




**SUSTAINABILITY &
ENVIRONMENTAL
ISSUES INITIATIVES
@Taylor's University,
Malaysia**



**TAYLOR'S
UNIVERSITY**

Wisdom • Integrity • Excellence

The background of the slide features a landscape with rolling green hills, a line of trees in the foreground, and several wind turbines under a cloudy sky. On the left side, there are two stylized leaves: a large blue one and a smaller green one. On the right side, there are two more stylized leaves: a white one and a green one. The text is centered in the middle of the slide.

Taylor's Sustainability Movement

Taylor's Sustainability Movement; is a celebration of sustainability efforts by the leaders of Taylor's Education Group highlighting the amount of breadth and contributions & leadership efforts across the Taylor's Group as well as providing opportunities for students, enterprise partners, NGOs, academic fellowship & individuals to demonstrate Taylor's commitment to provide sustainable living solutions to fulfil the environment day-to-day needs. Initiatives taken includes:



Efficient Energy Management

We are making serious effort towards reducing our carbon footprint and emission of Green House Gases (GHG).

“ Taylor’s University has formed an Effective Energy Management Team and adopted a comprehensive energy conservation programme. Energy audits help us to identify areas for improvement, which are then implemented and monitored for effectiveness. A historical data analysis pertaining to energy consumption at Taylor’s University’s revealed the major energy consumers

- Replacing conventional lighting with energy-saving alternatives such as T5 fluorescent and Light Emitting Diode (LED) fixtures in all the University’s main areas such as all common areas (including staircases, the basement parking garage, corridors and outdoor lighted areas within the campus), classrooms and offices.
- Reducing electricity consumption through turning off lights when they are not needed, including reducing the operating hours of certain stairways and other common areas as well as promoting the use of natural lighting for indoor buildings where feasible



Water Conservation

We have adopted a Water Loss Prevention Programme and initiated concrete measures to minimize water wastage and to promote efficient water usage through leveraging on natural sources such as rainwater.

- Water efficient landscaping eliminates or minimizes usage of potable water for all landscape irrigation
- Water efficient fittings optimize water usage through devices and fittings
- Metering and leakage control through the use of sub-meters to monitor and manage major water usage
- Pressure settings are continually observed and set optimally to prevent excessive flow of water

- Water taps are being replaced or modified for more efficient flow of water.
- The requirement for additional storage tanks for sustainable operations to prevent water shortage during a crisis is being studied, supporting the water recycling and rainwater harvesting initiatives
- Rainwater harvesting is being adopted in toilet areas and for gardening activities, reducing potable water usage and dependency



Green Building & Facilities

Taylor's University strives to sustain the natural environment while building, maintaining & operating our various Academic, Administrative, Research, Labs, Hostels and Recreational space in our Campus. By following and taking into consideration Sustainable building practices, Energy Efficiency guidelines and strong partnerships with the Utility providers and Energy Commission, our TU Campus will move towards achieving our Green building performance.

Green buildings integrate many aspects of Sustainability including water, energy and food. Our Campus will be more informed on how and why projects are built and provide proactive inputs to the Strategic Long Range Development Plans. Building upwards rather than building outwards will ensure greater use density. The campus use sustainable toilets with very low water flow rates and passive renewable Solar Energy to power up its air conditioning and other systems. More metering and retrofits to the existing buildings with the integration of sustainability criteria/ standards. Engagement of more campus students to co-lead/ support the green building and energy retrofit projects implementation as such of smoke-free campus zone, herbs garden for every campus blocks, monthly tree planting programs etc.



Green Transference

Sustainable transport planning at Taylor's University aims to reduce the number of cars on the road. This involves three main strategies: mobility options, connectivity and land use patterns.

Shuttle Buses

Taylor's University proactively encourage its community to use the provided shuttle bus services instead of driving to campus

Car-Pooling

To encourage students, designated car parks are provided for students who car-pool

Ride Sharing

Students who drive are encouraged to give a ride to non-driver students who live nearby. Non-driver students are expected to share in fuel and toll costs (if any) incurred

Active Transport

Students and staff are encouraged to use various active modes of transport where possible, instead of using motorized transportation

- Ensuring the availability of pedestrian pathways, sidewalks, covered walkways and bridges or tunnels that link all buildings within the campus to each other, without having pedestrians to cross dangerous roads or intersections congested with traffic.
- Allocating bicycle lanes with signage within the on-campus roads, improving traffic flow for cyclists
- Building a Bus Rapid Transit (BRT) pedestrian bridge from Bandar Sunway to the Taylor's University campus. This is to encourage the community to use public transit



