



Living Campus Blueprint



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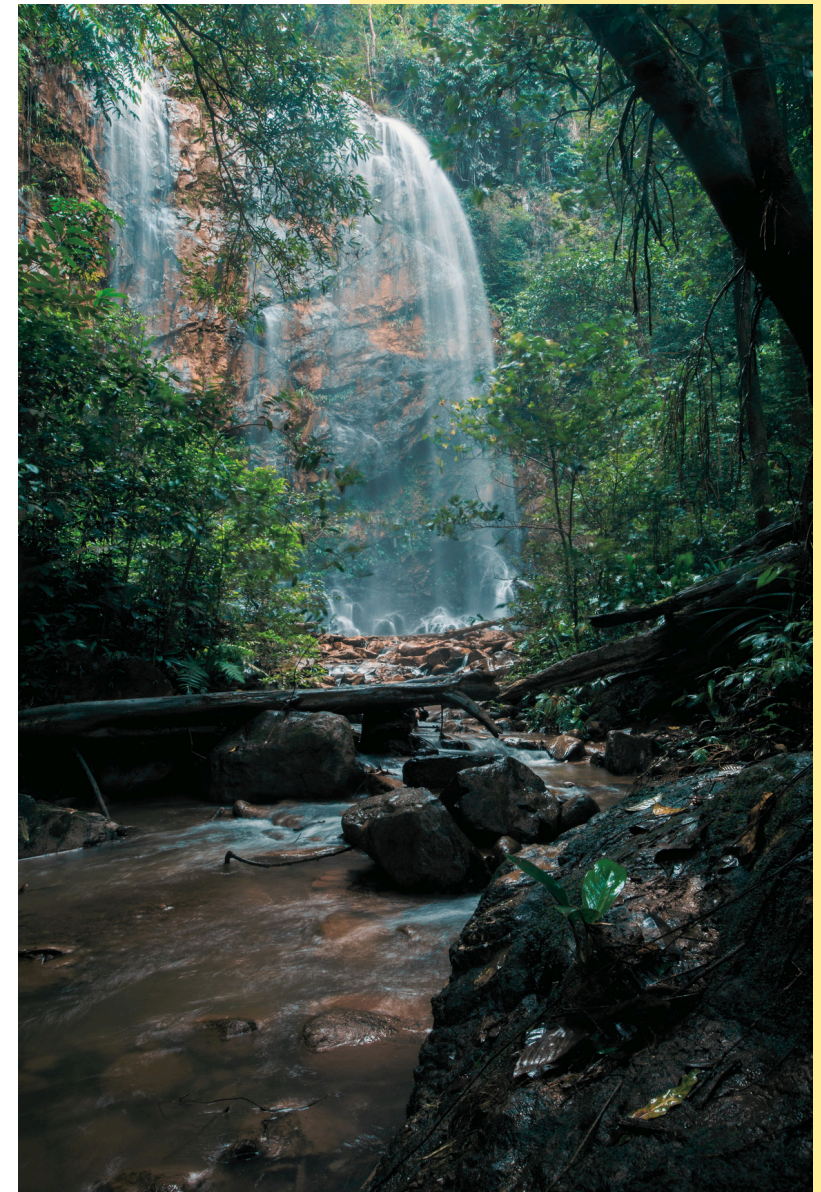
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Message from the Vice-Chancellor

Dear Esteemed UUM Family,

With a spirit of enthusiasm and shared commitment, I extend a heartfelt welcome to each member of our dynamic UUM community. As we embark on a new chapter, guided by the visionary Living Campus Blueprint, it is my distinct honor as Vice-Chancellor to set sail on this transformative journey alongside you.

The Living Campus Blueprint encapsulates our collective aspirations for UUM - an eminent management university that not only excels in academic pursuits but also stands as a beacon of sustainability, innovation, and community impact. This document goes beyond being a strategic plan; it is a testament to our shared dedication to fostering a resilient, sustainable, and globally influential institution.

As we study the pages of this blueprint, envision the future we are crafting – a future characterized by academic excellence, innovative research, and a strong dedication to the welfare of our community. Our goal is to be more than just a higher institution; it is to be a force for positive change, leaving an indelible mark on our community and the world.

Together, let us embark on a journey filled with inspiration, transformation, and sustainable excellence. Your dedication and contributions are invaluable as we work towards creating a future that is not only promising for UUM but also transformative for all.

Warm regards,

Prof. Dr Mohd Foad Sakdan
Vice-Chancellor,
Universiti Utara Malaysia



Our Commitment to Sustainability

Universiti Utara Malaysia (UUM) is deeply committed to sustainability and recognizes its responsibility to contribute towards a more sustainable future. The university firmly aligns its efforts with the United Nations Sustainable Development Goals (UN SDGs) agenda, which provides a comprehensive framework for addressing global challenges and promoting sustainable development in various sectors.

UUM aspires to be a leading institution that not only imparts knowledge and skills but also instills values and principles of sustainability among its students, faculty, staff, and the wider community. The university recognizes that sustainable development encompasses economic, social, and environmental dimensions, and it strives to integrate these aspects into all its activities, policies, and practices.

In upholding the UN SDGs agenda, UUM focuses on addressing key challenges and opportunities through a multidimensional approach. The university acknowledges that achieving the SDGs requires collaborative efforts and partnerships across disciplines, sectors, and stakeholders. Therefore, UUM actively engages with government agencies, industry partners, local communities, and civil society organizations to foster sustainable development and create meaningful impacts.

UUM's commitment to sustainability is reflected in its strategic initiatives and programs across various domains. The university emphasizes academic excellence and research excellence as essential drivers of sustainable development. Through its academic programs, UUM integrates sustainability principles, knowledge, and skills, ensuring that students are equipped to become agents of positive change in their respective fields.

In line with the UN SDGs agenda, UUM also places significant emphasis on sustainable community and industrial engagement. The university actively collaborates with local communities, industry partners, and relevant stakeholders to address social and environmental challenges, promote responsible business practices, and contribute to the well-being of the surrounding community.

Financial sustainability is another critical aspect of UUM's commitment to sustainability. The university recognizes the importance of sound financial planning and resource allocation to support sustainable initiatives. UUM seeks innovative ways to generate revenue while considering sustainability principles, and it actively explores funding opportunities, partnerships, and sustainable investment strategies to ensure the long-term viability of its sustainability efforts.

UUM also prioritizes service excellence, aiming to provide sustainable and ethical services to its students, faculty, staff, and the broader community. The university embraces sustainable practices in its administrative processes and operations, adopts digital technologies to enhance efficiency, and promotes responsible procurement and supply chain management.

Furthermore, UUM strives to develop holistic graduates who possess the knowledge, skills, and values necessary for sustainable living and leadership. The university integrates sustainability principles throughout its curriculum and co-curricular activities, fostering a sense of environmental responsibility, ethical decision-making, and social awareness among its students.

In summary, UUM is deeply committed to sustainability and upholding the UN SDGs agenda. Through its strategic initiatives and programs, the university aims to create a sustainable campus community, promote responsible business practices, contribute to the well-being of local communities, and develop graduates who are equipped to tackle global challenges and foster sustainable development. UUM's commitment to sustainability extends beyond rhetoric, driving meaningful actions and positive impacts that align with the aspirations of the UN SDGs agenda.

What is a Blueprint?

UUM Living Campus Blueprint holds significant importance for a higher learning institution like UUM. It serves as a comprehensive and strategic roadmap that outlines the institution's commitment and actions towards achieving sustainability goals. The blueprint provides a framework for integrating sustainability principles and practices across various aspects of campus life, encompassing academics, infrastructure, operations, community engagement, and more.

