak, Malaysia, and beyond. By embedding these practices, UNIMAS positions itself as a leader in sustainability reporting within higher education.

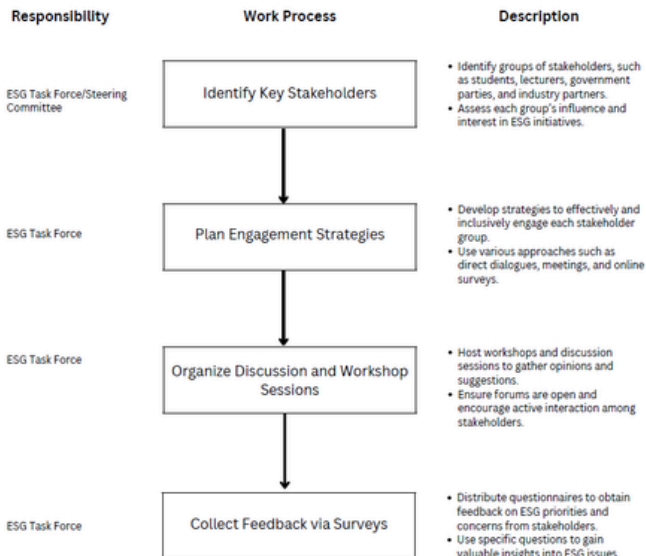
### Flowchart on ESG Planning and Evaluation

**Objective:** Establish a strong foundation for ESG reporting by setting clear objectives, forming cross-functional teams, and selecting appropriate frameworks for UNIMAS.



### Flowchart on ESG Stakeholder Engagement

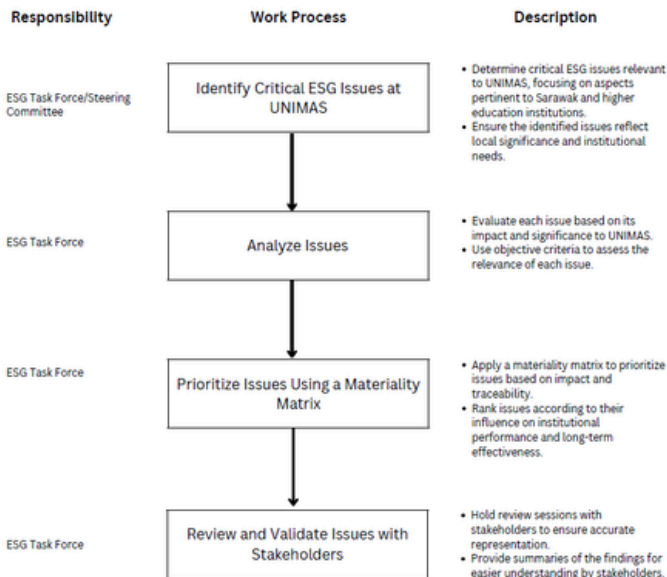
**Objective:** Engage key stakeholders in the ESG process to ensure their perspectives are considered and to build strong support.





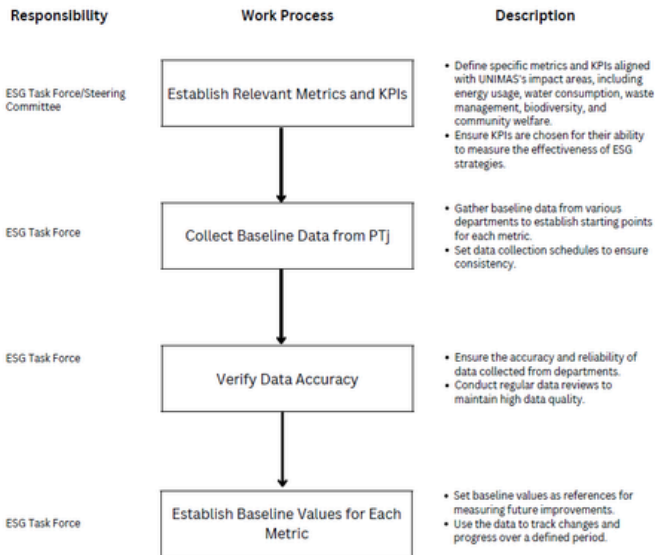
### Flowchart on ESG Materiality Assessment

**Objective:** Prioritize critical ESG issues relevant to UNIMAS and Sarawak through careful evaluation and stakeholder input.



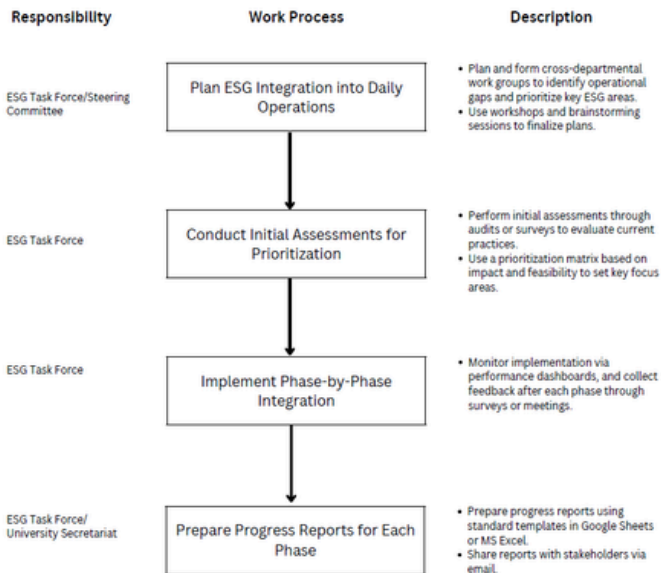
### Flowchart on ESG Data Collection

**Objective:** Collect accurate and relevant baseline data for each ESG metric to measure progress and ensure transparency in future reporting.



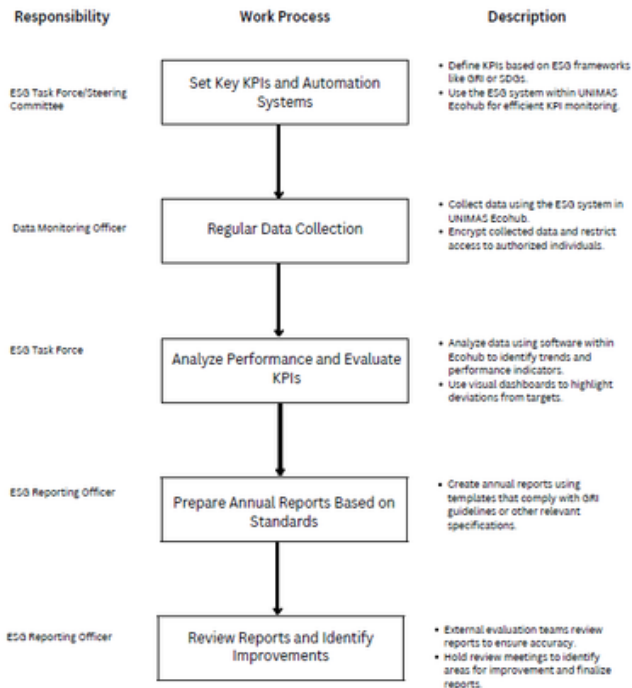
### Flowchart on ESG Implementation

**Objective:** Integrate ESG principles into daily operations, effectively train employees, and implement initiatives in phases.



