

SMART GREEN

POLITEKNIK BANTING SELANGOR



**SUSTAINABILITY
REPORT 2025**

SUSTAINABILITY REPORT 2025

SMART GREEN

POLITEKNIK BANTING SELANGOR

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POLITEKNIK BANTING SELANGOR

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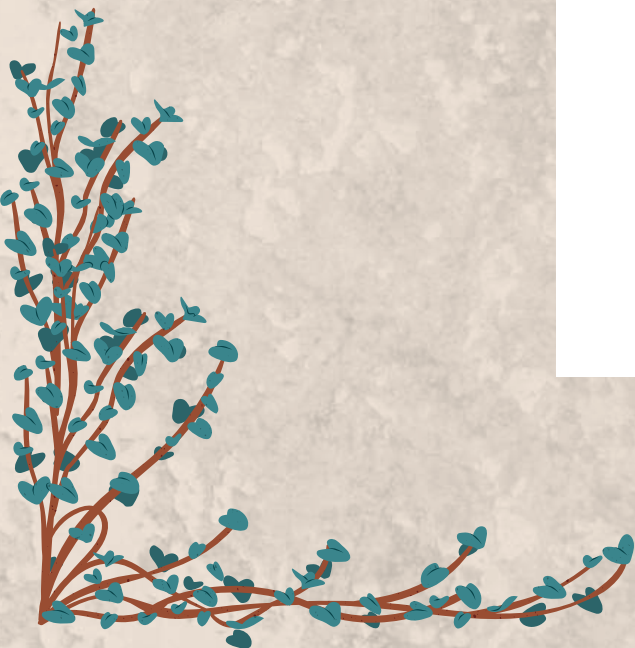


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Foreword

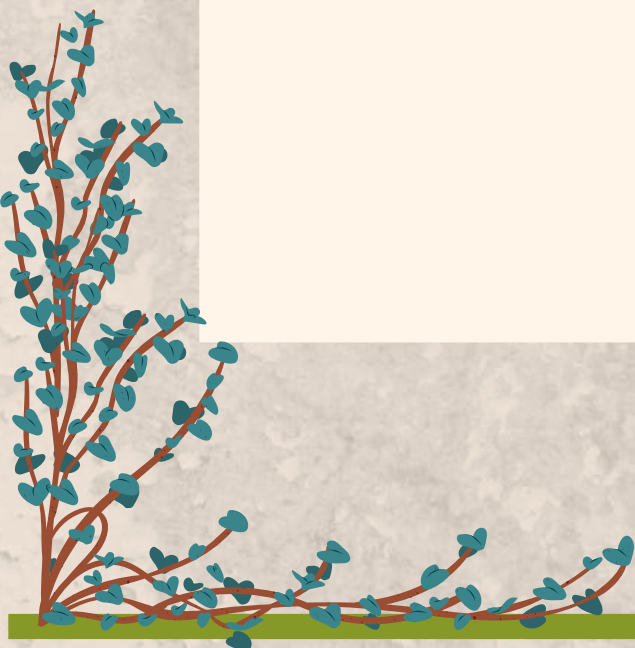
Alhamdulillah, Thank God, the Polytechnic Banting Selangor's SmartGreen Committee Report 2025 has been published. This report highlights the efforts and implementation of various programmes to maintain, promote and improve sustainability and green initiatives at Polytechnic Banting Selangor throughout the year 2025. In addition, this report serves as a significant evidence for the evaluation of the UI GreenMetric World University Ranking 2025. Special thanks goes to the editorial team and Polytechnic Banting Selangor's SmartGreen Committee who had worked hand in hand to publish this report. Hopefully by publishing this report, it could spread awareness and promote more sustainability and green initiatives among Malaysian Polytechnic and Community College staffs.

Thank you.