Guiding Sustainable Development

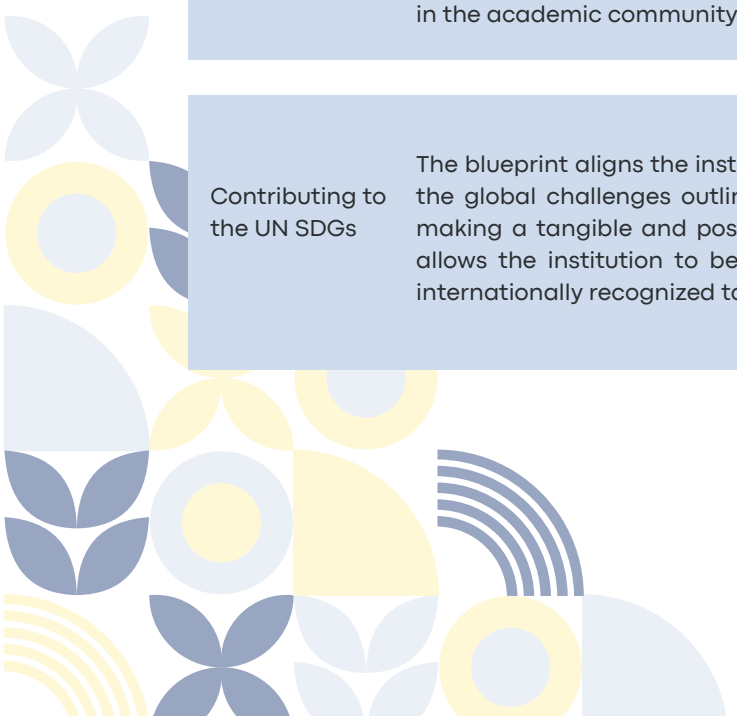
The blueprint serves as a guide for the systematic and coordinated development of sustainable practices and initiatives on campus. It provides a clear direction and sets specific goals and targets, ensuring that sustainability efforts are aligned with the institution's overall vision and values. By providing a structured approach, the blueprint enables effective planning and implementation of sustainable measures, fostering a culture of sustainability within the institution.

Coordinated Efforts and Collaboration

The blueprint facilitates collaboration and coordination among different stakeholders within the institution. It brings together faculty, staff, students, and administrators from various departments and disciplines to work collectively towards common sustainability objectives. By engaging the entire campus community, the blueprint encourages interdisciplinary collaboration, knowledge sharing, and the pooling of resources, fostering a sense of shared responsibility for sustainable development.

Prioritising Sustainability Initiatives

The blueprint helps in prioritizing sustainability initiatives based on their impact and feasibility. By outlining key focus areas and clusters, such as green talents, physical development, virtual development, and other thrusts, the blueprint enables the institution to allocate resources and efforts effectively. It ensures that sustainability initiatives are implemented in a strategic and prioritized manner, maximizing their positive impact on the campus community and the environment.



Measuring Progress and Accountability

The blueprint establishes clear indicators and metrics for measuring progress and evaluating the effectiveness of sustainability 9 initiatives. It enables the institution to monitor and track key performance indicators related to energy consumption, waste reduction, carbon footprint, academic programs, community engagement, and other sustainability metrics. By regularly reporting and communicating progress, the blueprint promotes transparency and accountability, demonstrating the institution's commitment to sustainable development.

Coordinated Efforts and Collaboration

The Living Campus Blueprint can significantly enhance the institution's reputation and attractiveness to prospective students, faculty, staff, and partners. In an era where sustainability is increasingly valued and sought after, having a well-defined sustainability plan demonstrates the institution's proactive stance towards addressing environmental and social challenges. It can attract environmentally conscious individuals and organizations, strengthen partnerships, and contribute to the institution's overall standing in the academic community and beyond.

Contributing to the UN SDGs

The blueprint aligns the institution's sustainability efforts with the UN SDGs. By addressing the global challenges outlined in the SDGs, the blueprint ensures that the institution is making a tangible and positive contribution towards global sustainable development. It allows the institution to be part of a broader movement and to align its actions with internationally recognized targets, creating a sense of purpose and impact.

In conclusion, the UUM Living Campus Blueprint is essential for a higher learning institution as it provides a roadmap for integrating sustainability principles and practices into all aspects of campus life. It guides the institution's sustainable development, fosters collaboration and accountability, enhances reputation, and contributes to global sustainability goals. The blueprint sets the stage for creating a sustainable campus community and ensuring a brighter and more sustainable future for the institution and its stakeholders.

UUM's Living Campus Blueprint

The Blueprint is closely aligned with the United Nations SDGs. The SDGs provide a global framework for addressing pressing social, economic, and environmental challenges, and UUM recognizes the significance of aligning its sustainability efforts with these goals.



UUM's Campus Sustainability Journey

UUM Living Campus Vision

Towards a Resilient &
Sustainable Campus

UUM Living Campus Mission

To champion institutional
sustainability by:

- Building resilience against uncertainties
- Nurturing creative thinkers
- Embracing/Humanising innovation and cutting-edge technology
- Measuring sustainability performance

UUM Living Campus Objectives



Build resilience against uncertainties

- Enhance campus infrastructure to withstand environmental risks and disasters.
- Develop robust emergency preparedness and response plans.
- Integrate climate change adaptation and resilience strategies into campus development.

Nurture Creative Thinkers

- Integrate sustainability principles into the curriculum across disciplines.
- Foster a culture of innovation and critical thinking among students and faculty.
- Encourage interdisciplinary collaboration for sustainable solutions.



Embrace/Humanise Innovation and Cutting-Edge Technology

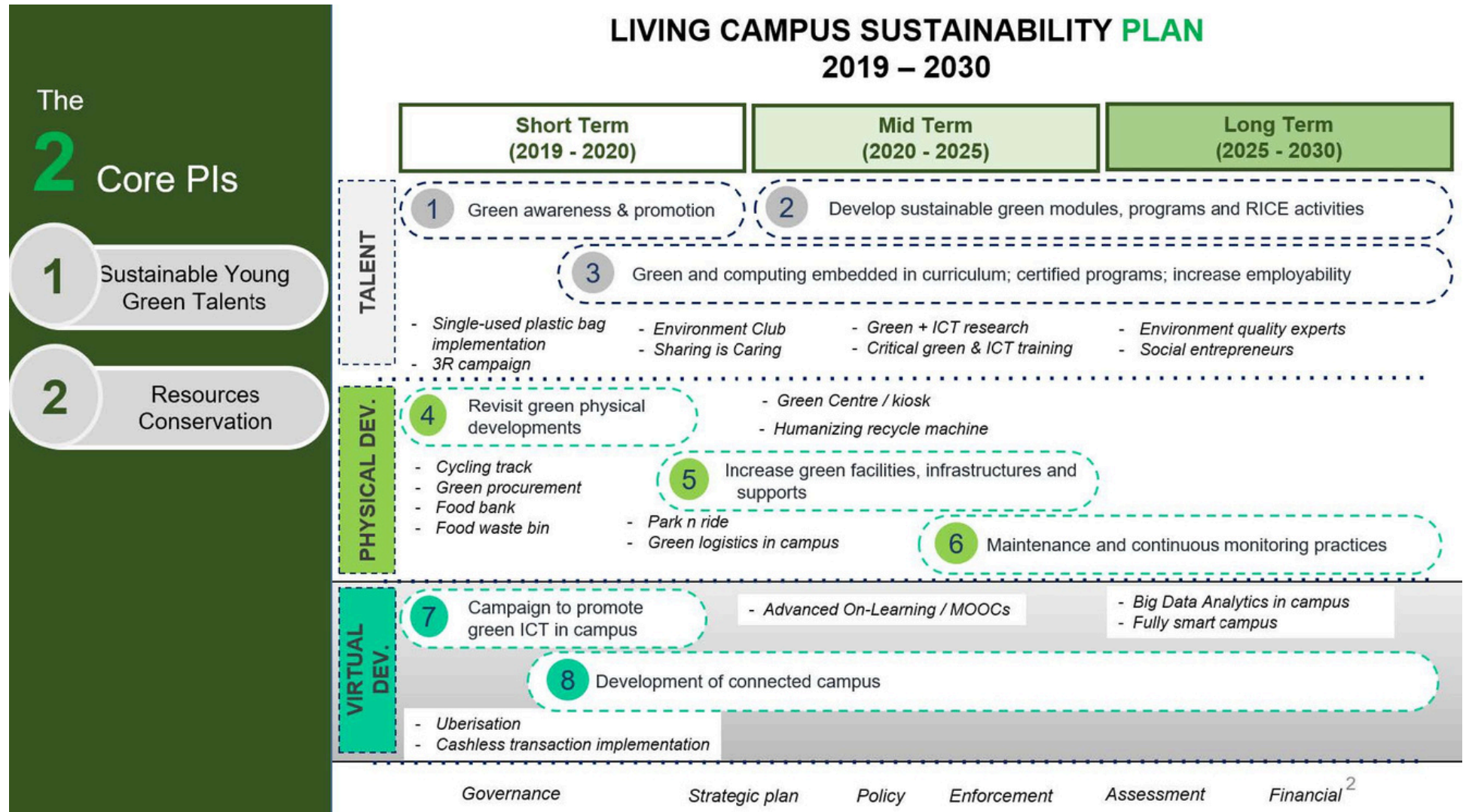
- Promote the adoption of sustainable technologies and practices.
- Encourage research and development of innovative solutions for sustainability challenges.
- Embrace AI and cutting-edge technologies to optimize campus operations and resource management.