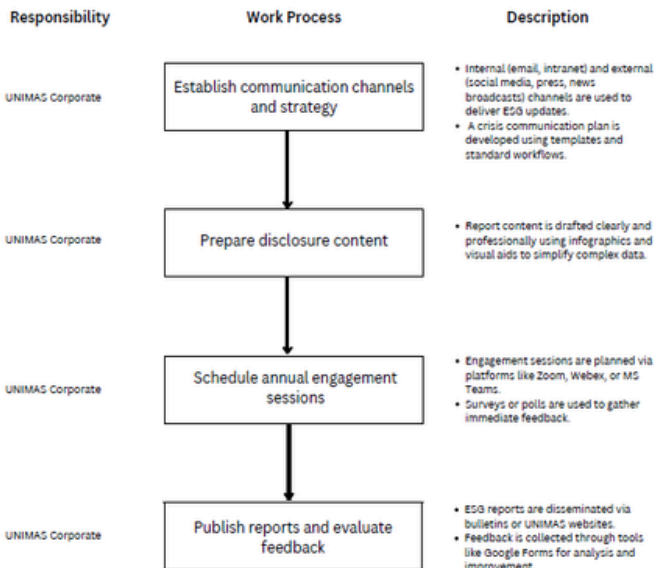
### Flowchart on ESG Monitoring and Reporting

**Objective:** Efficiently monitor ESG performance, ensure secure data handling, and comply with reporting standards.



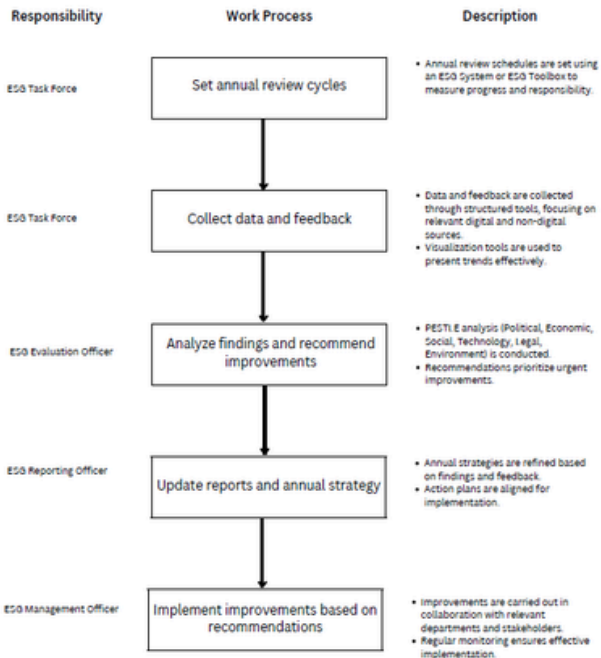
### Flowchart on Communication and ESG Disclosures

**Objective:** Establish a clear process for ESG reporting and effectively engage stakeholders.



### Flowchart on ESG Reporting

**Objective:** Monitor ESG performance efficiently, ensure data is managed securely, and comply with reporting standards.



## **PART 3: ESG Framework**

### **Introduction**

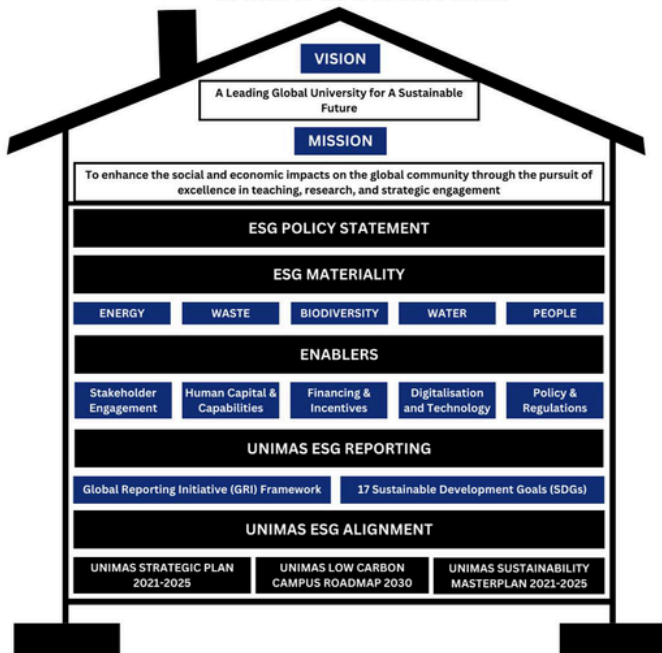
The UNIMAS ESG Framework serves as the foundation for embedding sustainability across all facets of the university's operations, aligning with the principles outlined in the UNIMAS ESG Policy. This comprehensive framework integrates the university's vision of becoming "A Leading Global University for a Sustainable Future" with its mission to create meaningful social and economic impacts through excellence in teaching, research, and strategic engagement.

The framework emphasizes ESG Materiality, focusing on key areas such as energy, waste, biodiversity, water, and people. These material topics are supported by essential enablers—stakeholder engagement, human capital development, financing and incentives, digitalization, and policy alignment. By leveraging these enablers, UNIMAS ensures its sustainability goals are achievable, impactful, and inclusive. Additionally, the framework underscores the importance of ESG Reporting, guided by the Global Reporting Initiative (GRI) and the United Nations Sustainable Development Goals (SDGs), ensuring transparency and accountability. The alignment with strategic plans, including the UNIMAS Low Carbon Campus Roadmap 2030 and the UNIMAS Sustainability Masterplan (2021–2025), reinforces the university's commitment to fostering a low-carbon, sustainable future.

This framework not only strengthens UNIMAS's leadership in sustainability but also positions the university as a benchmark for excellence in higher education, contributing to local and global sustainability agendas.

