SDG 13
CLIMATE ACTION

SDG 13 Content Overview

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01 Low-Carbon Energy Tracking

In 2025, Universiti Malaya measured the low-carbon energy generated on campus to track progress towards reducing its carbon emissions. Two renewable sources were in use: solar and wind power. For example, generation from the rooftop solar panels at the Research Management and Innovation Complex (KPPI) was recorded through the building's energy monitoring system (BEMS). In total, UM's renewable installations generated 168.52 kWh (0.61 GJ) in 2025, comprising 168.37 kWh from solar power and 0.15 kWh from wind power.

A summary of renewable energy generated on campus, including the type of energy, amount generated (kWh/GJ) and location, is provided in the table on **Page 3**.



(Left) Example of wind power on campus; (right) examples of solar power on campus.

Table: Summary of Renewable Energy Produced on Campus in 2025 (kWh/GJ)

Summary of Renewable Energy Produced on Campus (in kWh)			
No.	**Type of Renewable Energy:**	**Amount generated (kWh):**	**Location:**
1	**Wind power** UM Eco-Greenergy Wind Solar Outdoor Lighting System: Energy Solar-Powered Streetlight	0.15 kWh	Around Campus
Total Wind Power (kWH)		0.15 kWh	
2	**Solar Power:** UM Eco-Greenergy Wind Solar Outdoor Lighting System: Energy Solar-Powered Streetlight	2.7 kWh	Around Campus
3	**Solar Power** Campus Bus Stops (Lay-By) Solar Powered Lighting System	21 kWh	Bus Stations around campus
4	**Solar Power** UM Bus Stop with Solar Roof Panel for Lighting and Disabled Friendly Features	2.24 kWh	UM Bus Stop (3rd, 4th and 7Th Residential College)
5	**Solar Power** Solar Power Fountain and Garden Lighting System	1.125 kWh	Research Management & Innovation Complex (KPPI)
6	**Solar Power** Safety Warning Light with Solar	0.18 kWh	2 Locations: Bukit Cinta UM and Junction to Faculty of Languages and Linguistics UM
7	**Solar Power** Research Management & Innovation Complex Rooftop Solar Panel	32.4 kWh	Rooftop, KPPI UM
8	**Solar Power** Block Q, Faculty of Engineering UM Block Y, Faculty of Engineering UM Block M, Faculty of Engineering UM Block E, Faculty of Engineering UM	 6.21 kWh 1.35 kWh 6 kWh 1 kWh	Faculty of Engineering UM
9	**Solar Power** Solar Carpark, Faculty of Built Environment UM	2 kWh	Faculty of Built Environment UM
10	**Solar Street Light** Examination Hall to PPUM (8 unit) Examination Hall Parking (4 unit) Residential Collage – KK8 (8 unit)	 8 x 7.68 kWh = 61.44 kWh 4 x 2.56 kWh = 10.24 kWh 8 x 2.56 kWh = 20.48 kWh	Around campus
Total Solar (kWh)		168.37 kWh	

Total renewable energy generated on campus:

Summary of Renewable Energy Produced on Campus (in kWh)	
Total Wind Power (kWH)	0.15 kWh
Total Solar Power (kWh)	168.37 kWh
Total Renewable Energy (kWh) / (GJ)	**168.52 kWh / 0.61 GJ**

02 Local Education Programmes on Climate

In 2025, Universiti Malaya (UM) conducted climate education programmes and community outreach initiatives to strengthen understanding of climate change risks and impacts, while promoting practical approaches to climate mitigation, adaptation and impact reduction. Through school-based education, youth empowerment, public awareness campaigns and hands-on environmental activities, these programmes encouraged sustainable practices, carbon footprint reduction and nature-based solutions to climate challenges.

Initiatives such as SECA Phase 2, Superhero Iklim and UMPOLAR engaged students and communities in climate learning and action, while mangrove conservation activities highlighted ecosystem-based adaptation. Complementary disaster preparedness training strengthened awareness of climate-related hazards, including floods and landslides, and developed practical emergency response skills. Together, these initiatives support climate literacy, behavioural change and community resilience.

