

3rd International Workshop on UI GreenMetric World University Ranking  
"Global Campus Partnership for Sustainable Future"

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# CHALLENGES IN TRANSFORMATION INTO GREEN AND SUSTAINABLE CAMPUS: UMP'S EXPERIENCE

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   #UMPMalaysia





# INTRODUCTION



**Established on  
February 16, 2002**



**Gambang & Pekan Campus**



**Located on the east coast  
state of Pahang**



**1,767 staff**

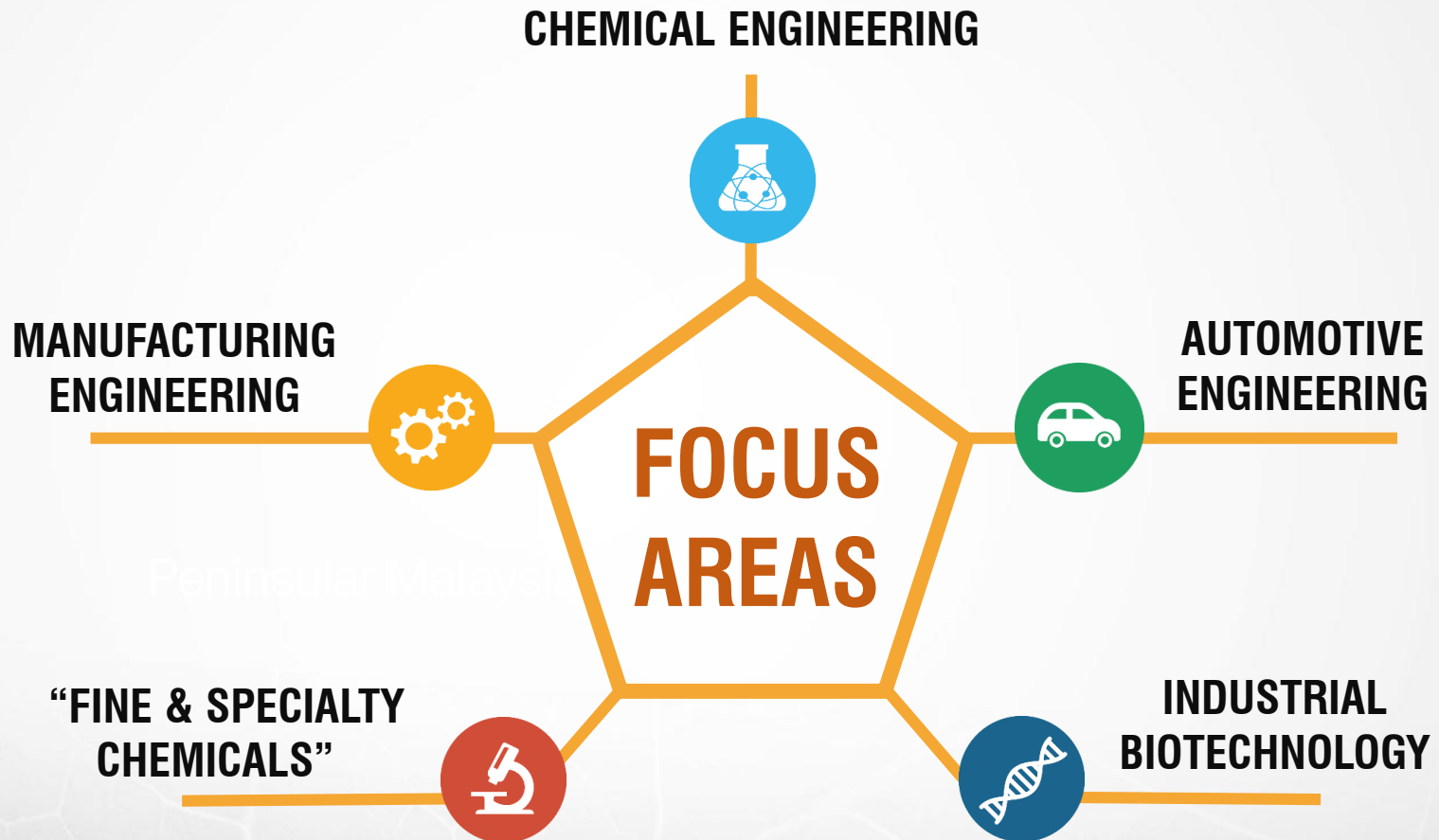


**Rainforest endowed with a  
wide range of biodiversities  