Sustainability Performance

- Establish key performance indicators (KPIs) to track sustainability progress.
- Implement data collection and analysis methods for monitoring sustainability metrics.
- Regularly report and communicate sustainability achievements and challenges.



The Plan at a Glance



Living Campus Framework 1.0

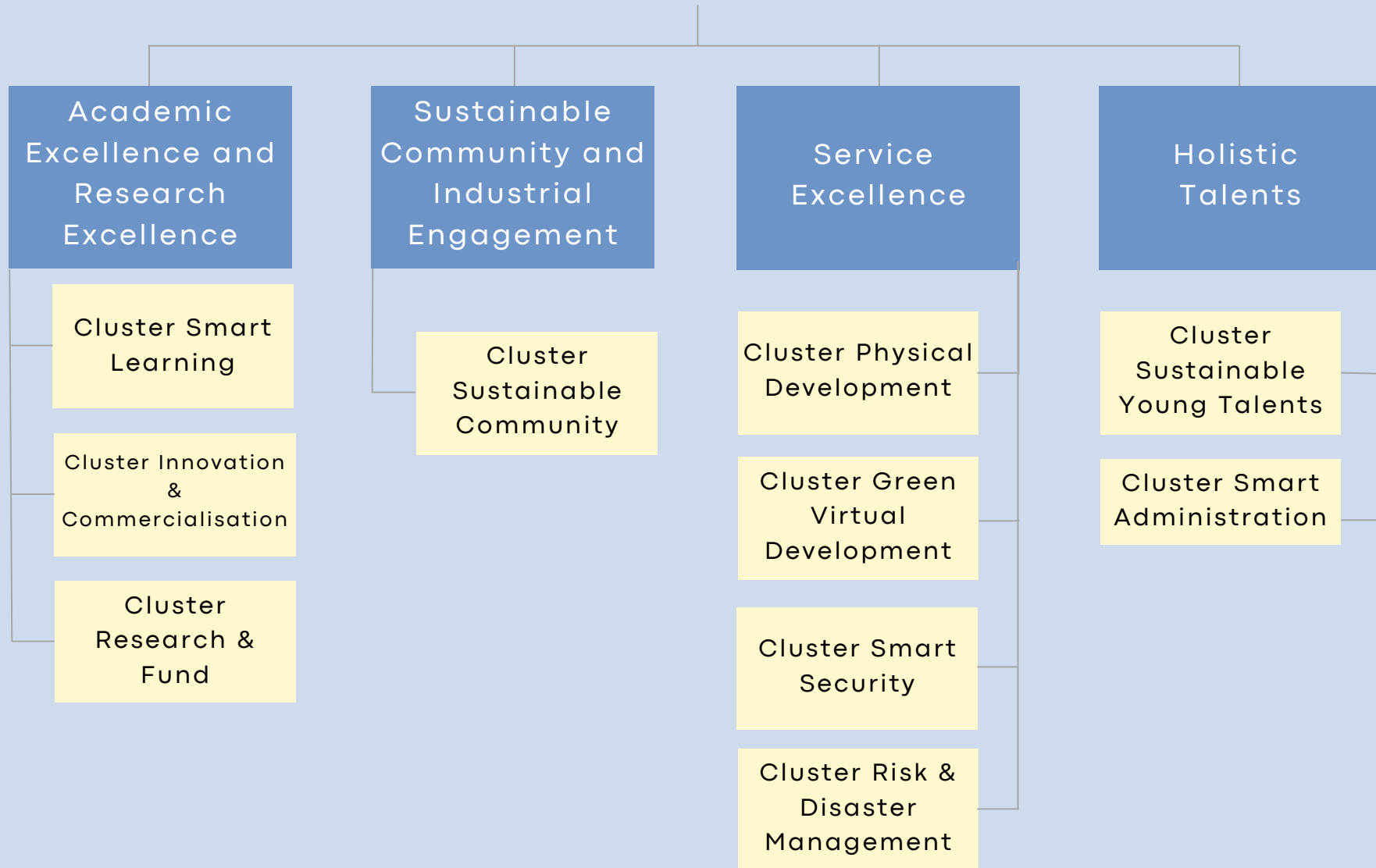
Sustainable Knowledge-creation Community



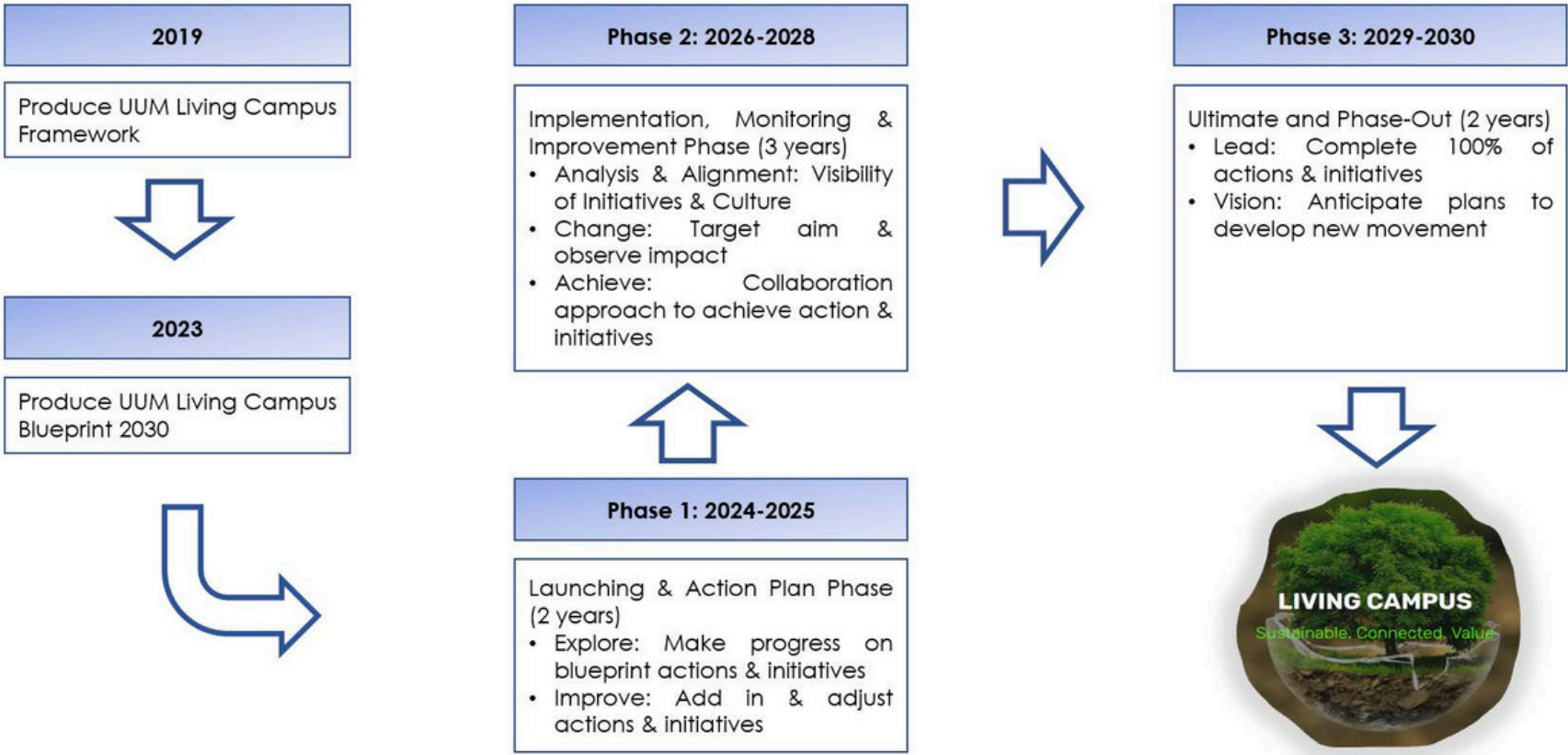
Monitoring: Steering committee, performance analytics dashboard