Examples include:

- **SECA Phase 2: Youth Climate Action Education in Sabah** (Page 5)
- **Superhero Iklim 2025 Climate Education Campaign** (Page 6)
- **UMPOLAR25** (Page 7)
- **Mangrove Climate Action** (Page 7)
- **Climate-Resilient Volunteer Training** (Page 8)



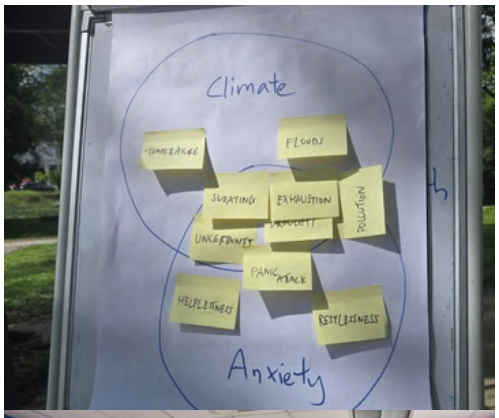
SECA Phase 2: Youth Climate Action Education in Sabah

The Student Empowerment in Climate Action in Sabah (SECA) Phase 2 is a UM research initiative involving researchers from various faculties, implemented in collaboration with education and community stakeholders. The programme ran from October 2024 to August 2025, focusing on strengthening youth climate awareness and action through experiential learning activities involving schools from Kudat, Kota Marudu, and Pitas, strengthening climate literacy and empowering rural youth to respond to climate-related challenges affecting their communities.

Throughout the programme, students and teachers participated in climate education workshops, online learning sessions, teacher training and hands-on environmental activities. These focused particularly on rainwater harvesting and mangrove conservation, connecting climate change education with practical adaptation measures relevant to coastal communities. Activities in 2025 included the installation of rainwater harvesting systems and mangrove replanting, including a community-based planting activity at Kampung Asin-Asin, Kota Marudu, on 29 April 2025.

The programme culminated in a closing event on 14 August 2025 at SMK Tandek, Kota Marudu, where students from the 13 schools showcased their climate action initiatives through presentations, videos, performances and other creative activities. Through its combination of climate education, practical projects and youth engagement, SECA Phase 2 helped develop students' understanding of climate risks while encouraging them to become active contributors to climate adaptation and environmental stewardship in their communities

Superhero Iklim 2025 Climate Education Campaign







Superhero Iklim 2025 was a four-week climate education campaign that transformed local campus awareness into action through hands-on learning and group challenges. The programme builds participants' understanding of climate change while encouraging practical, sustainable habits. Supporting workshops were organised in collaboration with the NGO Klima Action Malaysia (KAMY) and the Sunway Centre for Planetary Health.

Each week focuses on themes such as reducing energy use, improving recycling, and lowering carbon and water footprints. Guided activities help participants connect these actions to daily life, reinforcing how small changes can collectively support climate mitigation and more responsible lifestyles.

A key feature is its gamified approach using the JouleBug app, where participants track actions, complete challenges, and earn points. Workshops also cover climate adaptation, upcycling, composting, and climate therapy to help participants manage eco-anxiety.



UMPOLAR25



UMPOLAR25: Frozen Horizons – Tropical Linkages and Climate Action, held from 24–26 September 2025, marked 25 years of Antarctic research through public talks, an art and science exhibition, and an international workshop on plastic pollution. The programme connected polar research with tropical climate challenges, strengthening understanding of climate change impacts and mitigation while engaging researchers, students, and the public in sustainability and climate action dialogue.



Mangrove Climate Action

The Institute of Ocean and Earth Sciences (IOES) conducted the Climate Change Mitigation Programme: Nature-Based Solutions for Greenhouse Gas Monitoring at Taman Alam Kuala Selangor. The programme focused on conserving mangrove forests through replanting activities, providing participants with hands-on experience in ecosystem-based climate mitigation. Collaborating with international partners from The Leibniz Centre for Tropical Marine Research (ZMT), Germany, UM staff, postgraduate students, and sea scout volunteers, the event enhanced local understanding of climate change impacts, mitigation strategies, and the role of mangroves in carbon sequestration.