**Ts. Mohd Khairun Nizam Bin Sa'adan
Coordinator/Manager
Smart Green Politeknik Banting Selangor Comittee**

Objective

**To raise awareness among
PBS citizens about
sustainable living practices
by implementing and
engaging in sustainability-
related programmes.**



Committee Members 2025

Chairman : Ts. Ibrahim bin Burhan

Deputy Chairman 1: En. Roswady bin Abdul Wahab

Deputy Chairman 2: En. Khazaren bin Kusaini

Head of Green Tech. & Sustainability Unit: Pn. Santhy A/P Subbarau

Coordinator/Manager: Ts. Mohd Khairun Nizam Bin Sa'adan

Secretary: En. Mohd Azam Bin Mohd Daud

Education and Research Management:

Dr. S. Thivviah A/P Sanmugam

Pn. Badariah binti Abdollah

Energy Management and Climate Change:

Pn. Rasyida binti A'alaf

Pn. Noor Izna Syazwana binti Mohamad Yusop

Environmental and Landscape Management:

Pn. Rosmawar binti Hussin |

Pn. Ezdalina binti Abdul Rahman

Waste Management:

Pn. Adibah Hasanah binti A. Halim

Pn. Julizawati Binti Juki

Water Management:

En. Mohd Aly Rajaie Bin Halim

En. Ahmad Aminnudin Bin Basar

Transportation:

Hjh. Ruhayah Nazihah binti Zahkai

Pn. Hemala A/P Manohar

Green Procurement:

En. Muhammad Faez Bin Nordin

Smart Green at PBS

Polytechnic Banting Selangor (PBS) is the 24th polytechnic out of 36 Malaysian Polytechnics under the supervision of the Department of Polytechnic Education and Community College. PBS started operating in a temporary campus in 2007 at Kolej Komuniti Kuala Langat with the recruitment of the first cohort in January 2008 before moving to a shop house building in Bandar Sungai Emas.



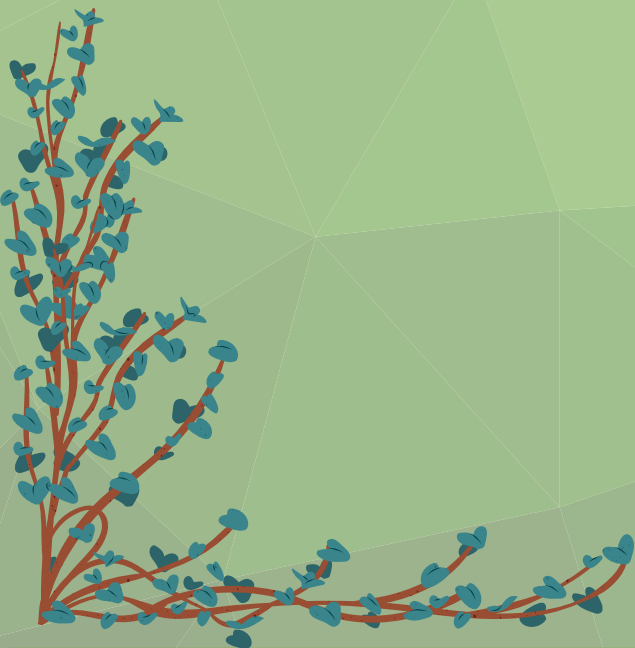
A celebratory graphic for PBS's achievement in the UI GreenMetric 2025 World University Rankings. At the top left, it says 'Tahniah!!!' in a stylized font. Below this are logos for 'JK SmartGreen PBS', 'SMART GREEN POLITEKNIK BANTING SELANGOR', 'POLITEKNIK MALAYSIA', and 'UI GreenMetric 2025 World University Rankings'. The central part of the graphic features two rows of portraits of staff members. At the bottom, it states '1,745 institutions across 105 countries Politeknik Banting Selangor (PBS): 563'. There are also social media icons and the website URL 'https://pbs.mypoltec.edu.my'.

PBS then moved to its permanent campus and started its operation on 6th September 2012 by offering 2 main diploma programs namely the Aircraft Maintenance Engineering and the Mechanical Engineering. The first intake of students at this permanent campus was in December 2012 session with a total of 165 students. Today, PBS student's enrolment has reached a total of 952 students with the addition of the Mechanical Engineering (Manufacturing) Diploma program.

PBS had continuously given priority to sustainability programmes in line with the launch of Politeknik Malaysia's Polygreen Blueprint which was launched on 1 April 2015 by the Deputy Prime Minister, Tan Sri Muhyiddin Yassin at Politeknik Merlimau, Melaka. With the blueprint plan, it has guided PBS to integrate many green practices that involved the five main aspects, namely green campus management, green curriculum development, green community nurturing, green research and green culture. Practices based on the 6R concept of Reuse, Reduce, Renew, Recycle, Repair and Rethink were promoted actively to all PBS citizens.