and natural resources**



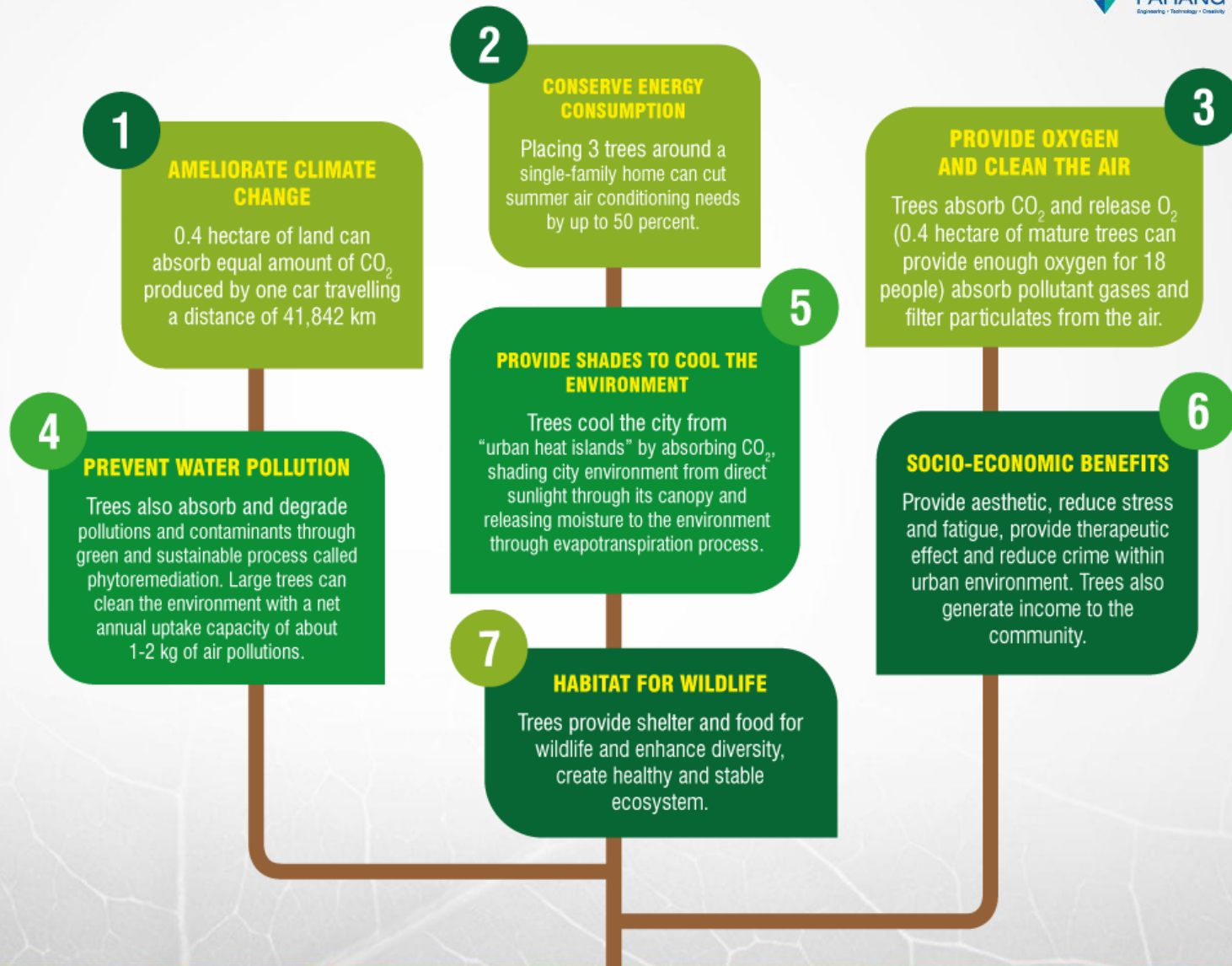
**13,697 students**

# FOCUS AREA



**Competency based technical university specialises in engineering and technology**

# TREES PLANTING BENEFITS





# GREEN & SUSTAINABLE CAMPUS: WHY DOES IT MATTER



# UMP'S STRATEGIC PLAN 2016-2020



# CHALLENGES TOWARDS GREEN & SUSTAINABLE CAMPUS: SITE CONSTRAINTS

## SWAMPY AREA

- Constant water logging
- Poor drainage
- Limit root depth



- Low soil fertility
- Low water retention
- Poor drainage
- High moisture loss
- High salinity