Climate-Resilient Volunteer Training

The My Rescue Team UM Training Programme, established by the Centre for Counselling and Disability Empowerment (CDE), aims to provide participants with both theoretical and practical emergency response training. The programme strengthens individual and team capabilities, equipping volunteers with the confidence and skills to respond effectively during post-disaster situations such as floods, landslides, and other emergencies. While the training covers general emergency preparedness, it is particularly relevant in the context of climate-induced disasters, which are becoming increasingly frequent due to climate change.







03 Climate Action Plan and Engagement with Stakeholders

Universiti Malaya (UM) advances climate action through its Net Zero Blueprint 2030, an institutional climate action plan targeting carbon neutrality by 2030 and net zero emissions by 2050. In 2025, UM approved its expanded eight-sector Blueprint, supported by annual greenhouse gas emissions monitoring, and incorporated its priorities into the development of UM Strategic Plan 2026–2030.

The Blueprint is publicly accessible through the UM Sustainability website and shared through collaborative meetings, stakeholder engagements and public communication platforms. In 2025, notable examples included the UM Sustainability and ESG Policy Development Workshop, the National Climate Governance Summit 2025 Satellite Session and a national radio programme on IKIMfm, reaching stakeholders across government, industry, academia, civil society and the wider community.

Together, these initiatives demonstrate UM's commitment to institutional climate planning, public accessibility and stakeholder engagement, while supporting opportunities for collaboration with local government authorities and community groups

Examples include:

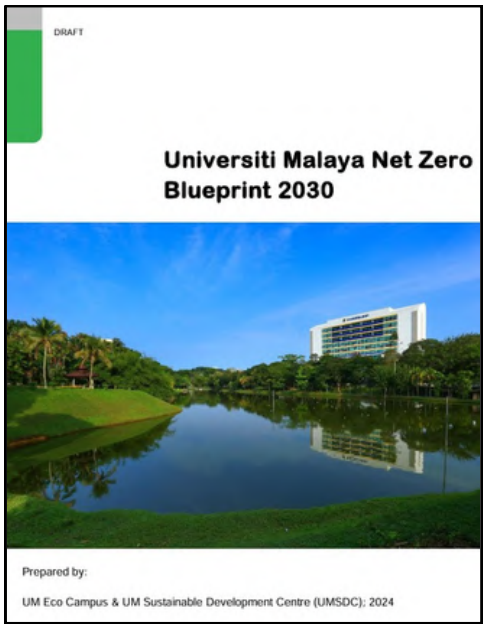
- **Climate Action Plan through the Universiti Malaya Net Zero Blueprint** (Page 10)
- **UM Sustainability and ESG Policy Development Workshop** (Page 11)
- **National Climate Governance Summit 2025 Satellite Session** (Page 12)
- **Green Campuses on IKIMfm** (Page 12)

Climate Action Plan through the Universiti Malaya Net Zero Blueprint

The Universiti Malaya Net Zero Blueprint (Phase 1): Towards Carbon Neutrality 2030 provides UM's strategic framework for measuring, planning and reducing greenhouse gas (GHG) emissions associated with university operations. Developed by Eco-Campus under the Universiti Malaya Sustainable Development Centre (UMSDC), the Blueprint was initially endorsed in principle by the University Management Committee on 11 December 2024. In 2025, the Blueprint was strengthened and expanded from six to eight strategic sectors: energy, mobility, waste minimisation and recycling, value chain, beyond-campus operations, water, green buildings and biodiversity. This expanded framework supports a more integrated approach to decarbonisation, incorporating operational improvements, sustainable infrastructure, resource management and nature-based solutions.

On 3 - 4 November 2025, UM Eco-Campus and UMSDC organised a workshop to refine the Blueprint's implementation strategies. Participants reviewed sectoral baselines, data availability, institutional responsibilities and proposed interventions, while examining potential emission reductions and carbon offset requirements. The workshop also explored alignment between the Net Zero Blueprint and UM's broader Eco-Campus framework. The revised eight-sector Blueprint version was approved in 2025.