## ESG Framework

### UNIMAS ESG Framework



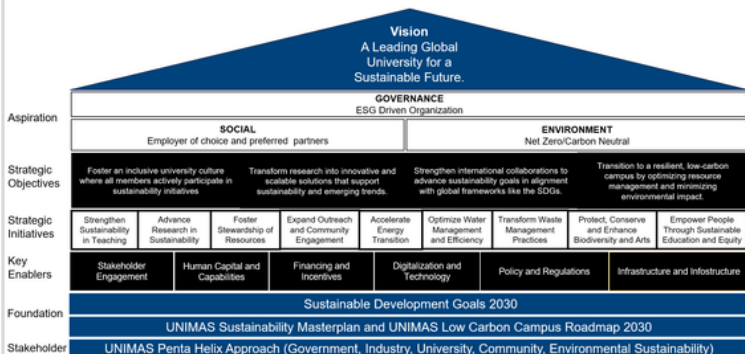


## **PART 4: UNIMAS Holistic and Inclusive Sustainability Framework**

### **Introduction**

The UNIMAS Holistic and Inclusive Sustainability Framework represents a comprehensive approach to embedding sustainability at the core of the university's mission. By addressing environmental, social, and governance (ESG) dimensions, the framework emphasizes ethical leadership, inclusivity, and resource optimization as key pillars. Focused on creating a low-carbon, resilient campus while fostering equitable and inclusive opportunities, it aligns with global and national sustainability priorities. Through strategic initiatives and collaborations with stakeholders, the framework seeks to integrate sustainable practices into teaching, research, operations, and community engagement, ensuring that UNIMAS contributes meaningfully to addressing both local and global challenges.

# Proposed UNIMAS Holistic and Inclusive Sustainability Framework



## **UNIMAS Holistic and Inclusive Sustainability Framework**

The UNIMAS Holistic and Inclusive Sustainability Framework serves as a strategic blueprint to integrate sustainability into all facets of the university's operations, governance, and community engagement. Anchored by its vision of becoming "A Leading Global University for a Sustainable Future", the framework positions UNIMAS as a frontrunner in advancing environmental, social, and governance (ESG) goals while collaborating with diverse stakeholders.

### **Core Aspiration**

The framework outlines three primary aspirations to guide the university's sustainability efforts:

- Governance: Establishing UNIMAS as an ESG-driven organization grounded in ethical leadership, transparency, and accountability.
- Social: Becoming an employer of choice and a preferred partner by fostering inclusivity, equity, and well-being across all levels of the institution.
- Environment: Achieving net-zero carbon neutrality and optimizing resources to create a resilient, low-carbon campus.

### **Strategic Objectives**

To realize these aspirations, UNIMAS has identified key strategic objectives:

- Cultivating an inclusive and participatory university culture where all members are engaged in sustainability initiatives.
- Advancing research to develop innovative and scalable solutions that address sustainability challenges and emerging trends.
- Strengthening global collaborations to align sustainability goals with international frameworks such as the **Sustainable Development Goals (SDGs)**.
- Transitioning towards a resilient, low-carbon campus through effective resource management and environmental impact minimization.

To elaborate on the UNIMAS Holistic and Inclusive Sustainability Framework while incorporating the introduction provided, here's a comprehensive and refined write-up for inclusion in the UNIMAS ESG policy:

## **UNIMAS Holistic and Inclusive Sustainability Framework**

The UNIMAS Holistic and Inclusive Sustainability Framework serves as a strategic blueprint to integrate sustainability into all facets of the university's operations, governance, and community engagement. Anchored by its vision of becoming "A Leading Global University for a Sustainable Future", the framework positions UNIMAS as a frontrunner in advancing environmental, social, and governance (ESG) goals while collaborating with diverse stakeholders.

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- Transitioning towards a resilient, low-carbon campus through effective resource management and environmental impact minimization.

### Strategic Initiatives

The framework is supported by a series of targeted strategic initiatives designed to deliver measurable outcomes:

- **Strengthen Sustainability in Teaching:** Embedding sustainability principles into academic programs to equip students with the knowledge and skills to address global challenges.
- **Advance Research in Sustainability:** Fostering innovative research that supports scalable solutions for environmental, social, and governance issues.
- **Foster Stewardship of Resources:** Encouraging responsible management and conservation of natural resources within the university and beyond.
- **Expand Outreach and Community Engagement:** Building stronger relationships with external stakeholders, including industries and communities, to promote collaborative sustainability efforts.
- **Accelerate Energy Transition:** Implementing clean energy solutions and reducing dependence on non-renewable resources.
- **Optimize Water Management and Efficiency:** Enhancing water conservation practices to support long-term sustainability.

- **Transform Waste Management Practices:** Developing innovative systems for waste minimization and recycling.
- **Protect, Conserve, and Enhance Biodiversity and Arts:** Safeguarding ecosystems and fostering cultural preservation through arts and heritage.
- **Empower People Through Sustainable Education and Equity:** Promoting access to education and equity while building human capital for a sustainable future.

### Key Enablers

The successful implementation of the framework relies on six key enablers:

1. **Stakeholder Engagement:** Strengthening collaboration with internal and external stakeholders, including government, industry, academia, and communities, through the Penta Helix Approach.
2. **Human Capital and Capabilities:** Empowering staff and students through skill development, lifelong learning, and leadership in sustainability.
3. **Financing and Incentives:** Mobilizing resources and funding to support sustainability initiatives.
4. **Digitalization and Technology:** Leveraging digital tools and technologies to enhance efficiency and drive innovation in sustainability practices.
5. **Policy and Regulations:** Establishing policies and frameworks that support sustainable operations and governance.
6. **Infrastructure and Infostructure:** Building and maintaining resilient, eco-friendly facilities and systems to support sustainability goals

### Foundation and Alignment

The framework is firmly rooted in global and local sustainability agendas:

- **Global Alignment:** The framework aligns with the Sustainable Development Goals (SDGs) to ensure UNIMAS contributes to addressing global challenges.
- **Local Commitments:** It supports the UNIMAS Sustainability Masterplan and the UNIMAS Low Carbon Campus Roadmap 2030, further advancing Sarawak's and Malaysia's sustainability objectives.

## **PART 5 : ESG Risk Management and Mitigation**

### **Introduction**

Effective ESG implementation requires the proactive identification, evaluation, and management of potential risks and challenges that could hinder the achievement of sustainability goals. Risks in ESG can range from financial constraints and stakeholder resistance to regulatory non-compliance and environmental challenges. Recognizing the dynamic and interconnected nature of these risks, UNIMAS has developed a comprehensive ESG Risk Management and Mitigation approach to systematically address potential obstacles. This approach not only safeguards the implementation of ESG initiatives but also ensures that UNIMAS remains adaptable to evolving challenges, enhancing its resilience and ability to achieve long-term sustainability objectives.

The system is designed to address key risk categories, including financial, social, environmental, technical, and governance-related risks, by adopting a structured strategy for mitigation. Through rigorous risk assessments, collaborative engagement with stakeholders, and the establishment of clear mitigation measures, UNIMAS ensures that its ESG initiatives align with institutional goals and external standards, such as the Sustainable Development Goals (SDGs). By embedding this risk management process into ESG operations, UNIMAS demonstrates its commitment to transparency, accountability, and the continuous improvement of its sustainability practices, ultimately safeguarding its role as a leader in sustainability within higher education.