Living Campus Framework 2.0

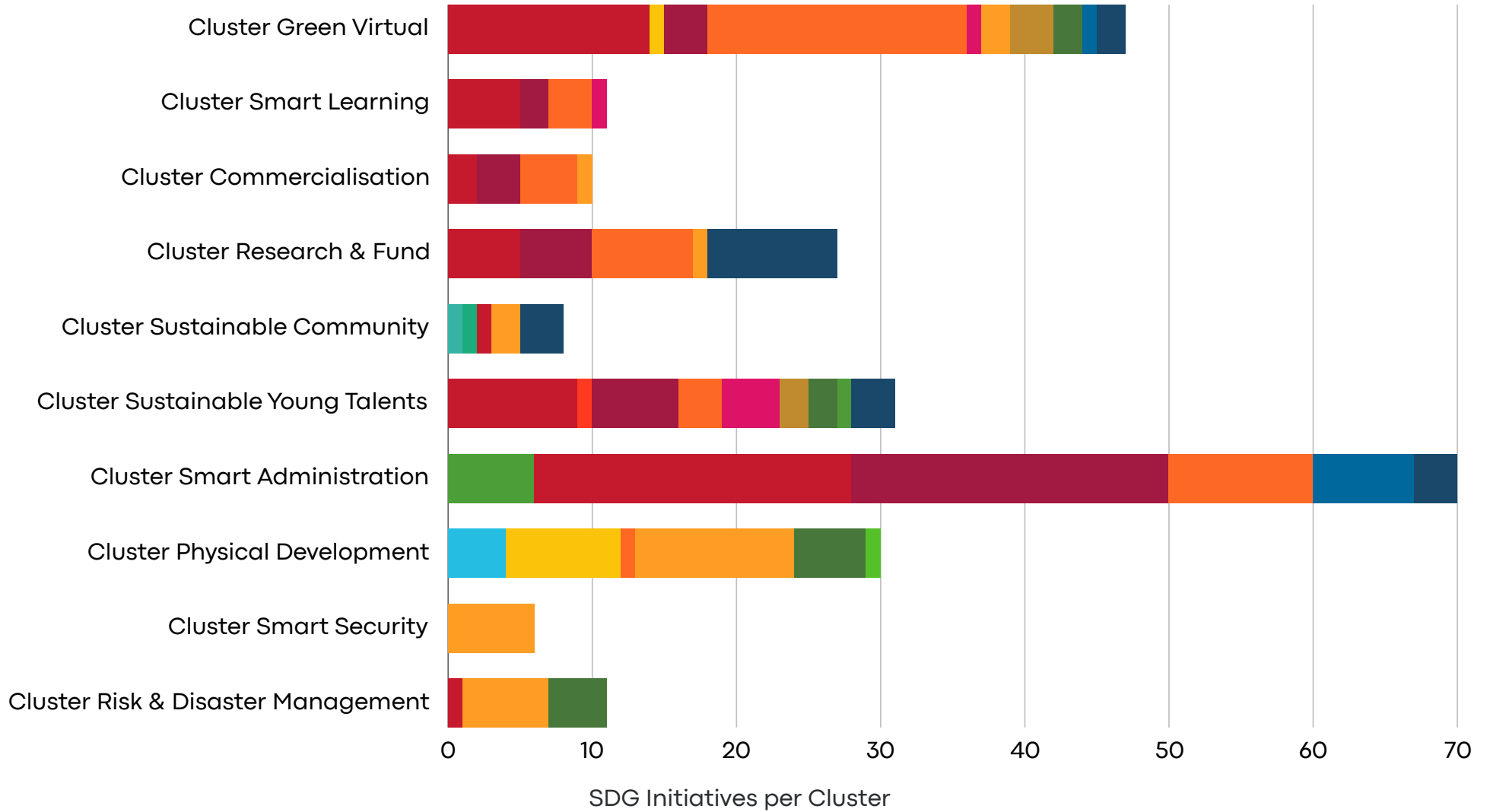
Mobilizers

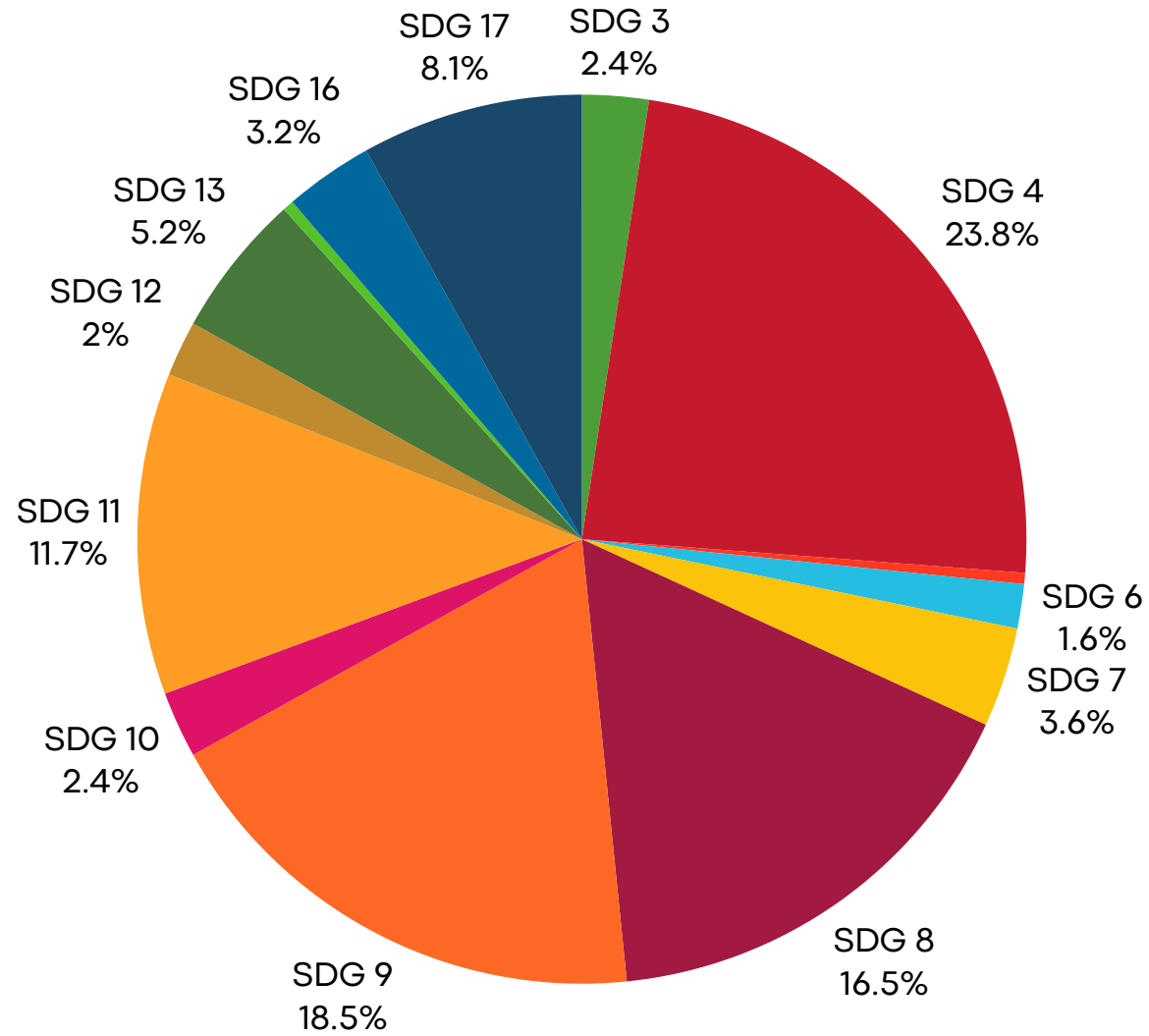
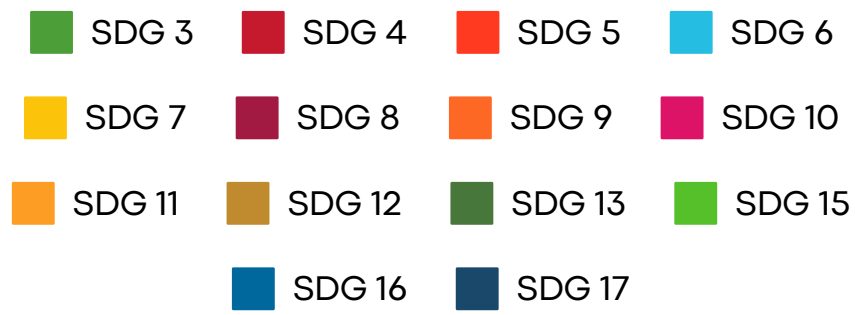


Implementation and Monitoring Phases



Living Campus Execution Phases





Percentage of SDG in UUM Living Campus Blueprint

An aerial photograph of a university campus, likely Universiti Kebangsaan Malaysia (UKM), showing a large central building with a prominent roof, surrounded by greenery, parking lots, and other campus structures. The image is overlaid with a blue tint and white text.