Implementation and progress monitoring are supported by UM's annual GHG inventory, which provides emissions data to inform climate action planning and institutional decision-making.
The Blueprint is made publicly accessible through the UM Sustainability website, enabling stakeholders beyond the University to refer to its decarbonisation framework and institutional climate commitments.





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Sharing the Climate Action Plan with Stakeholders

UM shares its climate action plan through collaborative meetings, networking activities and stakeholder engagement platforms, providing opportunities for government agencies, industry partners, higher education institutions, civil society organisations and local communities to understand its decarbonisation priorities and explore potential collaboration.

UM Sustainability and ESG Policy Development Workshop

A notable example was the UM Sustainability and ESG Policy Development Workshop, held on 16–17 December 2025, organised by UMSDC in collaboration with the UM Centre of Excellence on ESG. The workshop aimed to consolidate UM's sustainability initiatives within a comprehensive institutional policy framework, integrating ESG principles across university governance, operations, research and teaching. During the opening session, UMSDC presented UM's sustainability framework, including the Net Zero Blueprint 2030, its decarbonisation strategies and its targets of carbon neutrality by 2030 and net zero emissions by 2050. The workshop brought together a diverse group of internal and external stakeholders, including academic and non-academic staff, students, university leaders, representatives of government agencies (InvestKL), public and private universities, industry partners and alumni.

By presenting the Blueprint to these stakeholders, UM provided an opportunity for external institutions and partners to understand its climate action commitments and consider their relationship with wider sustainability and ESG priorities. The workshop also facilitated stakeholder discussions on the development of UM's sustainability policy framework, strengthening engagement between the University and its institutional partners.



National Climate Governance Summit 2025 Satellite Session





On 10 April 2025, Universiti Malaya hosted "The Role of Sustainable Finance in the Transition to Green Campus", a satellite session of the National Climate Governance Summit (NCGS) 2025. Hosted by UMSDC and the Faculty of Business and Economics, online session was broadcast on UM Sustainability's Facebook page and UniMalaya's YouTube channel, extending its reach beyond the University community. The NCGS 2025, organised by Climate Governance Malaysia, brought together a diverse, cross-sector audience spanning business, government, finance, academia and civil society. This provided a wider national platform for exchanging knowledge and experiences on climate governance, sustainability transitions and innovative financing approaches.

The panel built on UMSDC's February 2025 discussion paper Leveraging Sustainable Finance for Institutes of Higher Learning, which explored innovative financing approaches for sustainable campus development. During the session, UM shared its Net Zero Blueprint, setting out its pathway towards a carbon-neutral campus by 2030 and the key initiatives and practical steps taken, along with the opportunities and challenges of financing the transition. By sharing the Blueprint on a national platform, UM offered practical insights to other higher education institutions developing their own decarbonisation strategies.

Green Campuses: Sacred Trust for a Sustainable Future on IKIMfm



On 8 June 2025, UMSDC Director Associate Professor Dr Zeeda Fatimah Mohamad appeared on Man & Nature, a programme broadcast on IKIMfm, the radio station of the Institute of Islamic Understanding Malaysia (IKIM). In the episode titled "Green Campuses: Sacred Trust for a Sustainable Future", he discussed the role of universities in advancing sustainability and shared UM's Net Zero Blueprint, outlining its commitment to a carbon-neutral campus by 2030. By sharing the Blueprint through public broadcasting, UM communicated its campus decarbonisation agenda to a national audience beyond the university community, thus contributing to wider discussion on universities' role in climate action and sustainable development.

