# IMPACT & SARAH BEPORT

# CLIMATE ACTION





PHOTO SOURCE: SNAPSHOT OF PROGRAMME IN RIMBA ILMU





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UM Power Energy Dedicated Advanced Centre
(UMPEDAC)

## FOREWORD BY ASSOCIATE VICE-CHANCELLOR (CORPORATE STRATEGY)



The Sustainable Development Goals (SDGs) has transformed the landscape of the higher education sector on a global scale. These 17 goals have become a primary reference framework in many institution's planning of education & learning, research & innovation, as well as strategic partnerships strategies.

The publication of the 17 Universiti Malaya Impact Reports 2022 is crucial to monitor our efforts towards SDGs as we are advancing our excellence through the implementation of the UM Strategic Plan 2021-2025, UM Transformation Plan 2021-2030, and UM Sustainability Policy 2021-2030.

For many years, UM has integrated the SDGs into our leadership, university policies, curriculum activities, RDCIE initiatives, values, investments, and strategic partnerships with stakeholders to demonstrate that UM also "walks the talk." These efforts involve active engagement from our staff, students, and the broader community of stakeholders and alumni.

Congratulations to the team at the Corporate Data Centre for formulating data-driven comprehensive reports that will serve the University in becoming a Global University Impacting The World.

## PREFACE BY DIRECTOR OF THE CORPORATE DATA CENTRE



I am delighted to present all 17 Universiti Malaya Impact Reports for 2022, which review the data related to the Sustainable Development Goals (SDGs) and showcase UM's achievements in 2022. The 17 SDGs serve as a guide for addressing the most pressing issues and critical challenges. Each of the 17 SDGs demands strong collaborative efforts from all levels of society to ensure a more resilient and sustainable future for the next generation.

In the Corporate Data Centre, we apply knowledge and data analytics skills to make informed, evidence-based decisions. This not only helps address current challenges but also ensures preparedness for the future.

These 17 Impact Reports for 2022 are flagship reports designed to assist the University in monitoring and examining our contributions to the country's progress in achieving the 17 SDGs.

I would like to seize this opportunity to express my deep appreciation to my team, who have worked tirelessly to collect and analyse data, enabling us to effectively monitor UM's sustainability efforts. I am also sincerely grateful for the support from UM's top management and the hard work of all colleagues across campus, particularly the Sustainable Development Centre, data managers, and controllers, for their cooperation in providing the SDG data for 2022.

#### **OUR IMPACT IN 2022**



24 assistance programs empowered 10694 students in their academic journeys.



12 impactful food assistance programs, including free food, food banks, vouchers, and affordable options, eliminated hunger on UM campus.



Over 20 outreach programs delivered essential health services to local communities in need and refugees.



47 enriching courses featured in the 2022 Short-Term/International Training/Study Tour, part of UM Course Buffet to support lifelong learning.



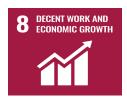
**55%** Female representation in senior positions



429 participants took on 7 weeks of water conservation challenges during the Kita Jaga Air Challenge 2022.



UM subscribed to the Green Electricity Tariff (GET) program, generating 5.5 million kWh of clean energy



Precision Intervention Program for selected students to produce future-ready graduates enriched with UM DNA.

#### **AIM OF THE GOALS**

SDG 1: End poverty in all its forms everywhere

SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

SDG 3: To ensure healthy lives and promote well-being for all at all ages

SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

SDG 5: Achieve gender equality and empower all women and girl

SDG 6: Ensure availability and sustainable management of water and sanitation for all

SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for al

SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation

SDG 10: Reduce inequality within and among countries

SDG 11: Make cities inclusive, safe, resilient and sustainable

SDG 12: Ensure sustainable consumption and production patterns

SDG 13: Take urgent action to combat climate change and its impacts

SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

The development of the Industrial Relations Strategic Planning Framework
- Industry University Hyper Engagement
Collaboration Framework (INSIGHT)

The publication of the First E-Magazine for Persons with Disability by The Secretariat AUN-DPPnet.

The establishment of UM Master Plan document to guide the university towards achieving a Carbon-Neutral Campus by 2050.

9 initiatives conducted by the Zero Waste Campaign to establish an integrated solid waste management system

The establishment of UM Carbon Neutrality Acceleration Living Labs to contribute to the university's carbon-neutral performance.

In 2022, Project Pulih joined forces with RHB ISLAMIC to protect Malaysia marine ecosystems.

Rimba Ilmu, or Forest of Knowledge, covers 40 hectares and contains an estimated living collection of around 1,700 species of plants.

UM as the first university in Malaysia to conduct campus elections fully run by students.

UM as part of 28 Global Network Memberships, has International Partners based in UM, and 96 Academia-Industry Collaborations.





