### **Objectives**

- To proactively identify and address risks that could hinder the successful implementation of ESG policies.
- To provide structured mitigation strategies that align with UNIMAS's sustainability goals.
- To promote resilience and adaptability in the face of evolving ESG challenges.

| Topic                  | Issue                                                                                                                                                                      | Risk                                                                                                                                 | Impact                                                                                             | Mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                       | Likelihood | Impact | Score |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|-------|
| Financial Constraint   | Significant funding is required to implement the ESG initiatives, including budget allocation for infrastructure, technology, training, and stakeholder engagement.        | Insufficient financial resources or delayed budget approvals may lead to incomplete or ineffective implementation of the ESG policy. | Incomplete or ineffective implementation of the ESG policy.                                        | 1. Seek internal funding through strategic budget allocation to ensure sufficient resources for ESG initiatives.<br>2. Explore opportunities to secure external funding or sponsorships from relevant stakeholders and partners.                                                                                                                                                                                                                 | 3          | 5      | 15    |
| Stakeholder Resistance | Resistance from internal (staff, students) & external stakeholders (vendors/suppliers, governments) who may not fully understand the importance or impact of ESG practices | Lack of buy-in could result in reduced participation, undermining the policy's effectiveness                                         | Weaken the integration of ESG practices, affecting overall sustainability efforts and stakeholder. | 1. Foster regular internal engagement by promoting collegiality and exemplary practices to build trust and collaboration.<br>2. Facilitate a smooth internal transition by aligning ESG initiatives with organizational culture and processes.<br>3. Implement compliance measures and enforce regulations for external stakeholders to ensure alignment with ESG goals.<br>4. Develop and monitor internal KPIs to track progress and reinforce | 3          | 4      | 12    |

| Topic                                | Issue                                                                                                                              | Risk                                                                                                                                            | Impact                                                                                                       | Mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Likelihood | Impact | Score |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|-------|
| Technical and Operational Challenges | Complexity in integrating new technologies (e.g., IoT sensors, GHG dashboards) and aligning current systems with ESG requirements. | Technical difficulties may cause delays or inconsistencies in achieving set goals like energy efficiency and waste management.                  | Delays or inconsistencies in achieving set goals, leading to resource inefficiencies.                        | <ol style="list-style-type: none"> <li>1. Identify necessary resources, including financial support and specialized expertise, to address technical challenges effectively.</li> <li>2. Conduct regular budget reviews to allocate resources efficiently for operational improvements.</li> <li>3. Collaborate with external partners to leverage their expertise and resources, ensuring mutually beneficial outcomes.</li> <li>4. Build and enhance technical expertise by developing a dedicated supporting team to manage operational complexities.</li> </ol> | 3          | 3      | 9     |
| Regulatory and Compliance Risks      | Adhering to evolving regulatory requirements, such as the Environment (Reduction of Greenhouse Gases) Ordinance 2023.              | Adhering to evolving regulatory requirements internally and externally, such as the Environment (Reduction of Greenhouse Gases) Ordinance 2023. | Non-compliance with regulations could result in penalties, legal issues, and damage to UNIMAS's credibility. | <ol style="list-style-type: none"> <li>1. Conduct regular internal and external regulatory reviews and updates to ensure full compliance with evolving standards and requirements.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                      | 2          | 5      | 10    |



| Topic                       | Issue                                                                                                                                        | Risk                                                                                                         | Impact                                                                                                                                 | Mitigation                                                                                                                                                                                                                                                                   | Likelihood | Impact | Score |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|-------|
| Monitoring and Evaluation   | Establishing robust frameworks to monitor and evaluate progress, including key performance indicators (KPIs) for sustainability.             | Poor monitoring systems could result in mismanagement and inability to demonstrate tangible progress.        | Mismanagement and inability to demonstrate tangible progress.                                                                          | 1. Establish a dedicated support team to oversee monitoring and evaluation processes, ensuring consistent and effective implementation.<br>2. Regularly review and upgrade tools and systems to enhance the accuracy and efficiency of monitoring and evaluation activities. | 3          | 3      | 9     |
| Environmental Challenges    | Achieving ambitious goals like reducing carbon emissions and managing biodiversity in Sarawak's unique ecosystems.                           | Environmental factors such as climate variability or external industrial impacts may hinder success.         | Failure to address environmental concerns may harm ecosystems, reduce biodiversity, and contradict UNIMAS's sustainability objectives. | 1. Develop a climate resilience adaptation plan and allocate appropriate budgets to address environmental challenges and ensure sustainable outcomes.                                                                                                                        | 2          | 3      | 6     |
| Social and Inclusion Issues | Providing fair opportunities and support for underserved communities while embedding ESG principles into academic and operational practices. | Social tension among communities could lead to criticism and lack of support from key societal stakeholders. | Community dissatisfaction, reputational damage, and reduced stakeholder trust.                                                         | 1. Ensure transparency in the selection process of communities to promote fairness and build trust among stakeholders.                                                                                                                                                       | 2          | 3      | 6     |

## **PART 6 : Universiti Malaysia Sarawak Carbon Management Plan: A Comprehensive Measurement, Reporting, and Verification (MRV) for Greenhouse Gas (GHG) Emissions in Universiti Malaysia Sarawak**

### **Executive Summary**

The UNIMAS Carbon Management Plan (UCaMP) establishes a structured approach for Measurement, Reporting, and Verification (MRV) of greenhouse gas (GHG) emissions in Universiti Malaysia Sarawak, reflecting international best practices outlined in the UNDP MRV Technical Paper. UCaMP is a key component of the UNIMAS Low Carbon Campus Roadmap (ULCC) 2030 Strategic Pillar 2 – GHG Inventory, aligning with the National's and Sarawak's Net Zero Vision.

UCaMP focuses on enhancing transparency, accuracy, and consistency in emissions data, serving as a robust framework that supports informed policy-making and institutional accountability. This comprehensive MRV framework fosters a scalable and adaptable to changing environmental landscapes. UCaMP is a testament that UNIMAS is committed towards low carbon and sustainable living.

### **Introduction to UNIMAS Carbon Management Plan (UCaMP)**

#### **(a) Background**

The Government of Malaysia has set a goal of achieving net-zero greenhouse gas (GHG) emissions by 2050, as part of its national climate action strategies. This commitment is embedded within a range of policy frameworks, including the Twelfth Malaysia Plan (2021-2025), the National Climate Change Policy 2.0, and the Post-COVID-19 Development Strategy (PCDS) 2030. Together, these initiatives aim to establish a sustainable, low-carbon economy that is resilient to climate impacts.