04 Co-operative Planning for Climate Change Disasters

Universiti Malaya (UM) works with government agencies and other stakeholders to support local and regional co-operative planning for climate change-related disasters, strengthening disaster preparedness, flood risk management and community resilience. These efforts include multi-agency disaster response planning through UMMC TOPCOM 2025, long-standing collaboration with Kuala Lumpur City Hall (DBKL) on urban flood mitigation, and sustained participation in national climate advisory processes and government-led international climate engagements, including the Malaysia Pavilion at COP30

Together, these initiatives address climate-related hazards and their wider implications for communities, livelihoods and human security. UM's engagement also contributes to regional discussions on climate risks and human mobility, including the potential displacement of people within countries and across national borders. Through practical disaster preparedness exercises, local government partnerships and regional policy dialogue, UM supports collaborative approaches to managing climate-related disaster risks.

Examples include:

- **UMMC TOPCOM 2025: 13th International Emergency and Disaster Medicine Conference** (Page 14)
- **Strengthening Early Warning and Government Collaboration for Climate-Related Health Risks in Malaysia** (Page 15)
- **UM–DBKL Flood Risk Collaboration** (Page 16)
- **UM Strengthens Role in National Climate Advisory Efforts** (Page 16)
- **UM at the COP30 Malaysia Pavilion** (Page 17)

UMMC TOPCOM 2025: 13th International Emergency and Disaster Medicine Conference

Universiti Malaya Medical Centre (UMMC) hosted UMMC TOPCOM 2025, the 13th International Emergency and Disaster Medicine Conference, from 18–21 July 2025, under the theme "Live, Learn, Love: Strengthening Disaster Resilience & Emergency Response." Organised in partnership with the Ministry of Health, National Disaster Management Agency (NADMA), Malaysia Civil Defence Force (APM), and Fire and Rescue Department (BOMBA), the programme brought together healthcare professionals, government agencies and NGOs to strengthen co-operative disaster preparedness and response planning.

The programme featured pre-conference workshops and symposia, including a presentation by the Malaysian Meteorological Department (METMalaysia) on how climate change is affecting the frequency and intensity of disasters and a BOMBA session on search and rescue in natural disaster scenarios. A key component involved multi-agency tabletop simulation exercises to test existing standard operating procedures (SOPs), communication flows and disaster action plans. These exercises provided opportunities to strengthen inter-agency coordination and assess preparedness for emergency situations.

The programme also featured practical workshops on disaster response and a dedicated symposium addressing climate change, environmental health and disaster medicine, highlighting the growing importance of preparedness for climate-related hazards. Through collaboration with government agencies and practical disaster response exercises, UMMC TOPCOM 2025 contributed to strengthening institutional and multi-agency capacity for disaster risk management.





Strengthening Early Warning and Government Collaboration for Climate-Related Health Risks in Malaysia

Universiti Malaya contributes to environmental health risk preparedness through RESPIRE 2: Early Warning System for Asthma via Air Quality Forecasting, a collaborative research initiative involving the University of Edinburgh, Cambridge Environmental Research Consultants (CERC) and Malaysian government agencies, including the Malaysian Meteorological Department (MetMalaysia) and the Department of Environment (DOE).

Implemented during 2024–2025, the project aims to develop and evaluate a mobile-based early warning system using high-resolution air quality forecasts, including particulate matter (PM2.5) and nitrogen dioxide (NO_2), to provide personalised alerts to asthma patients. The initiative addresses public health risks associated with severe air pollution and haze episodes by exploring how forecasting information can support timely warnings, risk communication and preparedness among vulnerable populations.

Expected outcomes include enhanced preparedness for air pollution-related health threats, greater resilience during haze events, and strengthened predictive capacity via sustained national partnerships. The project also provides research evidence, technical expertise, and practical applications to support local and national agencies, contributing scalable tools for early warning and risk communication. Through these efforts, RESPIRE 2 strengthens Malaysia's capacity to respond to air pollution and climate challenges, ensuring vulnerable groups, such as asthma patients, are better protected.







Local Government Collaboration with DBKL on Urban Flood Risk Management



In 2025, Universiti Malaya signed a Memorandum of Understanding (MoU) with Kuala Lumpur City Hall (DBKL) to strengthen urban flood risk management and climate resilience. The agreement built on an established partnership that had delivered a multi-functional flood retention facility in 2018. Developed jointly by UM and DBKL, the facility places a recreational field above an underground stormwater retention pond holding about 16,000 m^3. During heavy rainfall, the pond temporarily stores excess water diverted from Sungai Anak Air Batu, helping to reduce downstream flows into the Klang River and the flood risk to surrounding areas. DBKL maintains the facility. The agreement extended a long-standing partnership between the university and local government on urban flood management and climate adaptation.