# Overall Ranked in band **101-200 /**1591

From band **201-300** in 2022



Ranked **50/**876 From **201-300** in 2022



Ranked in band 101-200/1304 From ranked 79 in 2022



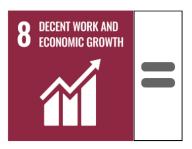
Ranked 13/812 From 201-300 in 2022



Ranked in band 101-200/647 From band 201-200 in 2022



Ranked 3/1081 From ranked 51 in 2022



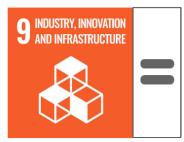
Ranked in band 401-600/960 From band 401-600 in 2022



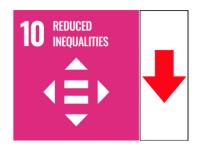
Ranked in band 101-200/1218 From band 201-300 in 2022



Ranked 60/702 From band 201-300 in 2022



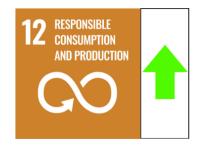
Ranked in band 201-300/873 From band 201-300 in 2022



Ranked in band 201-300/901 From band 101-200 in 2022



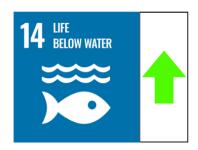
Ranked **72/**860 From **101-200** in 2022



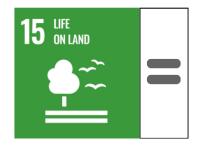
Ranked 73/674 From 201-300 in 2022



Ranked in band 101-200/735 From band 101-200 in 2022



Ranked **85/**504 From **101-200** in 2022



Ranked in band 101-200/586 From band 101-200 in 2022



Ranked in band 101-200/910 From band 201-300 in 2022



Ranked **81/**1625 From **301-400** in 2022





# Campus Operations COMMITMENT TO CARBON NEUTRAL UNIVERSITY

Universiti Malaya (UM) demonstrates an unwavering commitment to becoming a carbon-neutral university, a testament to its dedication to environmental sustainability. This ambitious aspiration aligns seamlessly with UM's broader vision to become global university impacting the world. With a clear vision for the future, UM is steadfastly moving towards the goal of a carbon-neutral campus.

#### LOW CARBON ENERGY TRACKING AT UM

UM's aspiration to transform into a carbon-neutral campus, a vision firmly embedded within the <u>UM Transformation Plan</u>. This commitment is substantiated by UM's institutional framework, primarily composed of the <u>UM Sustainability Policy 2021-2030</u>, UM Eco-Campus Blueprint, and <u>UM Eco-Campus Guidelines</u>, which serve as pivotal documents governing sustainability and climate action within the university.

One key strategic endeavor outlined in these documents is the progressive adoption of renewable energy infrastructure, aimed at ultimately ensuring that UM's operations are powered entirely by renewable energy sources.

Collaborative ventures within the university, involving research centers and academic units such as the Faculty of Built Environment, the Faculty of Engineering, UMPEDAC, UMSDC, and JPPHB, have yielded pioneering projects in the field of renewable energy production.

Given Malaysia's geographical advantage as a tropical nation situated near the equator, the abundance of direct sunlight makes solar energy a viable choice for on-campus energy generation. Consequently, numerous solar EV panels have been installed across the campus, predominantly to support outdoor lighting systems.

While UM primarily focuses on solar energy, various other research initiatives exploring alternative energy sources, such as wind power harnessed within the UM Eco-Greenery Wind Solar Outdoor Lighting program, are also actively pursued.

In tandem, UM emphasises sustainable biomass production through the implementation of anaerobic digester technology under UMSDC's Zero Waste Campaign. The energy production figures are meticulously monitored by UMSDC and made transparent to the public via their website, providing comprehensive insights into energy generation quantities and their respective sources.



#### LOCAL EDUCATION PROGRAMMES ON CLIMATE

UM consistently prioritises the quality of education it delivers, considering it a foundational aspect of its institutional mission. The university regularly reviews and updates the curricula employed in its academic programs. These revisions aim to ensure that the knowledge disseminated within classrooms remains in alignment with the latest advancements in relevant industries. This approach ensures that students are equipped with contemporary skill sets that are highly relevant in today's fast-evolving world. The concept of sustainability has gained increasing prominence in all sectors, primarily driven by the introduction of the SDGs.

To stay current with this global trend, UM has proactively integrated sustainability concepts into its teaching and learning initiatives. This integration is realised through the UM Sustainability Policy, especially within Pillar 1: Education. This pillar emphasises the promotion of both formal and informal education as vehicles for sustaining efforts related to campus sustainability.