SMART GREEN ACTIVITIES

Recycling Awareness Briefing



Recycling Awareness Briefing



In order to ensure the involvement of all PBS citizens regarding the importance of recycling activities, an awareness briefing for new students was held during their orientation week on 9th January 2025 and 30th July 2025 . A recycling awareness briefing for the new students was delivered by Smart Green PBS Coordinator, Ts. Mohd Khairun Nizam Bin Sa'adan.



SmartGreen Committee also contribute in the online program Green Generation Forum: "Youth Voices Against Global Warming," on 17 Oct 2025 organized by Kolej Awang Had Salleh, Universiti Pendidikan Sultan Idris, Tg Malim, Perak.

SMART GREEN ACTIVITIES

**Collection of Recycling Materials
& World Clean Up Day**



Collection of Recycling Materials

The collection of recyclable materials such as paper, plastic bottle, metal scrap and e-waste was implemented first at PBS in 2021 with the launch of the recycling center.

Since then, the collection of recycled materials has become a practice for PBS citizens in parallel with the launch of the Public Sector Conducive Ecosystem practice (EKSA).

Furthermore, active recycling material collection activities were carried out at at all the academic and non-academic departments. The total weight of the collected recycling materials for 2025 was 10,406kg (10 tonne).



World Clean Up Day 2025

The collection of recyclable materials also involved all the residential college students on 26 September 2025 in conjunction with World Clean Up Day 2025.

A total of 100.6 kg of recyclable materials (paper) and 50.5 kg of plastic were successfully collected from the recycling programme.