UM Strengthens Role in National Climate Advisory Efforts



In 2025, Universiti Malaya (UM) continues to play an active role in shaping Malaysia's response to climate change through the UM Climate Change Advisory Committee under the Ministry of Natural Resources and Environmental Sustainability (NRES). UM contributes expertise through the Technology and Innovation Cluster, chaired at the national level by YBhg. Tan Sri Zakri Abdul Hamid. The UM Climate Change Advisory Committee is co-chaired by Associate Prof. Dr. Helena Binti Muhamad Varkkey and Associate Prof. Dr. Sheeba Nettukandy Chenoli. The committee brings together experts from across UM to support the development of effective climate policies, share research insights, and strengthen Malaysia's preparedness for climate challenges. In 2025, the Committee facilitated the participation of UM academics and students in UNFCCC COP30, held in Belém, Brazil ensuring that the voices of Malaysian researchers and youth are represented in global climate discussions.

UM at the COP30 Malaysia Pavilion

Universiti Malaya participated as a stakeholder in the Malaysia Pavilion at the 30th United Nations Climate Change Conference (COP30), held from 10–21 November 2025 in Belém, Brazil. The Pavilion was led by the Ministry of Natural Resources and Environmental Sustainability (NRES) and implemented by the Malaysian Green Technology and Climate Change Corporation (MGTC). It served as a platform for national and regional climate cooperation during Malaysia's ASEAN Chairmanship. On 18 November 2025, UM organised the session Climate Security at the Crossroads: Safeguarding Lives, Livelihoods and Stability in a Warming World. The session examined how climate change is reshaping ecosystems, food systems and human mobility, and how grassroots innovation and Indigenous knowledge can reduce community vulnerability. UM experts also contributed to AI for Urban Resilience: Connecting Technology, Cities and People on 12 November 2025, which explored data-driven tools to predict floods and manage extreme heat. Documented in the NRES report Malaysia's Participation in UNFCCC COP30, these contributions supported government-led dialogue on climate adaptation and disaster resilience for Malaysia and the ASEAN region.







05 Inform and Support Government on Climate Change Disaster and Risk

Universiti Malaya (UM) works with local and federal government agencies to inform and support the management of climate change-related disaster risks, particularly flooding and the pressures facing vulnerable coastal communities. In 2025, UM continued its collaboration with the Department of Irrigation and Drainage (DID), under the Ministry of Energy Transition and Water Transformation (PETRA), on the flood early warning system at Sungai Pantai. It also signed a Memorandum of Understanding with Kuala Lumpur City Hall (DBKL) on urban flood risk management, centred on the stormwater retention pond on campus.

UM also shares locally grounded evidence on climate risks with government. A research team from the Institute of Ocean and Earth Sciences (IOES) and the Institute for Advanced Studies (IAS) briefed a representative of the Department of Orang Asli Development (JAKOA) on the climate and environmental risks facing the Indigenous Mah Meri community of Pulau Ketam. Together, these initiatives show how UM supports government agencies through flood monitoring infrastructure, local partnerships and community-level risk evidence.

Examples include:

- **UM–DBKL Flood Risk Collaboration** (Page 19)
- **Sungai Pantai Flood Early Warning System** (Page 19)
- **Sharing Climate Risk Findings with JAKOA, Pulau Ketam** (Page 20)

Flood Early Warning System Collaboration



Since 2022, Universiti Malaya (UM) has collaborated with Malaysia's Department of Irrigation and Drainage (DID), a federal government agency under the Ministry of Energy Transition and Water Transformation (PETRA), to support flood risk monitoring and early warning at Sungai Pantai. The collaboration involves the installation and operation of a flood early warning system, comprising flood sirens and a web-based camera system for real-time river level monitoring. These facilities support the detection of rising river levels and provide an important mechanism for early warning and flood preparedness in surrounding communities.