The Government of Sarawak is equally committed to this vision, aiming to reach net-zero GHG emissions by 2050, in alignment with Malaysia's national target. Sarawak's efforts are further strengthened by the Environment (Reduction of Greenhouse Gases) Ordinance 2023, which mandates that business entities in key sectors register and report their GHG emissions to the Natural Resources and Environment Board (NREB). Effective implementation of this ordinance calls for a rigorous Measurement, Reporting, and Verification (MRV) system that adheres to international standards, supporting Sarawak's journey towards a low-carbon economy.

In alignment with these national and state goals, the UNIMAS Carbon Management Plan (UCaMP) has been developed to bring this vision to a campus-wide scale. UCaMP demonstrates Universiti Malaysia Sarawak's (UNIMAS) commitment to sustainability through a structured, transparent framework for managing GHG emissions within the campus, setting a model for higher education institutions in Sarawak and Malaysia.

UCaMP is designed not only to meet the national and state climate objectives at a campus level but also to be scalable, adaptable, and able to support broader municipal and industry needs. With experience working closely with local authorities on GHG reporting, UNIMAS is taking an active role in the collective mission to achieve net-zero emissions.

UNIMAS has benchmarked a list of leading institutions and municipal councils to develop a robust Carbon Management Plan (CMP) and Measurement, Reporting, and Verification (MRV) framework. The UCaMP content is strategically aligned with national and state interests while incorporating best practices from these benchmarks to ensure its relevance and effectiveness in achieving sustainability goals. The benchmarked institutions are:

1. University of Birmingham (UK)  
Plan: Carbon Management Plan  
Relevance: Comprehensive roadmap to net-zero emissions by 2045, focusing on GHG reduction, cleaner energy production, and innovative MRV systems.  
Link: <https://www.birmingham.ac.uk/documents/environment/carbon-management-plan-2023.pdf>
2. RMIT University (Australia)  
Plan: Carbon Management Plan  
Relevance: Integration of renewable energy and advanced energy efficiency measures, aiming for carbon neutrality by 2025.  
Link: <https://www.rmit.edu.au/content/dam/rmit/au/en/about/our-values/sustainability/rmit-carbon-management-plan.pdf>
3. University of California, Berkeley (USA)  
Plan: Carbon Neutrality Initiative  
Relevance: Extensive MRV system tracking campus-wide emissions and integrating sustainable practices in operations and research.  
Link: <https://sustainability.berkeley.edu/carbon-neutrality>
4. National University of Singapore (NUS)  
Plan: Sustainability Strategic Plan 2030  
Relevance: Rigorous MRV integration, energy efficiency, and carbon offset strategies tailored to the tropical environment.  
Link: <https://www.nus.edu.sg/>
5. Universiti Malaya (UM), Malaysia  
Plan: UM Eco-Campus Blueprint  
Relevance: Strong alignment with Malaysia's Net Zero Vision, including MRV systems for campus emissions monitoring.  
Link: <https://www.um.edu.my/um-eco-campus-initiatives>
6. University of Cape Town (South Africa)  
Plan: Sustainability Strategy  
Relevance: MRV systems adapted to resource constraints and energy challenges in the Global South context.  
Link: <https://www.uct.ac.za/>

7. Pontifical Catholic University of Chile (Chile)

Plan: Climate Action Plan

Relevance: Focus on GHG reduction and sustainability in developing nations with an MRV framework emphasizing education and community engagement.

Link: <https://www.uc.cl/>

UCaMP's references extend to the perspectives of municipal councils, reflecting UNIMAS's role as a key consultant and point of reference for local authorities in constructing and implementing Net Zero-related plans. The reference is selected based on the socio-economic and environmental similarities to UNIMAS.

1. Kuala Lumpur City Hall (Malaysia)

Plan: Kuala Lumpur Climate Action Plan 2050

Relevance: Aims to achieve carbon neutrality by 2050, with a comprehensive MRV framework to monitor and report GHG emissions.

Link: <https://sdgcentrel.com/publication/kuala-lumpur-climate-action-plan-2050>

2. City of Bogotá (Colombia)

Plan: Climate Action Plan

Relevance: Extensive MRV system for urban GHG emissions, integrating public transport and renewable energy.

Link: <https://www.bogota.gov.co/>

3. City of Durban (South Africa)

Plan: Durban Climate Action Plan

Relevance: Focus on inclusive MRV systems, climate adaptation, and GHG reduction in a resource-constrained setting.

Link: <https://www.durban.gov.za/>

4. City of Jakarta (Indonesia)

Plan: Low-Carbon Development Plan

Relevance: Addresses urban challenges in a developing nation with a comprehensive MRV approach.

Link: <https://www.jakarta.go.id/>

5. Shenzhen Municipality (China)

Plan: Shenzhen Low-Carbon Development Initiative

Relevance: Integration of MRV systems in industrial and urban GHG reductions, supported by national climate goals.

Link: <https://www.sz.gov.cn/>

6. Dubai Municipality (UAE)

Plan: Dubai Carbon Abatement Strategy

Relevance: Regional adaptation of MRV systems with a focus on renewable energy and green building standards.

Link: <https://www.dm.gov.ae/>

## 7. City of Stockholm (Sweden)

Plan: Climate Action Plan

Relevance: Innovative MRV systems for city-wide carbon neutrality by 2040.

Link: <https://international.stockholm.se/>

These benchmarks provide a comprehensive reference for developing UCAMP, ensuring it aligns with the best global practices and integrates innovative sustainability measures relevant to UNIMAS's goals.

The plan is also informed by compliance with key frameworks and policies guiding Malaysia's path to a sustainable, low-carbon economy, including:

- Wawasan Kemakmuran Bersama 2030 (Shared Prosperity Vision 2030)
- Rancangan Malaysia Ke-12 (Twelfth Malaysia Plan, 2021-2025)
- Dasar Perubahan Iklim Negara 2.0 (National Climate Change Policy 2.0)
- Garis Panduan Perancangan Bandar Rendah Karbon dan Berdaya Tahan Perubahan Iklim
- Dasar Teknologi Hijau Negara (National Green Technology Policy)
- Post-COVID-19 Development Strategy (PCDS) 2030
- Laws of Sarawak Chapter 85 Environment (Reduction of Greenhouse Gases Emission) Ordinance, 2023

Through UCAMP, UNIMAS actively supports Malaysia's and Sarawak's climate ambitions, creating a pathway for universities and other institutions to meaningfully contribute to national net-zero targets.

### **(b) Purpose of UCAMP**

#### 1. Reducing Greenhouse Gas Emissions

**Climate Change Mitigation:** UCAMP aims to systematically reduce UNIMAS's carbon footprint through a structured MRV process. By accurately measuring and managing GHG emissions, the plan identifies significant emission sources, such as energy use and transportation, to implement targeted reduction strategies.

**Energy Efficiency:** Through UCAMP, the university can enhance energy efficiency in its operations, directly reducing energy-related carbon emissions in line with UNIMASESG goals.