LAB MESRA ALAM
POLITEKNIK BANTING SELANGOR

POLITEKNIK MALAYSIA
BANTING

SMARTGREEN
PolyCC
POLITEKNIK BANTING SELANGOR

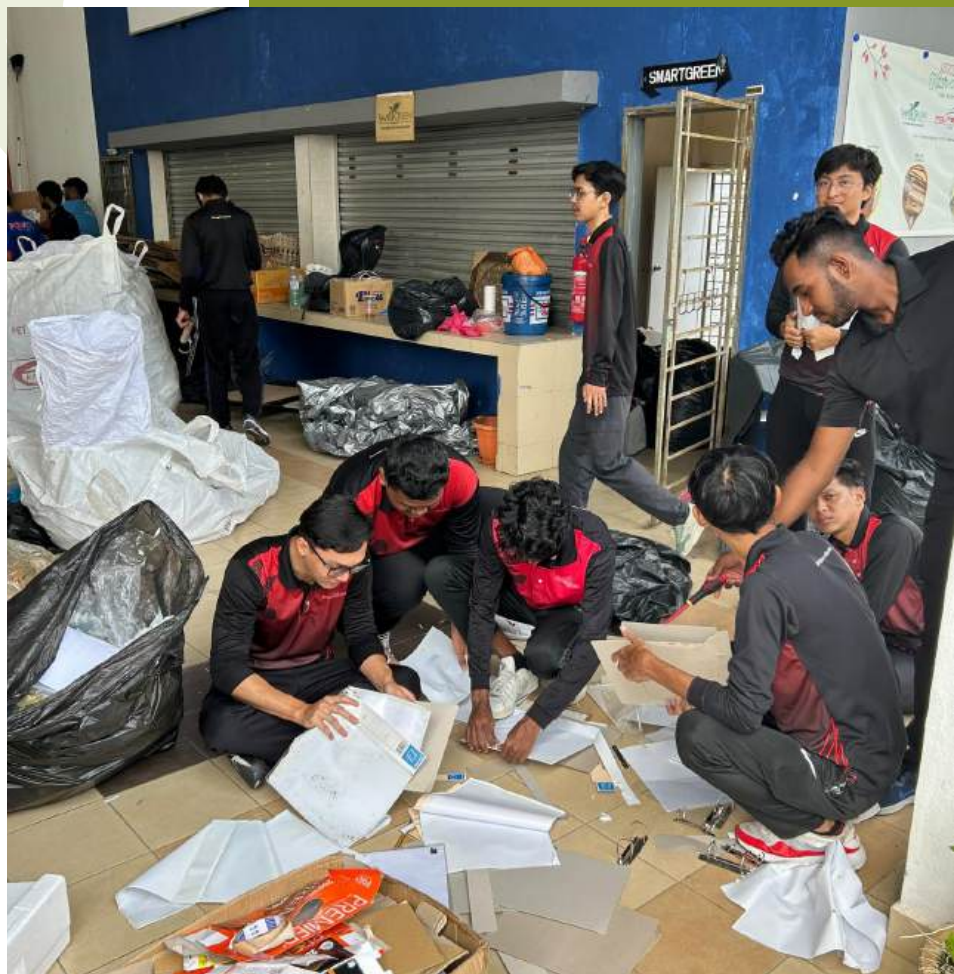
PBS CLEANUP DAY: JOM RECYCLE

26 SEPT 2025 (JUMAAT)
9 A.M - 11 A.M

ANJURAN : KELAB MESRA
ALAM & JK SMARTGREEN

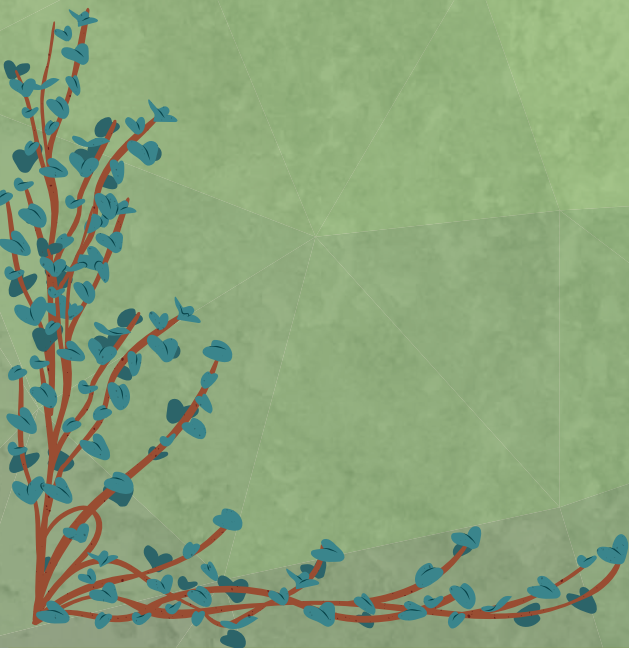
KAWASAN POLITEKNIK
BANTING SELANGOR

**WORLD
CLEANUP
DAY**
SEPT
26



SMART GREEN ACTIVITIES

Smart Urban Farming



Smart Urban Farming

The urban farming project at PBS was launched as a result of the approval of the Environmental and Green Technology grant worth RM15,000.00 from Selangor state government in 2023.

The urban farming project house was first set at the PBS academic building. This project utilises hydroponic concept and is carried out without the use of harmful pesticides.

In 2024, another Environmental and Green Technology grant worth RM18,000 was rewarded by Selangor state government. The fund was utilised to upgrade the urban farming project into “smart urban farming” project.

In 2025, a Environmental Grant amounting RM3000.00 was obtained from MPKL to support our Smart Urban Farming efforts.



Smart Urban Farming



Upon the success of the first phase of urban farming project, PBS has taken steps to upgrade the project into Smart Urban Farming in PBS led by the Mechanical Engineering Department.



Smart Urban Farming

PBS students are exposed to smart urban farming procedures and they often get hands-on experience. In one of the session, students from Kelab Mesra Alam worked collaboratively in seed planting, nutrient solution mixing and harvesting on 19th June 2025 and 31 October 2025.



SMART GREEN ACTIVITIES

Collection Of Used Cooking Oil



Collection Of Used Cooking Oil



One of the main sustainable activity that is widely carried out at PBS is the collection of used cooking oil. This activity has received strong support from PBS citizens, including the canteen operators throughout the year 2025.



SMART GREEN ACTIVITIES

Beach Cleaning & Plogging Activities



Beach Cleaning



In ensuring the sustainability of the environment, PBS citizens are very active in carrying out activities related to the environment. A total of 46 staffs of Politeknik Banting Selangor participated in a beach cleaning program called Save Our Nature on 29th May 2025 at Pantai Kelanang organized by the JK SmartGreen Politeknik Banting Selangor with Geng Peduli Sampah Malaysia.



Plogging



**AKTIVITI PLOGGING
DI
PANTAI KELANANG**

**TARIKH : (KHAMIS) 29 MEI 2025
MASA : 8.00 A.M -12.PM
LOKASI : PANTAI KELANANG**

DENGAN KERJASAMA :

SMART GREEN POLITEKNIK BANTING
GPS
PEYUBUHAN GENERASI PEDULI SAMPAH MALAYSIA

HIJAUKAN PANTAI, SIHATKAN DIRI

© SMART GREEN POLITEKNIK BANTING
<https://pbu.smartgreen.edu.my> #PloggingBanting



Several plogging activities were also carried out by PBS citizens to ensure the sustainability of the environment, especially in Kuala Langat area. These activities were jointly organized by Smart Green PBS and Geng Peduli Sampah Malaysia, on 29th May 2025.