To achieve the goals outlined in the policy, the strategy includes the integration of sustainability elements within various disciplines. These elements encompass sustainable development, sustainable lifestyles, human rights, gender equality, the promotion of a culture of peace and non-violence, global citizenship, and an appreciation of cultural diversity.

The list of programs related to sustainability concepts is updated annually and is available on the UMSDC website.

However, it's important to note that this list is not exhaustive, providing only a snapshot of the sustainability-related courses at the UM. In addition to formal education, UM conducts informal educational activities, such as webinars and outreach programs, organised by the UMSDC, with a specific focus on climate action.

Furthermore, UM has established the <u>UM Climate Change</u>
Network, a dedicated research center that advances knowledge and coordinates research projects led by UM researchers.







#### **CLIMATE ACTION PLAN**

UM has articulated its commitment to the establishment of an environmentally sustainable campus, as evident in its UM Transformation Plan 2030. This intention is prominently featured under Theme 6: Enhance Learning and Work Environment, which outlines a key objective: the development of a green campus. To realise this vision, UM has devised a comprehensive strategy consisting of five principal components, all aimed at advancing toward the target of a carbon-neutral campus.

The first strategy focuses on enhancing the institutional governance framework. This involves restructuring organisational elements to accommodate and effectively manage sustainability

practices, resulting in the formulation and execution of sustainability-oriented policies.

The second strategy entails a strong emphasis on limiting greenhouse gas emissions and adhering to green construction standards. It necessitates that all new construction and upgrades to existing facilities meet stringent energy-efficiency criteria.

The third strategy is geared towards augmenting campus-wide energy efficiency. This involves the deployment of on-site energy generation technologies. Additionally, the optimisation of water and waste management practices is integral to improving operational efficiency.

The fourth strategy concentrates on mitigating the urban heat island effect in the vicinity

and curbing the risk of flooding through efficient stormwater management. Simultaneously, there is a pronounced focus on preserving and enhancing campus ecosystems and biodiversity.

The fifth strategy underscores the significance of educational awareness campaigns within the campus community, directed towards instilling sustainable practices. The implementation of this plan is fully supported by institutional frameworks such as the <u>UM Sustainability Policy</u>, <u>UM Eco-Campus Blueprint</u>, and <u>UM Eco-Campus Guidelines</u>. The ultimate objective of this comprehensive initiative is the mitigation of the adverse impacts of climate change.



#### ENVIRONMENTAL EDUCATION COLLABORATION WITH NGO

One of the core strategies articulated within the UM Transformation Plan 2030 is a deliberate emphasis on enhancing sustainability awareness among the University's campus community. This initiative is executed through a comprehensive approach that encompasses both formal and informal educational methods.

These efforts involve a variety of activities, including sharing sessions, talks, and webinars, all centered around the theme of environmental sustainability. These educational forums serve as a means to engage the campus community and local public in open dialogues and knowledge-sharing sessions.

Throughout the academic year 2022, UMSDC orchestrated an array of educational programs. Notable collaborations with NGOs further emphasise the university's commitment to sustainability.

For instance, a collaboration with the Malaysian Relief Agency resulted in a recycling campaign, with the campaign's proceeds directed toward funding a mangrove planting program in Kuala Selangor. This initiative serves a dual purpose: promoting recycling awareness while contributing to the ecological conservation of mangroves.

Additionally, UMSDC collaborates with prestigious organisations such as the <u>Association of Pacific Rim Universities (APRU)</u>, Bard College, <u>Institut Masa</u>

<u>Depan Malaysia</u>, and <u>EcoKnights</u>, uniting experts from industry and sustainability groups.

These collaborations provide an invaluable platform for the exchange of knowledge and experiences in the realm of sustainability.

These multifaceted efforts by UMSDC underscore the institution's commitment to delivering diverse and impactful sustainability-related educational programs to the campus community.

























SDG12 ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

ECOFUND - PILOT COLLABORATIVE RECYCLING CAMPAIGN BETWEEN MALAYSIAN RELIEF AGENCY (MRA SISWA) x UM SDC AND UM ZWC 28 June 2022 (Tuesday) 10:00 am - 3:00 pm @ PerdanaSiswa Complex (KPS) Car Park, UM





UM Sustainability and Development Centre (UM SDC), International Relations Office (IRO),
UM Center for Civilisational Dialogue (UMCCD)
in sustainability partnership with Institut Masa Depan Malaysia & EcoKnights

#### DISCOURSES, DIALOGUES AND SHARING SESSION WITH SUSTAINABILITY THOUGHT LEADERS

MINUTES OF

FROM THE MINISTRY OF ENVIRONMENT & WATER, INSTITUT MASA DEPAN MALAYSIA, ASSOCIATION OF PACIFIC RIM UNIVERSITIES (APRU) & BARD COLLEGE