Food System Sustainability

A large expenditure of time, money and energy routinely goes into the preparation of food for the Campus community. This area of campus operations consumes a significant portion of resources and generates large volumes of wastes

Solid Wastes Recycling is a very important initiative at Taylor's University. Our Campus has set a target to achieve 60% recycling rate in 2016 and subsequently hit 90% by end of 2019. The Campus Facilities Management has created an excellent partnership with our students' Community Services Initiatives (CSI) and various academic schools and other support organizations to drive this recycling initiative for organics wastes, construction-related waste from major projects and food de-composting. We have started taking various steps to reduce environmental impacts. Programs and initiatives will be implemented to raise awareness of recycling on campus among all students, staff, faculty, and visitors of university facilities and events. Additional Recycling Centers have been created and recycling containers will be installed across the campus. The university recycles a wide array of materials including paper, metal, wood, food, bottles and cans, yard waste, construction debris, electronic equipment and a variety of "industrial wastes" such as motor oil, antifreeze, batteries, tires and fluorescent tubes, among other materials



Land, Habitat & Watershed

“ The magnificent setting of Taylor’s University Campus provides an excellent opportunity to manage both undeveloped and developed land holdings while providing an education to thousands of students housed on or commuting regularly to the Campus

- Extra-curricular campus events can be an effective way for students, Academic Schools and staff to learn about sustainability and develop a commitment to it. Community outreach has several functions. First, it is the means by which Taylor’s University can more widely share its knowledge of sustainability. Increased outreach efforts can benefit a public in need of sustainability education, operational examples and leaders. Hence, outreach has the potential to educate students and employees about how they might improve their lives and communities, and about how Taylor’s University can serve as a model and testing site for possible solutions
- Second, outreach is critical for Taylor’s University to become better known across the Educational Sector in Malaysia. The reputation of TU as a leader in sustainability and public perceptions will grow rapidly. Third, outreach helps us obtain the resources necessary to accomplish all campus sustainability goals, by informing donors, investors, partners, legislators and other parties capable of assisting the University.



Academic & Curriculum

Taylor's University's long term goal is to integrate formal teaching mission and informal teaching opportunities to develop understanding, attitudes and habits that promote sustainability. In our formal education, we can do much more to ensure that students have taken classes that provide them with a refined understanding of sustainability, and a basic set of skills with which to tackle these complex issues

Taylor's University explores and exemplifies all aspects of economic, environmental and social sustainability. We recognize that to meet society's needs without compromising those of future generations requires the best efforts of the brightest minds in every field—ecological, economic and social. Prudent with financial resources and mindful of its mandate to our society, Taylor's University supports those initiatives that will ensure the long-term resilience of the University and its ability to serve for generations to come. The University creates cost-neutral ways to include sustainability teaching and learning in and across all disciplines, and encourages students, staff and Academic Schools to carry daily sustainability practices out beyond the gates. In our Campus plans, in community development and in partnerships with Government agencies, we exemplify the hope that we can leave behind us a world worthy of our children.

- Research grant for environmental & sustainability focus up to RM2 millions
- Introduces variable of university core modules dedicated to make a meaningful impact to society by addressing various challenges under UN Sustainable Development Goals
- Community Service as part of accumulated lesson plan for certain core modules.

Green Purchasing

The acquisition of goods and services on the best possible terms, has historically been based on two criteria, price and quality, with the view to maximizing benefits for the Purchasing organization. Sustainable or “green” purchasing broadens this framework to ensure that quality criteria include minimal adverse environmental and health impacts. In making a sustainable purchasing decision, the entire Life

Cycle costs (financial, environmental and social) of the product will be taken into consideration. The Life Cycle takes into account extraction, production, manufacturing, distribution, operation, maintenance and disposal. Many “green” products are competitively priced with their conventional counterparts, are of comparable quality, and have one or more of the following attributes:

- High Content from Post-Consumer Recycled Materials
- Low Embodied Energy (consumed to extract, manufacture, distribute and dispose)
- Recyclable
- Non-toxic
- Energy Efficient
- Durable and/or Repairable
- Produced in an Environmentally and Socially-Sustainable Manner

- Conservation of material : Meaningful waste reduction begins with eliminating the need for materials during the planning and design phases.
- Environmentally preferable materials : Locally harvested, sustainably grown, made from rapidly renewable materials, biodegradable, free of toxins. All these designations demonstrate awareness for sustainability.
- Waste Management and reduction : During construction or renovation, materials should be recycled or reused whenever possible. During the building's daily operations, recycling, reuse, and reduction programs can curb the amount of material destined for local landfills.