Academic Excellence & Research Excellence

A.

Cluster Smart Learning

To establish a dynamic Smart Learning Environment that promotes active student engagement and collaboration by seamlessly integrating technology, interactive lessons, and sustainable practices, thereby facilitating the intended achievement of students' learning outcomes.

ACTION PLAN

Integration of technology and digital resources in the learning process

Best practices

- Technology Integration - Implementing cutting-edge technology such as smart classrooms, smart lab, virtual learning environments/platforms, and adaptive learning platforms to enhance the students' learning experiences.

Relevant SDGs

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure

Online learning platforms and tools to support sustainable education

Best practices

- Interactive Teaching Methods -Encouraging faculty to adopt innovative teaching methods such as MOOC, Micro-credential, Blended Learning, flipped classrooms, project-based learning, and collaborative learning to foster student engagement and active learning.

Relevant SDGs

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure



Digital accessibility and inclusivity in educational materials

Best practices

- Student-Faculty Engagement Programs and Facility: Creating a student-centred approach to teaching and learning by promoting personalized learning, mentorship, partnership, and academic support, and offering opportunities for students to participate in various innovative programs.

Relevant SDGs

- **Goal 4** Quality Education
- **Goal 9** Industry, Innovation and Infrastructure
- **Goal 11** Sustainable cities and communities

Innovation in remote learning and virtual classrooms

Best practices

- Talent management
- Faculty Development - Providing faculty with ongoing professional development opportunities to stay up-to-date with the cutting-edge teaching strategies, technology tools, and educational trends.

Relevant SDGs

- **Goal 4** Quality Education
- **Goal 8** Decent Work and Economic Growth
- **Goal 4** Quality Education
- **Goal 8** Decent Work and Economic Growth

B. Cluster Innovation & Commercialisation

Foster a culture of innovation and commercialization at UUM by strategically developing an R&D park, incubation programs to nurture startups, offering comprehensive training, and providing innovation grants on campus, thus enabling entrepreneurial growth and research excellence.



ACTION PLAN

Encouraging and supporting innovation and entrepreneurship

Best practices

- Develop R&D Park (Infrastructure)
 - Ideation Space
 - Co-Working Space
 - Product Showcase
 - Maker Space, Prototyping & Testing

sustainable

Relevant SDGs

- **Goal 8** Decent Work and Economic Growth
- **Goal 9** Industry, Innovation and Infrastructure

Cultivating sustainable and impactful R&D product or services

Best practices

- Development of Incubation Program
 - Innovation related grant
 - Incubation training program
 - Market Validation & Product Development
 - Demo Day

Relevant SDGs

- **Goal 4** Quality Education
- **Goal 8** Decent Work and Economic Growth
- **Goal 9** Industry, Innovation and Infrastructure

Digital accessibility and inclusivity in educational materials

Best practices

- Innovation Training Program - Providing training program for technical and non-technical audience. The training will consist such as follows (but not limited to):
 - Fundamental of innovation
 - Pitching, market validation & fundraising
 - Entrepreneurship
 - Digital technology
 - Module development for social science
 - Others

Relevant SDGs

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure
- Goal 11 Sustainable cities and communities

Empowering Talent for Innovation Initiatives

Best practices

- Innovation Training Program - Providing training program for technical and non-technical audience. The training will consist such as follows (but not limited to):
 - Fundamental of innovation
 - Pitching, market validation & fundraising
 - Entrepreneurship
 - Digital technology
 - Module development for social science
 - Others

Relevant SDGs

- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth
- Goal 9 Industry, Innovation and Infrastructures

Creation of intellectual property for sustainable solutions

Best practices

- Increase the number grant opportunities through sustainability related grant scheme such as DECoR, GraD, etc.

Relevant SDGs

- Goal 9 Industry, Innovation and Infrastructure
- Goal 11 Sustainable Cities and Communities



C. Cluster Research & Fund

Implement, coordinate and monitor effective research related policies, regulations, and governance frameworks to support sustainable practices on-campus and off-campus.

ACTION PLAN

Facilitate collaboration across departments and promote the integration of sustainable principles and practices in various research projects

Best practices

- Allocation for research grants specifically for students' development
 - Graduate Development Research Grant (GRAD) specifically designed for students' self-development development, support facilities.
 - Scholarship of Teaching and Learning (SoTL) is designated for advancing teaching and learning through research breakthrough.

Relevant SDGs

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure
- Goal 17 Partnerships for the Goals

- Allocation for research grants specifically for sustainable campus development and ecosystem.
 - Development and Ecosystem Research Grant Scheme (DeCoR) specifically designed for SDG initiatives.
- Research talent grooming on sustainability through research activities
- Research and Information Integrated System (RAIS)
- System Pemantauan Penyelidikan / Research Monitoring System
- Implementation of green financial management for research purposes
 - Financial Integrated Management System (FIMS)

- Goal 17 Partnerships for the Goals
- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure
- Goal 9 Industry, Innovation and Infrastructure
- Goal 9 Industry, Innovation and Infrastructure
- Goal 8 Decent Work and Economic Growth

Foster relationships with external stakeholders, including government, agencies, industry partners, NGOs and local communities

Best practices

 **Relevant SDGs**

<ul style="list-style-type: none"> Percentage of joint scholarly publications on sustainability 	<ul style="list-style-type: none"> Goal 4 Quality Education Goal 9 Industry, Innovation and Infrastructure
<ul style="list-style-type: none"> Number of research projects with other organisations 	<ul style="list-style-type: none"> Goal 9 Industry, Innovation and Infrastructure Goal 17 Partnerships for the Goals
<ul style="list-style-type: none"> Number of MoA/LoA/Agreement-Research-Based 	<ul style="list-style-type: none"> Goal 9 Industry, Innovation and Infrastructure Goal 17 Partnerships for the Goals

Explore funding opportunities from organizations specifically dedicated to sustainability, such as government agencies, foundations and corporate sustainability programs

Best practices

 **Relevant SDGs**

<ul style="list-style-type: none"> Allocation for research grants specifically for students' development <ul style="list-style-type: none"> Graduate Development Research Grant (GRAD) specifically designed for students' self-development development, support facilities. Scholarship of Teaching and Learning (SoTL) is designated for advancing teaching and learning through research breakthrough. 	<ul style="list-style-type: none"> Goal 4 Quality Education Goal 9 Industry, Innovation and Infrastructure Goal 17 Partnerships for the Goals
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Disseminate research findings through various channels, including academic journals, conferences and public engagement activities

Best practices

 **Relevant SDGs**

<ul style="list-style-type: none"> Effectiveness/Implementing/embed of research policy align with living campus blueprint 	<ul style="list-style-type: none"> Goal 11 Sustainable Cities and Communities
<ul style="list-style-type: none"> Scholarly publication on sustainability 	<ul style="list-style-type: none"> Goal 4 Quality Education Goal 8 Decent Work and Economic Growth Goal 17 Partnerships for the Goals
<ul style="list-style-type: none"> Impact of research 	<ul style="list-style-type: none"> Goal 8 Decent Work and Economic Growth Goal 17 Partnerships for the Goals
<ul style="list-style-type: none"> Academic staff sent abroad for research activities 	<ul style="list-style-type: none"> Goal 4 Quality Education Goal 17 Partnerships for the Goals
<ul style="list-style-type: none"> University Publication System 	<ul style="list-style-type: none"> Goal 8 Decent Work and Economic Growth

Sustainable Community and Industrial Engagement



A. Cluster Sustainable Community

To develop and empower strategic partnerships with industries, NGOs and government agencies for sustainable community development.

ACTION PLAN



Engaging with the local community and stakeholders in sustainability efforts

Best practices

- Offering Social Innovation Grants (SIGS) as a scale-up research mechanism for Knowledge Transfer Program initiative. Research from academicians will be transferred to elevate the wellbeing on the community at large.