9:00 AM - 5:30 PM VIA ZOOM WEBINAR & FB LIVE





1 HOUR SESSION ON CLIMATE AND JUSTICE THEMED MOVIE SCREENING & COMMENTARY BY ECOKNIGHTS

TOTAL NUMBER OF ZOOM WEBINAR PARTICIPANTS

PECIAL REPORT

RECAP OF KEY INSIGHTS ON CLIMATE & JUSTICE DISCOURSES AND FORUM BY INSTITUT MASA DEPAN

MALAYSIA

TOTAL NUMBER OF VIEWS VIA FB LIVE

TECHNICAL TEAM MEMBERS



SCAN THIS **QR CODE** TO RÈLIVE THE MOMENT OF **UM'S WORLDWIDE TEACH-IN ON CLIMATE AND JUSTICE 2022** 



OUR SPEAKERS & MODERATORS:

• MALAYSIAN INSTITUTE OF ECONOMIC RESEARCH (MIER)
• INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT (LESTARI), UKM
• INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT (LESTARI), UKM
• INSTITUTE OF STRATEGIC & INTERNATIONAL STUDIES (ISSIS) MALAYSIA
• ALL-PARTY PARLIAMENTARY GROUP MALAYSIA (APPGM) - SDGS
• KLIMA ACTION MALAYSIA - KANY
• JEFFREY SACHS CENTER ON SUSTAINABLE DEVELOPMENT, SUNWAY UNIVERSITY
• ACADEMY OF ISLAMIC STUDIES UNIVERSITAS NASIONAL
• FACULTY OF MEDICINE, UNIVERSITA NASIONAL
• INSTITUTE OF ISLAMIC UNDERSTANDING MALAYSIA (IKIM)
• UNIVERSITY OF NOTINGHAM MALAYSIA
• MALAYSIAN HINDU SANGAM SARAWAK STATE COUNCIL

LIVE BROADCAST VENUE PARTNER: UM MARKETING & RECRUITMENT CENTER (MRC) FB LIVE: UM SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK (UM SDSN)



INTERNATIONAL PARTNERS:

APRU Bard SUSTAINABILITY PARTNERS:















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**UM Sustainability** 



https://sustainabiliy.um.edu.my







- Table

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Welcome to Universiti Malaya's



气候行动

























#### RCE CENTRAL SEMENANJUNG & UM SDSN





















#### **BENCHMARKING VISIT & SHARING SESSION ON CAMPUS AND SCHOOL'S**

EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD) BEST PRACTICES:

GREEN EDUCATORS' WORKGROUP - GREW

(PERSATUAN PENDIDIK LESTARI HIJAU PULAU PINANG) DELEGATION

TO UNIVERSITI MALAYA

HOSTED BY UM SUSTAINABILITY AND DEVELOPMENT CENTRE (UMSDC) AND RIMBA ILMU IN PARTNERSHIP WITH DEPARTMENT OF DEVELOPMENT AND ESTATE MAINTENANCE (JPPHB) 10 JUNE 2022 (FRIDAY) 9:00 AM - 12:30 PM @ RIMBA ILMU, ECO-SURAU APIUM, & UM ZERO WASTE CAMPAIGN



#### MOVING TOWARDS COMMIT-MENT TO CARBON NEUTRAL UNIVERSITY

Our commitment to establish a sustainable, environmentally conscious campus is prominently expressed in the UM Transformation Plan, a cornerstone document of the institution. This strategic plan underlines UM's endeavor to integrate sustainable frameworks into its institutional operations. Central to this commitment is the aspiration for UM's campus to attain carbon neutrality by the year 2050, in alignment with UM's overarching mission.

The UM Eco-Campus Blueprint outlines three distinct scopes that collectively constitute the institution's carbon footprint. Scope 1 encompasses direct emissions resulting from the

University's operational activities.

In contrast, Scope 2 encompasses indirect emissions stemming from the University's electricity consumption. These emissions trace back to the energy production process that ultimately powers UM's operations.

Finally, Scope 3 encompasses all other indirect emissions, arising from activities related to the University but originating from sources beyond UM's ownership or control.

Typically, this category encompasses a significant proportion of UM's carbon footprint and encompasses emissions associated with aspects such as business travel, procurement, waste management, and water usage.

Facilitating the execution of this strategic plan, UM relies on a suite of supporting institutions, including the UM Sustainability Policy, UM Eco-Campus Blueprint, and UM Eco-Campus Guidelines.

These pivotal documents provide a comprehensive roadmap of strategic initiatives and concerted actions, alongside specific targets and objectives that must be achieved for UM to realise its ambition of becoming a carbon-neutral campus.

#### **Carbon Neutral Campus Initiatives**