Total trash:

Recycle - 28.75kg, Gen waste - 53.7kg, Overall total: 82.45 kg

SMART GREEN ACTIVITIES

Innovative Recycling Competition



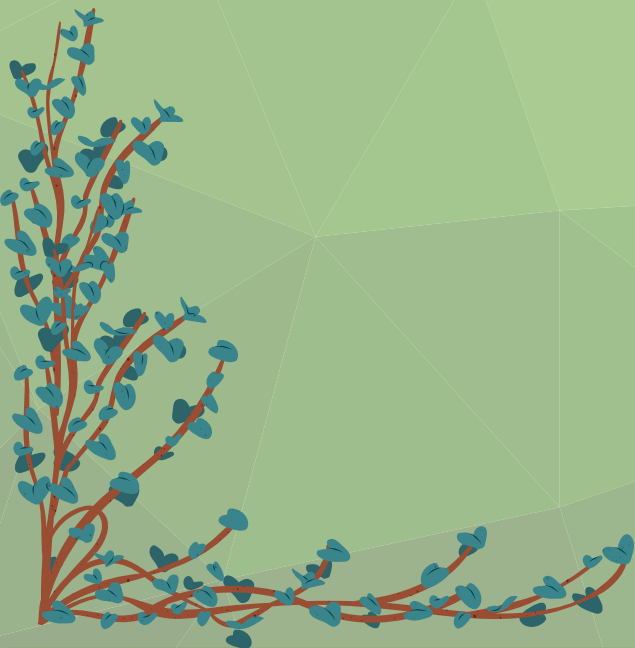
Merdeka Corner Competition



In an effort to increase PBS staffs and students' creativity and awareness of upcycling recycling materials, Merdeka Corner competition was held on 28th August 2025. A total of 8 departments/units had taken part in the competition to display their creativity. Since then, the collection of recycled materials has become a practice for PBS citizens in parallel with the launch of the Public Sector Conducive Ecosystem practice (EKSA).

SMART GREEN ACTIVITIES

Rainwater Collection & Reuse System



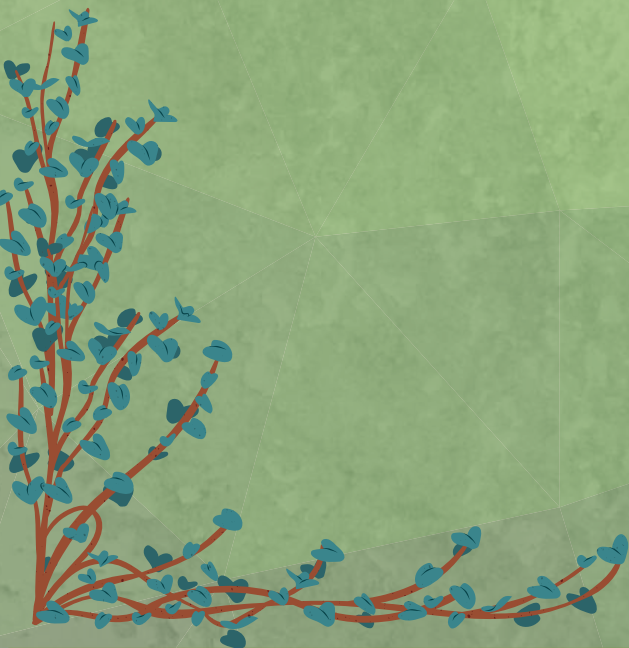
Rainwater Collection And Reuse System

In order to save water usage, PBS has provided two tanks for the process of collecting rainwater. The collected rainwater is used for watering trees and plants around PBS campus. In addition, rain water pond also use as fishing activities on 25th June 2025.



SMART GREEN ACTIVITIES

Car Pool & Park n Walk



Car Pool & Park n Walk

Swafoto CHALLENGE

LET'S CARPOOL
SAVE THE PLANET, GO GREEN.

Sempena Minggu Kesedaran Alam Sekitar

Tempoh pertandingan
01 - 24 JUN 2025

Terbuka kepada semua staf PBS

Hadiah menarik menanti anda!!