## RECLAIMED LAND



## MECHANICAL IMPEDANCE

- Low permeability
- Poor water drainage
- Limit root penetration
- Poor root depth



# TRANSFORMATION INTO GREEN & SUSTAINABLE CAMPUS: OUR STRATEGIES



# INITIATIVES & PROGRAMME



## SETTING & INFRASTRUCTURE

- 7% university budget for sustainable effort
- Wind breaker project
- UMP trees planting
- Fruit orchard
- Bio aromatic arboretum
- Greening programme with Pahang Forestry Department
- *Rimbunan Cendekia* greenery programme
- Rare fruits trees arboretum



## ENERGY & CLIMATE CHANGE

- Renewable energy usage policy (Bio diesel, Clean biomass, Solar power, Wind power)
- Elements of green building implementation as reflected in all construction and renovation policy
- Green Building



## WASTE

- Program to reduce the use of paper and plastic
- Double sided printing policy
- Recycle container
- Recycling program for university waste
- Toxic waste management

# INITIATIVES & PROGRAMME



## WATER

- Water conservation program implementation (Rain Harvesting System, Ground Water Tank, Lake or Pond)
- Water recycling program



## TRANSPORTATION

- Biodiesel using recycling oil
- Bicycle track
- Bicycle and pedestrian policy on campus

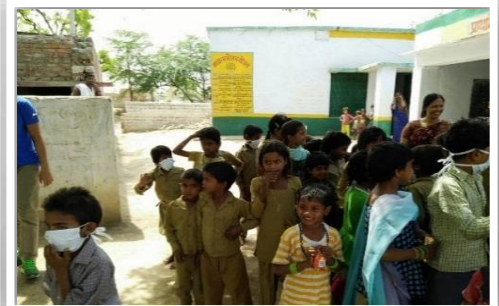


## EDUCATION

- 20 Students Association related to environment and sustainability
- Collaboration with Sultan Ahmad Shah Environment Trust (SASET)
- Pahang State Forestry Department



# COMMUNITIZING TECHNOLOGY





4<sup>th</sup>

IN MALAYSIA

13<sup>th</sup>

IN ASIA

8<sup>th</sup>

IN SOUTHEAST ASIA

58<sup>th</sup>

IN THE WORLD



Universiti  
Malaysia  
PAHANG

Engineering & Technology University



UI's GreenMetric University Sustainability Ranking (GreenMetric) is a world university ranking for universities to assess and compare campus sustainability efforts. It was launched by Universitas Indonesia in 2010.

1. **Setting and Infrastructure (15%)**
2. **Energy and Climate Change (21%)**
3. **Waste (18%)**
4. **Water (10%)**
5. **Transportation (18%)**
6. **Education (18%)**

### Ranking by Indicators

WORLD RANKING	14	Setting & Infrastructure	3	MALAYSIA RANKING
	145	Energy & Climate Change	4	
	284	Waste	6	
	74	Water	2	
	157	Transportation	4	
	23	Education	1	

# WAY FORWARD

## FIVE YEAR STRATEGIC PLAN (2011-2015)

We have blended campus greening and sustainability in our Five Year Strategic Plan (2011-2015).

## RESEARCH

UMP is entrusted with actively frontier research to ensure the long-term sustainability of our beloved country and the world.

## FIVE YEAR STRATEGIC PLAN (2016-2020)

This holistic effort is continued and further strengthened in our Strategic Plan 2016-2020 with five thrusts, namely; Academic Excellence, Financial Sustainability, Research and Innovation Sustainability, Socio-Economic and Environmental Sustainability and its own UMP Prime Branding.

## EDUCATION

## CORPORATE SOCIAL RESPONSIBILITY

To ensure that all graduates that we train will become new breed of professionals with far-reaching conscience and responsibility to continue the strife and struggle to make the Earth a beautiful and comfortable home to live.

**GREEN  
SUSTAINABLE  
CAMPUS**





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