Relevant SDGs

- Goal 8 Sustainable Cities and Communities

Collaboration with local government and organisations for sustainable development

Best practices

- Collaborating with number of industrial partners ranging from MNCs/GLCs/Listed

Relevant SDGs

- Goal 17 Partnerships for the Goals

Other

Best practices

- Number of ad-hoc educational outreach activities (e.g., tailored lectures or demonstrations) in the local schools' community
- Number of university social responsibility (USR) events
- Number of non-research activities with industry partners
- Number of practitioners from community/industry who actively engage with the university

Relevant SDGs

- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth
- Goal 17 Partnerships for the Goals
- Goal 1 No Poverty
- Goal 2 Zero Hunger
- Goal 17 Partnerships for the Goals

Service Excellence



A. Cluster Physical Development

A leader in facility management

ACTION PLAN



Sustainable campus infrastructure and building design

Best practices

- BAS System to control air condition (smart monitoring)
- Variable Speed Drive Chiller (VSD) installation at academic buildings to reduce power consumption
- SCADA System for monitoring electrical energy usage (Kwh) of UUM building
- Smart Campus - Infrastructure

Relevant SDGs

- Goal 11 Sustainable Cities and Communities
- Goal 13 Climate Action
- Goal 9 Sustainable Cities and Communities
- Goal 11 Innovation, Industry and Infrastructure
- Goal 13 and Infrastructure Climate Action
- Goal 11 Sustainable Cities and Communities
- Goal 11 Sustainable Cities and Communities
- Goal 13 Climate Action

Renewable energy integration and energy-efficient practices

Best practices

- Smart Pre-Valued Energy Meter at UUM's business premises in Sintok, Kedah
- Install control system using devices eg. timer, sensors at toilets, corridors, lecture hall, street lighting etc. (Kwh)
- Retrofit existing light fitting to use energy efficient fitting eg. LED T8 (Kwh)
- Scheduled the centralized air condition system operating hours to optimize time control and energy consumption

Relevant SDGs

- Goal 7 Affordable and Clean Energy
- Goal 7 Affordable and Clean Energy
- Goal 11 Innovation, Industry and Infrastructure
- Goal 7 Affordable and Clean Energy
- Goal 11 Innovation, Industry and Infrastructure
- Goal 7 Affordable and Clean Energy
- Goal 11 Innovation, Industry and Infrastructure

<ul style="list-style-type: none"> Promote usage of big fan (HVLS Fan) at suitable areas eg. Hall, cafeteria, mosque (kWh) 	<ul style="list-style-type: none"> Goal 7 Affordable and Clean Energy Goal 11 Innovation, Industry and Infrastructure
<ul style="list-style-type: none"> Number of programs for on-campus/local community to learn about importance of energy efficiency and clean energy 	<ul style="list-style-type: none"> Goal 7 Affordable and Clean Energy Goal 11 Innovation, Industry and Infrastructure Goal 13 Climate Action
<ul style="list-style-type: none"> Electric energy Consumption per capital 	<ul style="list-style-type: none"> Goal 7 Affordable and Clean Energy Goal 11 Innovation, Industry and Infrastructure

Water conservation and waste management strategies

Best practices

- Non-Renewable Water (NRW) program to reduce and control losses of water in university piping systems due to defective pipe and leakages. Repaired existing supply system, installed a monitoring system and advanced pressure management.
- Save Water/Electricity Campaign every month
- Number of activities to promote conscious water usage on-campus/ wider community
- Average daily water usage

Relevant SDGs

- Goal 6 Clean Water and Sanitation
- Goal 11 Innovation, Industry and Infrastructure
- Goal 6 Clean Water and Sanitation
- Goal 7 Affordable and Clean Energy
- Goal 6 Clean Water and Sanitation
- Goal 11 Innovation, Industry and Infrastructure
- Goal 6 Clean Water and Sanitation

Others

Best practices

- Campus forest conservation plan

Relevant SDGs

- Goal 15 Life on Land



B. Cluster Green Virtual Environment

To establish a Green Virtual Development, in alignment with the SDGs, is to utilize technology to enrich education, foster innovation, ensure equitable access to information and resources, and drive sustainable development by promoting digital literacy, bridging the digital divide, and implementing technology for both efficient operations and environmental sustainability.

ACTION PLAN



Strategies for incorporating virtual technologies and platforms to promote sustainability

Best practices

- Virtual Desktop Infrastructure (VDI) is a technology that allows users to access virtual desktop environments hosted on remote servers or data centers. Instead of running applications and storing data on individual physical devices, VDI enables users to interact with a virtual desktop environment that is hosted and managed centrally.
- Data Analytics and Reporting Systems: Develop data analytics and reporting systems that collect and analyze data on student performance, enrollment trends, and resource utilization, enabling data-driven decision-making and proactive interventions.

Relevant SDGs

- Goal 4 Quality Education
- Goal 7 Affordable and Clean Energy
- Goal 9 Industry, Innovation and Infrastructure
- Goal 8 Decent Work and Economic Growth
- Goal 9 Industry, Innovation and Infrastructure
- Goal 17 Partnerships for the Goals

- AI-Powered Chatbots: Implement AI-powered chatbots that can handle frequently asked questions, provide personalized assistance, and offer guidance on university services, academic resources, and campus information, enhancing support services and reducing response times.
- Campus Resource Booking System: Implement a system that enables students and faculty to easily reserve and manage campus resources such as classrooms, laboratories, equipment, and study spaces, optimizing resource utilization and ensuring efficient scheduling.
- Secure and verified credentials - Blockchain technology used to store and verify academic credentials, such as degrees, diplomas, and certificates. This ensures the authenticity of the documents and prevents fraudulent activities like document forgery. Students can have a verifiable and tamper-proof record of their achievements, which can be shared easily with potential employers or other educational institutions.

- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth
- Goal 9 Industry, Innovation and Infrastructure
- Goal 9 Industry, Innovation and Infrastructure
- Goal 11 Sustainable Cities and Communities the Goals
- Goal 12 Responsible Consumption and Production
- Goal 4 Quality Education
- Goal 10 Reduced Inequalities
- Goal 16 Peace, Justice and Strong Institutions

- A Competency-Based Talent Management System is a strategic approach to human resource management that focuses on identifying and developing specific skills, knowledge, behaviours, and abilities (competencies) required for individuals to excel in their roles within an organization.

Initiatives to enhance virtual collaboration and knowledge sharing among students and faculty

Best practices

Relevant SDGs

- Training on Emerging Technologies: Provide regular training sessions to UUMIT staff to keep them updated on the latest trends, tools, and technologies relevant to SDGs.

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure

- Industry and Research Collaborations: Encourage UUMIT staff to engage in collaborative projects with industries and researchers related to emerging technology, providing them with opportunities to learn and apply relevant innovative solutions.

- Goal 9 Industry, Innovation and Infrastructure
- Goal 17 Partnerships for the Goals

- e-Health Profile for a university is a digital platform or system that securely stores and manages the health-related information of students, faculty, and staff within the university community. It serves as a centralized repository for medical records, personal health data, and other relevant healthcare information.

- Goal 3 Good Health and Well-Being
- Goal 9 Industry, Innovation and Infrastructure

- Career Development and Job Placement Platforms: Create online platforms that connect students with internships, job opportunities, career resources, and alumni networks, facilitating career development and enhancing students' transition into the workforce.

- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth

- Campus Mobile App: Build a mobile application that provides essential campus information, such as campus maps, event calendars, news updates, transportation schedules, and access to campus resources, improving communication and engagement within the university community.

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure

Development of online courses and programs focused on sustainability

Best practices

Relevant SDGs

- Smart Classroom/Virtual Classroom to leverage technology to create a dynamic, interactive, and immersive learning environment that fosters student engagement, collaboration and critical thinking while providing instructors with innovative tools to enhance their teaching practices.

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure

- Secure online assessment for implementing measures and protocols to ensure the integrity, confidentiality and fairness of online assessments. It involves protecting the assessment content, preventing cheating or unauthorized access and maintaining the reliability and validity of the assessment process.

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure

- Virtual learning platform using web-based technology to facilitate the delivery of educational content, interaction, and collaboration between instructors and learners in a virtual or remote learning environment. It serves as a digital hub where instructors can create and share course materials, engage students in activities, and assess their progress, while students can access learning resources, participate in discussions, submit assignments, and receive feedback.

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure

- Virtual Reality (VR) and Augmented Reality (AR) Applications: Develop VR and AR applications to enhance learning experiences, allowing students to explore virtual environments, conduct simulations, and interact with 3D objects for hands-on and immersive learning. It can be implemented for Virtual Museum Application.