In November 2025, DID also conducted a technical briefing for UM students and auxiliary police on flood monitoring operations and emergency response procedures. This engagement strengthened understanding of the early warning system and supported institutional preparedness for flood-related emergencies.

UM–DBKL Flood Risk Collaboration



A Memorandum of Understanding (MoU) signed in 2025 between Universiti Malaya and Dewan Bandaraya Kuala Lumpur (DBKL) established a collaboration to support urban flood risk management and climate resilience in Kuala Lumpur. The partnership focuses on strengthening coordinated efforts in monitoring and maintaining critical water management infrastructure within the city. As part of this collaboration, activities are centred on the university's retention pond, where joint efforts include inspections, clearing of shrubs, removal of sediment and debris, and ongoing maintenance works. These interventions improve the pond's capacity for stormwater retention, helping to reduce flood risk in surrounding areas and supporting more effective local flood management and climate adaptation efforts.

Sharing Climate Risk Findings with JAKOA, Pulau Ketam

Under its research project Risk and Resiliency: Impacts of Climate and Environmental Changes on Mah Meri Community in Pulau Ketam, Selangor, a Universiti Malaya team from the Institute of Ocean and Earth Sciences (IOES) and the Institute for Advanced Studies (IAS) examined the climate and environmental pressures facing the Indigenous Mah Meri community along the coastline of Port Klang and the Klang Islands. In 2025, the team held a focus group discussion with community members, which identified food insecurity and the need for alternative livelihoods as key concerns. The briefing gave the Jabatan Kemajuan Orang Asli (JAKOA) community representative locally grounded information on risks facing a community that is otherwise rarely represented in such assessments. By sharing its findings with JAKOA, UM helped inform government awareness of emerging climate-related risks in a vulnerable coastal Indigenous community.







06 Environmental Education Collaboration with NGO

Universiti Malaya (UM) collaborates with environmental non-governmental organisations (NGOs) to strengthen environmental education and community capacity for climate adaptation, mitigation and resilience. These partnerships combine university expertise with NGO experience in environmental advocacy, ecosystem conservation and sustainable resource management to promote practical responses to climate change and its impacts. In 2025, UM collaborated with Klima Action Malaysia (KAMY) through the Superhero Iklim climate education campaign, which included climate adaptation awareness; and with the Sabah Wetland Conservation Society (SWCS) to support mangrove conservation as a nature-based approach to climate adaptation. UM also partnered with WWF-Malaysia on sustainable river management and environmental monitoring, the Malaysian Society of Soil Science (MSSS) on sustainable soil and agricultural management, and The Lost Food Project (TLFP) on food waste reduction and responsible resource consumption.

Together, these collaborations demonstrate UM's engagement with NGOs in advancing environmental education and practical climate action, particularly by strengthening knowledge and community participation relevant to climate adaptation and resilience, alongside complementary efforts in climate mitigation and environmental sustainability.

Examples includes:

- **Superhero Iklim 2025 Climate Education Campaign** (Page 22)
- **Mangrove Conservation and Climate Adaptation Education with Sabah Wetland Conservation Society** (Page 23)
- **WWF–UM Collaboration on River Conservation and Climate Resilience** (Page 24)
- **Universiti Malaya and NGO Malaysian Society of Soil Science Promote Sustainable Soil Management** (Page 25)
- **Law Students and NGO The Lost Food Project (TLFP) Unite for Sustainable Food Waste Management** (Page 26)

Superhero Iklim 2025 Climate Education Campaign

Universiti Malaya (UM) collaborated with Klima Action Malaysia (KAMY), a Malaysian climate-focused non-governmental organisation (NGO), and the Sunway Centre for Planetary Health through Superhero Iklim 2025, a four-week climate education and behavioural change campaign. The programme combined interactive workshops, practical activities and gamified challenges to strengthen participants' understanding of climate change and encourage everyday climate action.