#### 2. Alignment with National and International Climate Goals

**Compliance with Standards:** UCAMP ensures adherence to international standards like ISO 14064 for GHG measurement, aligning with Malaysia's and Sarawak's commitments and the university's sustainability masterplans. This supports regulatory compliance and fulfills reporting requirements.

**Contributing to Global Initiatives:** The plan supports UNIMAS's commitment to the United Nations Sustainable Development Goals (SDGs), particularly SDG 13 (Climate Action), positioning the university as an active participant in global climate change mitigation.

### 3. Promoting Sustainable Practices on Campus

**Building a Culture of Sustainability:** UCAMP fosters a culture of sustainability among UNIMAS's community by educating students, staff, and faculty about the importance of accurate GHG measurement and reduction. It aligns with the goal of sustainable community transformation outlined in UNIMASESG.

**Operational Sustainability:** The plan promotes sustainable practices in daily operations, such as energy-saving measures, sustainable waste management, and the adoption of renewable energy sources.

### 4. Enhancing University Reputation and Leadership

**Positioning as a Leader in Sustainability:** By implementing UCAMP, UNIMAS showcases its commitment to sustainability, reinforcing its vision to become a leading global university for a sustainable future as stated in UNIMAS ESG Reports. This attracts students, researchers, and partners who value climate action.

**Securing Funding and Partnerships:** The structured approach of UCAMP allows UNIMAS to attract funding from organizations (e.g. WWF and Suruhanjaya Kebangsaan UNESCO Malaysia (SKUM)) by leveraging these resources to advance sustainability initiatives)

### 5. Financial Savings and Resource Efficiency

**Cost Savings through Efficiency:** UCAMP emphasizes efficient energy and resource management, resulting in long-term operational cost savings. By identifying and implementing low-carbon solutions, the university can reduce energy costs while meeting its sustainability goals.

**Risk Management:** The plan prepares UNIMAS for future changes in carbon regulations and potential carbon pricing, reducing financial risks associated with high emissions.

### 6. Supporting Research and Innovation

**Living Laboratory for GHG Management:** Through UCAMP, UNIMAS serves as a living laboratory for research in carbon management, providing practical training opportunities for students and staff in GHG measurement, reporting, and verification. This supports UNIMAS Strategic Focus, UNIMAS Sustainability Master Plan 2021-2025, UNIMAS ESG's focus on information, communication, and creative technology.

**Advancing Low-Carbon Technologies:** The plan facilitates the design and deployment of innovative solutions, such as the GHG Inventory Dashboard and carbon capture machines, reinforcing UNIMAS's reputation for pioneering sustainable technologies.

## 7. Improving Data Management and Transparency

**Data-Driven Decision-Making:** UCAMP emphasizes robust data collection and management, enabling informed decisions for GHG reduction. The focus on accurate data aligns with the goals of the MRV system, ensuring transparency in carbon management efforts.

**Accountability through Reporting:** The plan ensures that UNIMAS maintains comprehensive documentation and reporting, showcasing progress toward its emission reduction targets and the broader goals of the ULCC and UNIMAS ESG Goals.

## 8. Community Engagement and Societal Impact

**Engaging Local Communities:** UCAMP extends its impact beyond the university by engaging the surrounding communities in climate action.

**Contributing to Sarawak's Sustainability Goals:** As part of UNIMAS's broader commitment, UCAMP supports Sarawak's regional strategies for reducing emissions, enhancing the region's environmental stewardship, and contributing to local and regional climate resilience.

### **(c) Purpose of UCAMP Reporting**

The UCAMP Reporting aims to:

- i. Establish a standardized and transparent MRV framework for GHG emissions at Universiti Malaysia Sarawak (UNIMAS), ensuring alignment with the state's regulatory requirements.
- ii. Support accurate, consistent reporting across campus operations, facilitating data transparency for both internal and external stakeholders.
- iii. Enable UNIMAS to comply with national and international climate change commitments as a leader in sustainable campus operations.
- iv. Support data-driven policy formulation and strategic implementation of GHG reduction initiatives.
- v. Position UNIMAS to access carbon markets and attract climate finance opportunities that contribute to its long-term sustainability goals.

#### **(d) Alignment with the UNDP MRV Framework**

The MRV system outlined within the UCAMP is aligned with the UNDP MRV Technical Paper, structured around core principles that ensure transparency, accuracy, and accountability:

- i. **Transparency:** Provide clear, accessible GHG emissions information, ensuring all stakeholders can engage meaningfully.
- ii. **Accuracy:** Ensure precise data collection and reliable reporting methods, building a foundation of credible emissions data.
- iii. **Consistency:** Maintain uniform methodologies over time, allowing for credible comparability and trend analysis.
- iv. **Completeness:** Include all significant emissions sources and sinks within the scope of UNIMAS's operations to present a comprehensive picture of GHG impact.

### **General Objectives of UCAMP**

#### **(a) Objectives**

##### **1. Strategic GHG Reduction Planning**

**Objective:** To provide a structured framework that helps UNIMAS develop and implement effective strategies for reducing its greenhouse gas (GHG) emissions.

**Purpose:** By establishing a comprehensive measurement and reporting system, UCAMP enables the university to identify emission hotspots and plan targeted interventions, supporting a more sustainable and low-carbon campus.

##### **2. Enhance Data Integrity and Compliance**

**Objective:** To provide a structured framework that helps UNIMAS develop and implement effective strategies for reducing its greenhouse gas (GHG) emissions.

**Purpose:** This not only supports regulatory compliance but also provides UNIMAS with reliable data to inform decision-making, ensuring that reduction strategies are based on solid evidence and aligned with global climate commitments.

##### **3. Capacity Building for Long-Term Sustainability**

**Objective:** To build expertise within the university community for managing and reducing GHG emissions through training, technical support, and collaborative engagement.

**Purpose:** By empowering students, staff, and stakeholders with skills in GHG management, UCAMP ensures that UNIMAS's carbon reduction efforts are sustainable over the long term, fostering a culture of environmental responsibility.



This version emphasizes that UCAMP serves as a strategic tool for helping UNIMAS plan and effectively reduce its GHG emissions while ensuring data accuracy and building capacity for sustainable growth. Let me know if this aligns better with your vision

## **(b) UCAMP Strategic Approach**

To meet the ULCC 2030 target, UNIMAS aims to reduce energy consumption by 6% annually.

In alignment with the ULCC roadmap, UCAMP focuses on GHG management with the goal of reducing the demand for carbon-intensive energy sources. The plan prioritizes energy efficiency improvements in operations, emphasizes low-carbon strategies, integrates green technology interventions for offsetting, and maximizes nature-based carbon solutions as outlined in the ULCC 2030 roadmap.

UCAMP provides a detailed framework for the measurement, reporting, and verification (MRV) of GHG emissions, ensuring transparency and accuracy in UNIMAS's efforts to achieve its carbon reduction goals.