IMBAS KOD QR UNTUK BUATNAIK BUKTI PENYERTAAN

BT 61 PENGANGKUTAN

Logos: RSEB, MALAYSIA MADANI, POLITEKNIK MALAYSIA, POLYU

14 PENYERTAAN
LET'S CARPOOL

Noryatimah
Ride Together, Thrive Together

Letchumanan
Ride together, save the earth!

Zulkarnain
Dalam Perjalanan, Bersatu Selamatkan Alam.



PARK & WALK @ PBS

Sempena MINGGU KESEDARAN ALAM SEKITAR

23 Jun 2025 [Isnin]

Rekod langkah bermula 8.00 pagi - 6.00 petang

Jumlah langkah tertinggi bakal menerima hadiah

IMBAS KOD QR UNTUK SYARAT PENYERTAAN @ BUATNAIK BUKTI PENYERTAAN

BT 61 PENGANGKUTAN

Logos: RSEB, MALAYSIA MADANI, POLITEKNIK MALAYSIA, POLYU



In continuing efforts towards a low-carbon city, PBS encourages its citizens to share vehicles to work. This effort is actively supported by PBS staffs whereby many staffs started carpooling with their colleagues to work PBS staffs are also encouraged to use Fuel Efficient Vehicle or Hybrid cars around PBS Campus.

SMART GREEN ACTIVITIES

Collecting & Recycling Used Fabric



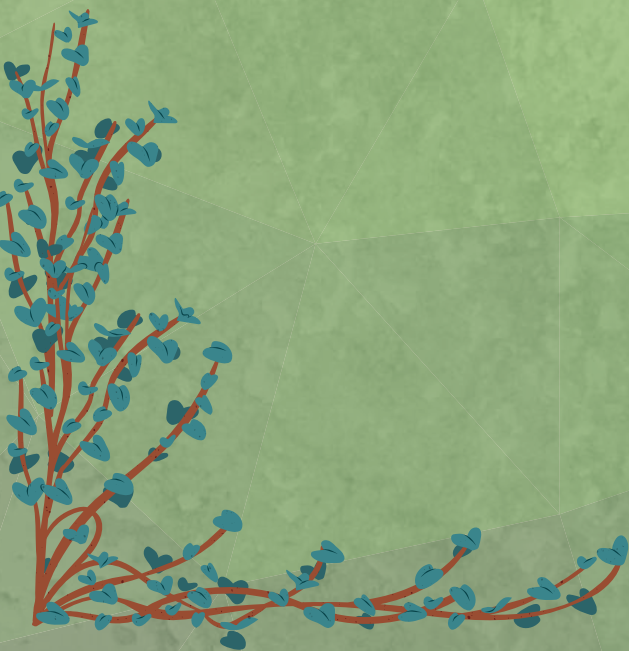
Collecting & Recycling Used Fabric



A total of 20 tons kg of used fabrics were collected to support environmental friendly initiative from 2nd-27th January 2025 and 23rd June- 25th July 2025. The program was co-organized by Smart Green PBS, students from Kelab Mesra Alam , EKSA and Puspanita PBS.

SMART GREEN ACTIVITIES

Solar Panel Installation Project



Solar Panel Installation

The Solar Panel installation project is one of PBS's initiatives in promoting green initiatives on campus. This Electrical Solar Panel project kick-started with the installation of 18 solar panels that was held on 25th April and 7th November 2025. This project was carried out by Kelab Mesra Alam and Smart Green Committee.



SMART GREEN ACTIVITIES

**Education &
Research Management**



Education & Research Management



Dr. S. Thivviyah Sanmugam presented a research paper titled "Towards Green Trends in Communicative English Classroom Assessments; Voices of Malaysian Polytechnic Engineering Students" at the Asian Conference for Innovation in Education (ACIE 2025) in Osaka, Japan on March 3, 2025.



PBS emerged as the champion at PolyCC Green Campus Competition under Selangor and Kuala Lumpur Zone level on 16th April 2025 at Sultan Idris Shah Polytechnic, Sabak Bernam, Selangor. Credit goes to the Mentor, Dr. S. Thivviyah Sanmugam.

Education And Research Management



Politeknik Banting EV Contingent obtained Bronze Award at the Electric Mobile Vehicle Techno-entrepreneur Innovation Competition, held from October 28-30, 2025, at UTHM. Credit goes to the Lead Researcher, Mr. Zulkarnain Jamak.