The campaign covered climate mitigation and adaptation, including energy conservation, carbon and water footprint reduction, upcycling, composting and climate-related psychological well-being. Participants used the JouleBug application to track sustainable actions and complete weekly challenges, translating climate awareness into practical behavioural changes.

Through collaboration with KAMY and other partners, the programme brought together university and external expertise to promote climate literacy, sustainable lifestyles and greater awareness of climate adaptation.







Mangrove Conservation and Climate Adaptation Education with Sabah Wetland Conservation Society



UM, through its Student Empowerment in Climate Action in Sabah (SECA) Phase 2 programme, collaborated with the NGO Sabah Wetland Conservation Society (SWCS) to promote environmental education and nature-based climate adaptation among rural school communities.



On 29 April 2025, secondary school students participated in a mangrove replanting activity at Kampung Asin-Asin, Kota Marudu, Sabah, using seedlings sponsored by SWCS. The hands-on activity provided opportunities for students to understand the ecological importance of mangrove ecosystems and their role in strengthening coastal resilience to climate-related risks.



By combining environmental education with practical ecosystem restoration, the initiative encouraged young participants to recognise mangrove conservation as a nature-based approach to climate adaptation. The collaboration also demonstrated how universities and NGOs can work together to support community awareness and participation in addressing local climate challenges.

WWF–UM Collaboration on River Conservation and Climate Resilience

UM collaborated with WWF-Malaysia, an environmental NGO, to co-organise the Socialisation Workshop on Kerayong River Litter Hotspot Findings on 30 June–1 July 2025. The workshop brought together government agencies, local authorities, academics and community-based organisations to strengthen environmental awareness and promote collaborative approaches to sustainable urban river management.



Building on a litter hotspot scoping study in the Kerayong River Sub-Basin, the programme combined research sharing, stakeholder discussions, water-quality monitoring and waste audits. These activities provided participants with practical knowledge of river pollution, environmental monitoring and measures to improve river ecosystem health.



By strengthening understanding of urban river management and encouraging multi-stakeholder participation, the collaboration contributes to environmental management capabilities that can support local climate resilience.

Universiti Malaya and NGO Malaysian Society of Soil Science Promote Sustainable Soil Management



Universiti Malaya works closely with the Malaysian Society of Soil Science (MSSS), a professional non-governmental organisation focused on advancing soil science, sustainable land management, and environmental stewardship. The MSSS Management Committee 2024/2026 is led by President Dr. Rosazlin Abdullah from Universiti Malaya, alongside members from Universiti Putra Malaysia, Universiti Malaysia Terengganu, the Department of Agriculture (DOA), Forest Research Institute Malaysia (FRIM), Malaysian Agricultural Research and Development Institute (MARDI), and other institutions. This wide representation strengthens collaboration across academia, government, and industry.

Through joint programmes such as training courses, community engagement activities, and knowledge-sharing initiatives, the partnership supports student involvement, applied research, and practical learning. These activities provide exposure to sustainable farming practices and improve understanding of soil management among students, researchers, and local communities. Overall, this collaboration strengthens knowledge exchange and supports more sustainable approaches to land use and agriculture.

Law Students and NGO The Lost Food Project (TLFP) Unite for Sustainable Food Waste Management

A group of 13 first-year law students from UM collaborated with the NGO, The Lost Food Project (TLFP) and Persatuan Shenpen Malaysia to implement the community outreach programme "Sustainable Food Waste Management in Kuala Lumpur." The initiative focused on collecting surplus vegetables from the Selayang Wholesale Market and redistributing them to vulnerable communities at Flat Hock Lock Mansion, including refugees, elderly residents, and low-income families. By engaging in hands-on volunteering and promoting legal literacy on the Food Donors Protection Act 2020, the students combined civic responsibility with practical education on sustainable food practices and climate-conscious consumption.





The programme exemplified the importance of partnerships between student initiatives and established NGOs in fostering environmental education. Beyond immediate food distribution, students analysed food waste data, identified nutrition gaps, and proposed policy improvements to enhance long-term food rescue efforts.