## **UCAMP Goals**

### **i. Develop and Implement a Comprehensive MRV System:**

To effectively monitor, report, and verify GHG emissions across UNIMAS campuses and affiliated entities, a standardized MRV framework has been designed and operationalized. This system leverages the UNIMAS GHG Inventory Dashboard and 4SEE Mobile Apps, specifically developed to support data collection, analysis, and reporting for GHG MRV purposes. These tools ensure accurate, real-time data management, providing UNIMAS with a robust foundation for comprehensive and transparent emissions reporting.

### **ii. Enhance Data Quality and Management:**

Improve the accuracy, reliability, and accessibility of emissions data with rigorous data collection, management, and verification processes to support effective environmental management at UNIMAS.

### **iii. Support Policy and Decision-Making:**

Provide UNIMAS management and policymakers with credible data to inform effective climate action strategies and mitigation initiatives.

### **iv. Ensure Compliance with Reporting Obligations:**

Enable UNIMAS to meet all required reporting standards under the Environment (Reduction of Greenhouse Gases) Ordinance 2023 and applicable international standards.

### **v. Facilitate Access to Carbon Markets and Climate Finance**

Equip UNIMAS with the capacity to readily engage in national and international carbon markets, leveraging climate finance mechanisms as a potential revenue stream for the university. With 60% of its territory maintained as natural forest and wetlands, UNIMAS holds significant potential to participate in carbon markets, tapping into these valuable carbon sinks to support sustainable development and generate financial returns for ongoing environmental initiatives.

## Scope

### (a) Scope Covered

Scope 1: Direct emissions from UNIMAS-owned assets, including emissions from vehicles and facilities directly controlled by the university.

Scope 2: Indirect emissions from purchased electricity used across UNIMAS campuses and facilities.

Scope 3: Other indirect emissions related to UNIMAS activities, including emissions from official mobility using commercial transportation, commuting by staff and students, and emissions from third-party waste management services.

#### Carbon Sink:

A carbon sink refers to natural or engineered ecosystems within UNIMAS's managed areas, such as natural forests, wetlands, and green spaces on campus, that actively absorb and store carbon dioxide (CO<sub>2</sub>) from the atmosphere. These sinks play a crucial role in offsetting a portion of the university's GHG, contributing to its overall carbon management strategy and alignment with net-zero goals.

#### Carbon Reservoir:

A carbon reservoir within UNIMAS includes the UNIMAS Lake that holds accumulated carbon for extended periods. This stored carbon remains sequestered and is not released into the atmosphere, aiding in stabilizing emissions levels and supporting the university's sustainable carbon footprint goals.

### (b) GHG Included

The system will cover all significant greenhouse gases as per the International Panel of Climate Change (IPCC) guidelines and United Nations Framework Convention on Climate Change (UNFCCC) reporting requirements:

- Carbon Dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous Oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF<sub>6</sub>)
- Nitrogen Trifluoride (NF<sub>3</sub>)

Operation specific emissions which are not listed above are also considered per the requirement of the IPCC guidelines.

## **Operation of UCAMP**

### **(a) Measurement**

#### **i. Methodologies**

- **Adopt Recognized Standards:** Utilize methodologies based on the IPCC Guidelines for National GHG Inventories to ensure compatibility with international best practices.
- **Develop Campus-Specific Protocols:** Create tailored measurement protocols for scopes within UNIMAS, prioritizing precision and relevance for the university's operational activities.
- **Integrated Data Collection Techniques:** Employ a mix of direct measurements, activity-based calculations, and emission factors.

#### **ii. Data Collection**

- **Standardized Data Collection Procedures:** Implement uniform data collection protocols for all scopes within the UNIMAS GHG management scope.
- **Clear Data Requirements:** Define data needs, covering activity data, emission factors, and essential parameters.
- **Leverage Advanced Technologies:** Use IoT sensors and remote sensing technologies to enable real-time data capture across campus.
- **Comprehensive Coverage:** Ensure all relevant GHG emission sources and sinks are captured within the MRV scope.

#### **iii. Data Management System**

- **Centralized Data Platform:** Develop a centralized GHG Data Management System hosted by UGID Server.
- **Data Integrity and Security:** Secure data storage and retrieval within a robust IT infrastructure.
- **Efficient Data Validation:** Incorporate mechanisms for error checking and data accuracy to ensure integrity in reporting.

## **(b) Reporting**

### **i. Reporting Standards**

- **Alignment with International Protocols:** Follow the UNFCCC Reporting Framework and GHG Protocol to maintain global standards.
- **Consistency Across Reports:** Apply standardized formats for comparability overtime.
- **Guidelines and Templates:** Provide reporting templates and guidance to assist departments in accurate submissions.

### **ii. Reporting Frequency and Deadlines**

- **Annual Reporting:** Submit comprehensive GHG reporting every end of year to include the data in the ESG Report.
- **Progress Monitoring:** Interim reports track ongoing mitigation efforts and initiatives through UGID.
- **Public Transparency:** Share summarized GHG data and progress through ESG Report to enhance accountability.

### **iii. Reporting Content**

- **Executive Summary:** Outline key findings and trends.
- **Methodology Overview:** Document measurement and calculation methods.
- **Emissions Data:** Detail GHG emissions by scope, gas, and source.
- **Mitigation Efforts:** Describe current and planned reduction actions.
- **Data Limitations:** Address uncertainties or gaps in data.
- **Recommendations:** Propose improvements and forward-looking actions.

## **(c) Verification**

### **i. Verification Process**

- **Internal Quality Assurance:** Departments conduct internal audits before final report submission.
- **Third-Party Verification:** Accredited verifiers assess data accuracy and integrity.

### **ii. Verifier Accreditation**

- **Verifier Standards:** Verifiers must meet international standards like ISO 14065, ISO 14066.
- **Verifier Registry:** Maintain a list of approved verifiers accessible to UNIMAS departments.

### **iii. Verification Criteria**

- **Accuracy, Completeness, Consistency, Transparency, Relevance:** Apply these key verification principles to ensure data reliability and policy alignment.

### **iv. Discrepancy Handling**

- **Protocol for Resolution:** Procedures for addressing discrepancies found during verification.
- **Resubmissions and Penalties:** Entities may need to correct reports or face potential penalties for non-compliance.

## **Institutional Arrangements**

### **(a) Roles and Responsibilities**

#### **i. UNIMAS Top Management**

- **Oversight and Policy Formulation:** Top Management will lead MRV oversight, policy development, and compliance monitoring.
- **Data Management and Capacity Building:** Serve as the repository for GHG data, providing support to ensure quality reporting.

#### **ii. UNIMAS Departments**

- **Data Collection and Reporting:** Individual departments will collect emissions data, ensure quality control, and develop mitigation plans.