PBS students project entitled IOT Smart Fish Feeder supervised by Mr. Aly Rajaei won Gold Medal in IdeaNOVA 2025 on 28th April 2025.

SMART GREEN ACTIVITIES

Green Procurement

Green Procurement



En. Muhammad Faez gave a briefing to Polytechnic Banting staffs regarding Malaysian Standard for Green Procurement practices and schemes such as MyHijau Mark.



POLITEKNIK MALAYSIA BANTING **SMARTGREEN**
POLITEKNIK BANTING SELANGOR

PEROLEHAN LESTARI

BELI DENGAN BIJAK, ALAM TERJAGA

APA ITU?

Perolehan lestari ialah amalan pembelian yang mengambil kira kesan terhadap alam sekitar bagi mengurangkan pencemaran dan menyokong pembangunan mampan.



AMALAN HIJAU

- Pilih produk mesra alam
- Guna barangan kitar semula
- Pilih peralatan jimat tenaga
- Kurangkan penggunaan plastik
- Sokong pembekal hijau

KEPENTINGAN

- ✓ Kurangkan pencemaran
- ✓ Jimat sumber semula jadi
- ✓ Lindungi alam sekitar
- ✓ Jimat kos jangka panjang

PILIH HIJAU, UNTUK MASA DEPAN KITA!



BIJAK MEMILIH **ALAM TERPELIHARA** **MASA DEPAN TERJAMIN** **BERSAMA KITA BOLEH!**

MALAYSIA MADANI **Malaysia Zero's Asia** **POLITEKNIK BANTING SELANGOR** <https://pbs.mypolycc.edu.my> **POLYCC**
TERT For All

SMART GREEN ACTIVITIES

Field Trips

Field Trips



PBS Smart Green team has participated in several field trips in 2025 :

1) Asean Green Skills Fair at IOI Mall, Putrajaya
(29 August 2025)

2) Flora and Fauna Life Education Exploration Program "Preserving the Environment" Organized by the Awang Had Salleh College Student Council Session 2025
(19 February 2025)

3) MARDI Show Tech
(30/5/2025)



SMART GREEN ACTIVITIES

CSR Activities



CSR Activities



SMART GREEN ACHIEVEMENTS



PBS Smart Green Achievements



PBS Smart Green Team improved achievement in UI World's Most Sustainable University Ranking since participation year 2021 until 2025.

In addition, PBS Smart Green team has secured 563th place for World's Most Sustainable University Ranking on 2025



MPCCSustAWARD

29 SEPTEMBER 2025

PBS Smart Green team won 3rd places Transportation categories in the Malaysian Polytechnic and Community College Sustainability Award 2025



**A TRIBUTE TO
OUR FORMER
COMMITTEE
MEMBERS**



Wishing You The Best



KEMENTERIAN PENDIDIKAN TINGGI
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI

POLITEKNIK BANTING

Terima Kasih

Puan Santhy a/p Subbarau

atas segala khidmat bakti, komitmen, dan sumbangan cemerlang yang telah dicurahkan sepanjang tempoh perkhidmatan di PBS

Selamat Maju Jaya

1 Januari 2008 - 8 Februari 2026

Salam Ikhlas
Pegawai
& Seluruh Warga Politeknik Banting Selangor



KEMENTERIAN PENDIDIKAN TINGGI
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI

POLITEKNIK BANTING

Terima Kasih

Puan Hemala a/p Manohar

atas segala khidmat bakti, komitmen, dan sumbangan cemerlang yang telah dicurahkan sepanjang tempoh perkhidmatan di PBS

Selamat Maju Jaya

13 Disember 2012 - 9 Februari 2026

Salam Ikhlas
Pegawai
& Seluruh Warga Politeknik Banting Selangor



EDITORIAL MEMBERS



Editorial Members

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Secretary: En. Mohd Azam Bin Mohd Daud

Editors

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Dr. S. Thivviah A/P Sanmugam

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Pn. Ezdalina binti Abdul Rahman

Waste Management:

Pn. Adibah Hasanah binti A. Halim

Pn. Julizawati Binti Juki

Water Management:

En. Mohd Aly Rajaie Bin Halim

En. Ahmad Aminnudin Bin Basar

Transportation:

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Pn. Hemala A/P Manohar

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