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure

- Mobile Learning Applications: Create mobile learning applications that allow students to access course materials, participate in discussions, submit assignments, and receive notifications on their smartphones, enabling convenient and on-the-go learning experiences.

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure

Use of virtual simulations and models for sustainable campus planning and design

Best practices

- Virtual Library Resources: Develop a comprehensive digital library system that provides access to e-books, research articles, journals, and other digital resources, ensuring that students and faculty can access information remotely and conveniently.

Relevant SDGs

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure

- Networking equipment to ensure a robust and reliable network and networking equipment commonly deployed in university infrastructures: Routers, Switches, Wireless Access Points (WAPs), Firewalls, Load Balancers, Network Security Appliances, Network Storage devices, Network Management Systems, Network Cabling, Network UPS

- Goal 9 Industry, Innovation and Infrastructure

- Centralized repository of integrated data from various sources within an organization and developing an analytical dashboard system provides visualizations and interactive tools to monitor and analyze key performance indicators and make data-driven decisions. Together, they support efficient data analysis and reporting for informed decision-making.

- Goal 9 Industry, Innovation and Infrastructure

Others

Best practices

- Yearly report on connected campus

Relevant SDGs

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure
- Goal 11 Sustainable Cities and Communities
- Goal 12 Responsible Consumption and Production
- Goal 13 Climate Action

- Provide package training on sustainable ICT

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure
- Goal 12 Responsible Consumption and Production
- Goal 13 Production Climate Action



C. Cluster Smart Security

Enhance campus security and safety through the implementation of a comprehensive plan, including parking limitations, promoting university transport, widespread CCTV coverage, continuous technical training for security personnel, strict traffic enforcement, collaboration with external agencies, and the publication of an annual report on campus security, ensuring a secure learning environment.

ACTION PLAN



Implementation of smart security systems to enhance safety and sustainability

Best practices

- Students are not allowed to park at staff area (fine + clamp)

Relevant SDGs

- Goal 11 Sustainable Cities and Communities

Sustainable campus lighting and surveillance solutions

Best practices

- Replacement and acquisition of CCTV system and equipment

Relevant SDGs

- Goal 11 Sustainable Cities and Communities

Strategies for reducing crime and improving emergency response

Best practices

- Technical training for security staffs on campus security
- Parking violation (traffic line)

Relevant SDGs

- Goal 11 Sustainable Cities and Communities
- Goal 11 Sustainable Cities and Communities



Collaborative efforts with local law enforcement and community stakeholders

Best practices

- Numbers of cooperation with enforcement agencies such as PDRM, Jabatan Bomba, Jabatan Perhilitan dan Majlis Perbandaran Kubang Pasu.

Relevant SDGs

- **Goal 11** Sustainable Cities and Communities

Others

Best practices

- Yearly report on campus security

Relevant SDGs

- **Goal 11** Sustainable Cities and Communities

D. Cluster Risk & Disaster Management

Establish a resilient and proactive risk and disaster management framework at UUM by conducting environmental risk assessments, developing emergency preparedness plans for natural disasters and climate change-related events, regularly testing and reviewing emergency procedures, implementing risk mitigation projects, deploying early warning systems, conducting joint exercises with local authorities, and continuously monitoring and reviewing risk aspects, safeguarding the campus and its community against potential disasters

ACTION PLAN



Strategies for identifying and mitigating environmental risks and hazards

Best practices

- Organize environmental risk identification and mitigation workshop and incorporating environmental risks and hazards in the university level risk register.

Relevant SDGs

- Goal 11 Sustainable Cities and Communities

Emergency preparedness and response plans for natural disasters and climate-related events

Best practices

- Development of Emergency preparedness and response plan for natural disasters and climate change related events.
- Testing and review of emergency preparedness and response plan in the form of simulation.

Relevant SDGs

- Goal 11 Sustainable Cities and Communities
- Goal 11 Sustainable Cities and Communities

Integration of climate change adaptation and resilience into campus planning

Best practices

- Ensuring risk mitigation projects relevant to climate change and resilience are implemented and monitored by respective departments.
- Proposal for Early Warning Systems for Flood and Strong Winds in strategic locations in UUM.

Relevant SDGs

- Goal 11 Sustainable Cities and Communities
- Goal 13 Climate Action
- Goal 11 Sustainable Cities and Communities
- Goal 13 Climate Action

Collaboration with local authorities and organisations for disaster management

Best practices

- Joint exercise with local authorities and organizations (Bomba, PBTs etc.)

- All PTJs are involved in the joint exercises organized.

Relevant SDGs

- **Goal 11** Sustainable Cities and Communities

- **Goal 11** Sustainable Cities and Communities

Others

Best practices

- Review and monitoring of other aspects of risks in relation to university's resilience and sustainability (eg: financial, other resources, assets and liabilities)

Relevant SDGs

- **Goal 4** Quality Education
- **Goal 11** Sustainable Cities and Communities



Holistic Graduates



A. Cluster Sustainable Young Talents

To nurture and develop young individuals who possess a strong commitment to sustainability and can drive positive change in various fields by emphasizing the importance of equipping young people with the knowledge, skills, and values necessary to contribute to a sustainable future.

ACTION PLAN



Programs and initiatives to engage and empower students in sustainability efforts

Best practices

- Incorporate sustainability education throughout students' activities that integrate sustainability concepts across various societies and provide opportunities for hands-on learning experiences that emphasize practical application and problem-solving.
- Focus activities on developing essential sustainability skills such as critical thinking, systems thinking, communication, organization, entrepreneur collaboration, and leadership by emphasizing the importance of ethical decision-making, social responsibility, and a global perspective.

Relevant SDGs

- Goal 4 Quality Education
- Goal 12 Responsible Consumption and Production
- Goal 4 Quality Education
- Goal 12 Responsible Consumption and Production



- Encourage young talents to be advocates for sustainability in their communities and engage in dialogue and activism on sustainability issues by participating in conferences, seminars, and forums where they can share their ideas, research and projects with a wider audience.
- Emphasize of lifelong learning and continuous professional development for sustainable young talents stays updated on the latest trends, research, and innovations in sustainability and provide resources and platforms for ongoing learning.

- Goal 4 Quality Education
- Goal 12 Partnerships for the Goals
- Goal 4 Quality Education
- Goal 12 Decent Work and Economic growth

Scholarships, grants and awards for student-led sustainability projects

Best practices

Relevant SDGs

- Facilitate platforms and events that foster collaboration and networking among sustainable young talents between other institutions, businesses, NGOs, and government agencies to create opportunities for young individuals to work on sustainability projects, exchange ideas, and build connections within the sustainability community.
- Recognition programs and awards to acknowledge and celebrate the achievements and contributions of sustainable young talents to motivate and inspire them to continue their sustainability efforts and provide visibility and credibility to their work.

- Goal 17 Partnerships for the Goals
- Goal 17 Partnerships for the Goals

Internship and mentoring programs to foster sustainability leadership among students

Best practices

Relevant SDGs

- Establish mentorship programs where experienced professionals or sustainability leaders can guide and support young talents can provide valuable insights, share their experiences, offer career advice, and help young individuals navigate the complexities of sustainability-related fields
- Opportunities to gain practical experience through internships, apprenticeships, or project-based learning by engaging in sustainability initiatives/activities within organizations, allowing them to apply their skills, develop a deeper understanding of sustainability challenges, and contribute to real-world solutions.

- Goal 4 Quality Education
- Goal 5 Gender Equality
- Goal 8 Decent Work and Economic Growth
- Goal 10 Reduced Inequalities
- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth
- Goal 9 Industry, Innovation and Infrastructure

- Provide pathways and opportunities for young talents to pursue careers in sustainability by connecting them with job opportunities, creating mentorship networks, and promoting the value of sustainability-related professions.

- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth
- Goal 9 Industry, Innovation and Infrastructure
- Goal 10 Reduced Inequalities
- Goal 13 Climate Action

Student clubs and organisations focused on sustainability and environmental awareness

Best practices

Relevant SDGs

- Nurture an environment that encourages young talents to develop innovative solutions to sustainability challenges by providing resources, incubators, and support for aspiring young entrepreneurs who aim to create sustainable businesses or initiatives.

- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth
- Goal 9 Industry, Innovation and Infrastructure
- Goal 10 Reduced Inequalities
- Goal 13 Climate Action
- Goal 14 Life Below Water

Others

Best practices

Relevant SDGs

- Establish UUM Young Talent Development Plan

- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth
- Goal 10 Reduced Inequalities

B. Cluster Smart Administration

Enhance smart administration environment that would maximize the level of health and well-being of UUM staff.

ACTION PLAN

Sustainable practices in administrative processes and operations

Best practices

- Group medical insurance (takaful)
- Medical treatment for staff & family members - Limited to RM500 for every staff
- Sabbatical leave for academic staff
- Industry attachment programme for staff
- Post-doctoral programme

Relevant SDGs

- **Goal 3** Good Health and Well-Being
- **Goal 8** Decent Work and Economic Growth
- **Goal 3** Good Health and Well-Being
- **Goal 8** Decent Work and Economic Growth
- **Goal 4** Quality Education
- **Goal 8** Decent Work and Economic Growth
- **Goal 8** Decent Work and Economic Growth
- **Goal 4** Quality Education
- **Goal 8** Decent Work and Economic Growth

- Competency Based Talent Management (CBTM) covering performance management, succession management and learning management for administrative staff
 - **Goal 8** Decent Work and Economic Growth
- Joint Appointment Academic Scheme
 - **Goal 4** Quality Education
 - **Goal 8** Decent Work and Economic Growth
- Budi Bakti Scheme for retired academic staff
 - **Goal 4** Quality Education
 - **Goal 8** Decent Work and Economic Growth
- Number of health outreach programs
 - **Goal 3** Good Health and Well-Being
- Number of free mental health support programs for staff/students
 - **Goal 3** Good Health and Well-Being
- Percentage of academic staff with PhD
 - **Goal 4** Quality Education
- Percentage of academic staff with community/industry engagement
 - **Goal 4** Quality Education
 - **Goal 8** Decent Work and Economic Growth
- Academic staff with industry experience of three years and above
 - **Goal 4** Quality Education
 - **Goal 8** Decent Work and Economic Growth

- Academic staff in cohort A (>50 years old) . **Goal 8** Decent Work and Economic Growth
- Academic staff in cohort B (40-50 years old) . **Goal 8** Decent Work and Economic Growth
- Academic staff in cohort C (<40 years old) . **Goal 8** Decent Work and Economic Growth
- Percentage of staff who attend high impact programmes and trainings . **Goal 4** Quality Education
- Percentage of administrative staff who attend high impact trainings . **Goal 4** Quality Education
- Percentage of staff achieving high productivity . **Goal 4** Quality Education
- Percentage of administration staff with professional qualification . **Goal 4** Quality Education
. **Goal 8** Decent Work and Economic Growth
- Percentage of experts being appointed as advisors to government . **Goal 4** Quality Education
- Number of prominent academia/ industry experts . **Goal 4** Quality Education
- Percentage of academic staff achieving high productivity . **Goal 4** Quality Education
. **Goal 8** Decent Work and Economic Growth
. **Goal 9** Industry, Innovation and Infrastructure
- Percentage of administrative staff achieving high productivity . **Goal 4** Quality Education
. **Goal 8** Decent Work and Economic Growth
. **Goal 9** Industry, Innovation and Infrastructure
- Number of staff receiving institutional recognition for contribution to university . **Goal 4** Quality Education
. **Goal 9** Industry, Innovation and Infrastructure
- Academic staff as members of international academic/professional bodies/association/NGOs . **Goal 16** Peace, Justice and Strong Institutions
. **Goal 17** Partnerships for the Goals
- Academic staff appointed as committee members in international academic/professional bodies/association/NGOs . **Goal 16** Peace, Justice and Strong Institutions
. **Goal 17** Partnerships for the Goals

- Awards conferred by academic/professional bodies for research excellence – National . **Goal 4** Quality Education
. **Goal 9** Industry, Innovation and Infrastructure
- Awards conferred by academic/professional bodies for research excellence – International . **Goal 4** Quality Education
. **Goal 9** Industry, Innovation and Infrastructure
- Stewardships/recognitions conferred by national academic or professional bodies for research excellence . **Goal 4** Quality Education
. **Goal 9** Industry, Innovation and Infrastructure
- Stewardships/recognitions conferred by international academic or professional bodies for research excellence . **Goal 4** Quality Education
. **Goal 9** Industry, Innovation and Infrastructure
- Percentage academic staff as members of national academic/professional bodies/associations/NGOs . **Goal 16** Peace, Justice and Strong Institutions
. **Goal 17** Partnerships for the Goals

Paperless initiatives and digital document management systems

Best practices

Relevant SDGs

• Administrative Staff Transfer Policy (proposal for Online Transfer System)	• Goal 16 Peace, Justice and Strong Institutions
• Online Promotion System for Academic Staff	• Goal 16 Peace, Justice and Strong Institutions
• Online Application for Administrative Position	• Goal 16 Peace, Justice and Strong Institutions
• Online Performance Management System	• Goal 16 Peace, Justice and Strong Institutions

Smart campus services and facilities management

Best practices

- Staff welfare fund
- Allocation of fund for research activities to improve well-being and improve efficiency of services
- On-boarding programmes covering Postgraduate Diploma in Higher Education Learning and Teaching
- Pre-retirement course
- Smart Campus - Process
- Number of new mobile applications produces
- Smart Campus - Accessibility in relation to Wi-Fi coverage

Relevant SDGs

- Goal 8 Decent Work and Economic Growth
- Goal 8 Decent Work and Economic Growth
- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth
- Goal 4 Quality Education
- Goal 8 Decent Work and Economic Growth
- Goal 9 Industry, Innovation and Infrastructure
- Goal 9 Industry, Innovation and Infrastructure
- Goal 9 Industry, Innovation and Infrastructure

Use of data analytics for optimising resource allocation and decision-making

Best practices

- Compulsory health check-ups for staff ages 40 years and above
- University Continuous Learning (Continuous Professional Development) covering knowledge and training course obtained/attended by staff

Relevant SDGs

- Goal 3 Good Health and Well-Being
- Goal 8 Decent Work and Economic Growth
- Goal 3 Good Health and Well-Being
- Goal 8 Decent Work and Economic Growth



Our Measurement of Progress

Monitoring:

includes regular data collection, analysis, and reporting to provide a comprehensive view of progress and identify areas that require improvement

Evaluation:

involves analyzing both qualitative and quantitative data, considering environmental, social, and economic dimensions of sustainability.

Continuous Improvement:

utilises the data and insights gathered through monitoring and evaluation processes to identify areas for improvement, set new targets, and refine strategies.



Letter from the Blueprint Team

We, at UUM, are committed to taking decisive action in implementing the initiatives outlined in the UUM Living Campus Blueprint. We recognize the urgency and importance of sustainability in shaping a resilient and sustainable future for our institution, community, and the world. Therefore, we call upon all stakeholders to join us in this collective effort towards sustainability.

Students:

Embrace sustainability as an integral part of your education and personal development.
Actively participate in sustainability-related activities, research, and community engagement programs.
Champion sustainability initiatives within your peer groups and encourage others to adopt sustainable practices.

Faculty and Staff:

Integrate sustainability principles into curriculum design, teaching methodologies, and research projects.
Lead by example through sustainable practices in daily operations, such as reducing energy and water consumption and promoting waste reduction.
Engage in professional development opportunities to enhance knowledge and skills related to sustainability.

Community and Industry Partners:

Collaborate with us on sustainability projects, research, and innovation initiatives.
Share best practices, expertise, and resources to collectively address sustainability challenges.
Engage in joint programs that promote sustainable community development and industrial practices.

Administrators and Decision-Makers:

Allocate necessary resources and support for the implementation of sustainability initiatives.
Incorporate sustainability considerations into institutional policies, strategic plans, and decision-making processes.
Regularly review progress, monitor outcomes, and adapt strategies to ensure continuous improvement.
We are committed to upholding the United Nations Sustainable Development Goals (SDGs) and aligning our efforts with global sustainability agendas. Through our dedication to SDGs such as quality education, sustainable communities, and climate action, we aim to contribute meaningfully to a sustainable future for all.

Together, we can create a campus that nurtures green talents, embraces technological advancements, fosters academic and research excellence, engages with the community and industry, ensures financial sustainability, delivers exceptional services, and develops holistic graduates.

Let us seize this opportunity to make a lasting impact and inspire positive change. By working collectively and taking bold steps towards sustainability, we can create a brighter and more sustainable future for generations to come. Join us in this journey towards a resilient and sustainable campus at Universiti Utara Malaysia.

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