#### **iii. Accredited Verifiers**

- **Independent Data Verification:** Conduct impartial audits and provide detailed verification reports.

iv. ISuRE UNIMAS Team

- Technical Support and Training: Deliver research-based insights, support the MRV system, and facilitate technology adoption.
- Continuous Improvement: Propose MRV enhancements based on ongoing studies.

**(b) Coordination Mechanism**

- MRV Steering Committee: An oversight body including ISuRE UNIMAS, industry associations, and stakeholders to coordinate implementation.
- Stakeholder Engagement: Regular meetings for feedback, collaborative solutions, and communication protocols to support efficient information flow.
- This MRV system supports UNIMAS's commitment to GHG emissions accountability, aligning university operations with Sarawak's environmental regulations and Malaysia's national climate goals.

**Data Quality Assurance and Control (QA/QC)**

**(a) QA/QC Plan Development**

- Under UCAMP, entities within UNIMAS are required to develop and implement a QA/QC Plan. This plan will ensure the integrity of GHG data throughout the measurement, reporting, and verification processes. It should include the following:
- Roles and Responsibilities: Clearly defined roles for personnel managing QA/QC processes.
- Methodologies: Standardized procedures for data verification.
- Documentation: Practices for maintaining thorough records of QA/QC activities.

**(b) QA/QC Procedures**

- Data Checks: Regularly validate data for accuracy and completeness to align with UNIMASESG standards.
- Methodology Reviews: Continually assess and update measurement methods to ensure adherence to current GHG reporting frameworks.
- Documentation: Maintain detailed records of data sources, assumptions, and procedures to support transparency.
- Training: Implement training programs to enhance the skills of personnel in data management and quality control.

**(c) Continuous Improvement**

- Use feedback from verification processes to improve data quality continuously.
- Encourage adoption of best practices and new technologies in line with UNIMASESG's vision for efficiency and accuracy.

## **Capacity Building and Support**

### **(a) Training Programs**

- To support UCAMP, capacity-building initiatives will include:
- Introductory Workshops: Offering foundational knowledge of MRV principles for new personnel.
- Technical Training: Specialized sessions on data management, reporting standards, and verification.
- E-Learning Platforms: Develop digital resources for flexible, self-paced learning.
- Certification Programs: Establish pathways for accreditation in MRV processes, supporting UNIMAS's leadership in sustainable practices.

### **(b) Technical Assistance**

- Helpdesk Services: Establish support channels in ISuRE to resolve MRV-related queries.
- Resource Materials: Create comprehensive manuals and guidelines to aid in MRV implementation.
- Peer Learning Networks: Foster collaboration through knowledge-sharing platforms, supporting a community-driven approach to UCAMP.

## **Risk Assessment and Mitigation**

### **(a) Potential Challenges**

- Data Quality Issues: Risk of inconsistent data across departments.
- Resource Constraints: Limited resources for full-scale implementation.
- Internal Resistance: Potential reluctance from departments to adopt new practices.
- Technical Complexities: Integration challenges with advanced monitoring technologies.

### **(b) Mitigation Strategies**

- Robust QA/QC Measures: Strengthen validation processes to ensure high-quality data.
- Resource Mobilization: Explore partnerships with industry and government for additional support.
- Stakeholder Engagement: Build buy-in through transparent communication of UCAMP's benefits.
- Technical Support: Provide continuous assistance to address technical challenges in implementation.

## Budget and Resource Requirements

- Financial Resources: Detailed budget for system setup, training programs, and operational expenses.
- Human Resources: Roles for technical experts, trainers, and support staff.
- Technological Resources: Procurement of hardware, software, and data management tools to support UCAMP.

## Monitoring and Evaluation Framework

- Key Performance Indicators (KPIs): Track the number of departments reporting, data accuracy, and progress toward emission reductions.
- Regular Reporting: Provide periodic reports summarizing the outcomes of UCAMP.
- Independent Reviews: Engage external experts to ensure objectivity in assessing the project's progress and impact.

## Proposed Best Practices for UCAMP

UCAMP serves as the MRV (Measurement, Reporting, and Verification) mechanism for monitoring progress on ULCC's goals. It integrates with the 6 strategic pillars and aligns with sustainability and ESG reporting.

### 1. Strategic Integration with ULCC

- Objective: Ensure that UCAMP tracks progress across ULCC's 6 Strategic Pillars:
- Energy Efficiency: Reduction of energy consumption and improved performance of campus infrastructure.
- GHG Inventory: Development and continuous updating of a comprehensive GHG inventory for Scopes 1, 2, and 3 emissions.
- Circular Economy and Waste Management: Promote reuse, recycling, and sustainable resource use.
- Capacity & Capability Building: Educate staff, students, and stakeholders on sustainable practices.
- Sustainable Innovative Solutions: Foster research and innovation in sustainability-focused areas.
- Low Carbon Mobility: Shift to sustainable transport modes like cycling, carpooling, and electric vehicles.

### 2. Measurement Framework:

Use the UNIMAS GHG Inventory Dashboard and 4SEE mobile app to monitor:

- Carbon footprint by category (Scopes 1, 2, and 3).
- Progress on ULCC strategies like energy performance and mobility.



### 3. Reporting Framework:

- ESG-compliant reporting using GRI (Global Reporting Initiative) and SDG-linked metrics.
- Annual ULCC progress reports tied to measurable indicators from UCAMP.

### 4. Verification Framework:

- Internal audits by faculty and campus leadership.
- Third-party verification by ISO 14065-accredited auditors to validate data integrity.

### 5. Technology and Innovation Framework:

- Integrate IoT devices for real-time monitoring (e.g., energy and waste).
- Implement blockchain-based tracking for carbon credits linked to campus achievements.

### 6. Stakeholder Engagement Framework:

- Regular capacity-building workshops on climate literacy and carbon management.
- Collaboration with local communities on circular economy practices (e.g., mangrove conservation as carbon sinks).

### 7. Continuous Improvement Framework:

- Annual reviews of UCAMP and ULCC progress.
- Dynamic adjustments based on new technologies and policies.

### 8. Reporting Outputs Metrics:

- Emission reduction trends for energy, transportation, and waste.
- Annual carbon savings from innovative campus projects (e.g., Green Café, Ultimate 9R Lab).
- Impact on SDG indicators (7, 11, 12, 13, 15, 17).
- Integration: Results feed into the UNIMAS Sustainability and ESG Report.

## UCaMP Conclusion

UCaMP serves as a vital framework for UNIMAS's journey toward sustainability, integrating robust Measurement, Reporting, and Verification (MRV) processes with the university's Low Carbon Campus Roadmap. By aligning with national and global standards, leveraging advanced technologies, and fostering stakeholder collaboration, UCaMP ensures accurate tracking of GHG emissions, supports strategic decision-making, and drives impactful progress toward achieving UNIMAS's Net Zero goals by 2030.

The infographic of the framework is in the next page.

## UCaMP Framework

