



## CERTIFICATE

This certificate is awarded to

University College of Agroscience Malaysia

as The 330<sup>th</sup> World's Most Sustainable University in 2019 UI GreenMetric World University Rankings

Jakarta, December 3, 2019

Prof. Dr. Ir. Muhammad Anis. M. Met

Rector of Universitas Indonesia

Prof. Riri Fitri Sari, M.M., M.Sc

Chairperson of UI GreenMetric World University Rankings





FACT FILE 2019

# UI GREENMETRIC WORLD UNIVERSITY RANKINGS

## UNIVERSITY COLLEGE OF AGROSCIENCE MALAYSIA

### Malaysia

Kolej Universiti Agrosains Malaysia Lot 2020, Ayer Pa'abas, Alor Gajah 78000 Melaka Malaysia



#### **UNIVERSITY PROFILE**

Name : University College of Agroscience

Malaysia

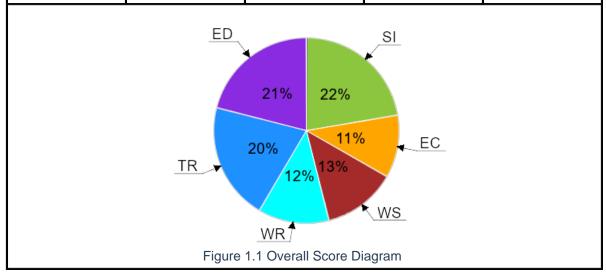
Established: 1999

Country : Malaysia



#### 1. VERIFIED DATA

Category	Point	Percentage of Point to Total Score	Maximum Point	Percentage of Point to Maximum Point
Setting and Infrastructure (SI)	1,175	22 %	1500	78.33 %
Energy and Climate Change (EC)	575	11 %	2100	27.38 %
Waste (WS)	675	13 %	1800	37.50 %
Water (WR)	650	12 %	1000	65.00 %
Transportation (TR)	1,075	20 %	1800	59.72 %
Education (ED)	1,125	21 %	1800	62.50 %
Total Score	5,275	100 %	10000	52.75 %



#### 2. RESULTS SUMMARY



#### 3. WORLD RANKINGS HISTORY



Figure 3.1 World Rankings History Diagram

#### 4. RANKING IN MALAYSIA



#### **5. RESULTS DETAIL**

### **Setting and Infrastructure**

	Indicator	Score	
SI.1	The ratio of open space area towards total area	225	SI.6 SI.1
SI.2	Area on campus covered in forest	0	
SI.3	Area on campus covered in planted vegetation	300	SI.100 20 40 60 80 100
SI.4	Area on campus for water absorbance	200	100
SI.5	The ratio of open space area divided campus population	300	SI.\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
SI.6	University budget for sustainability effort	150	Figure 5.1 Percentage of Score to Maximum Score for Setting and Infrastructure

### **Energy and Climate Change**

	Indicator	Score	EC.1
EC.1	Energy efficient appliances usage	50	EC.2
EC.2	Smart building program implementation	0	EC.7 (0)-25 EC.3
EC.3	Number of renewable energy source in campus	75	40 60 80 100 EC.3
EC.4	The total electricity usage divided by total campus population	150	EC.6 EC.4
EC.5	The ratio of renewable energy production towards total energy usage per year	0	Figure 5.2 Percentage of Score to Maximum Score for Energy and Climate
EC.6	Element of green building implementation	0	Change
EC.7	Greenhouse gas emission reduction program	0	
EC.8	The ratio of total carbon footprint divided campus population	300	

#### Waste

	Indicator	Score	
WS.1	Recycling program for university waste	150	Ws.6 Ws.1
WS.2	Program to reduce the use of paper and plastic in campus	225	WS 5 25 75 WS 2
WS.3	Organic waste treatment	75	25) (25) 40 <sub>60</sub>
WS.4	Inorganic waste treatment	75	80 100
WS.5	Toxic waste treatment	75	
WS.6	Sewerage disposal	75	WS.4 WS.3
			Figure 5.3 Percentage of Score to Maximum Score for Waste

#### Water

	Indicator	Score	WR.1
WR.1	Water conservation program	225	75
WR.2	Water recycling program	225	
WR.3	The use of water efficient appliances	150	WR.4 25 75 WR.2
WR.4	Piped water consumed	50	WR.4 20 40 WR.2
			75 WR.3
			Figure 5.4 Percentage of Score to Maximum Score for Water

### **Transportation**

	Indicator	Score	TR.1
TR.1	The ratio of total vehicles (cars and motorcycles) divided by total campus population	100	TR.8 TR.2
TR.2	Shuttle services	0	TR.7 75 0 20 40 60 80 100 R.3
TR.3	Zero Emission Vehicles (ZEV) policy on campus	200	50 50 80 100
TR.4	The ratio of Zero Emission Vehicles (ZEV) divided by total campus population	100	TR.6 TR.4
TR.5	Ratio of parking area to total campus area	200	Figure 5.5 Percentage of Score to Maximum Score for Transportation
TR.6	Transportation program designed to limit or decrease the parking area on campus for the last 3 years	100	
TR.7	Number of transportation initiatives to decrease private vehicles on campus	150	
TR.8	Pedestrian policy on campus	225	

#### **Education**

	Indicator	Score	FD
ED.1	The ratio of sustainability courses towards total courses/modules	225	ED.1
ED.2	The ratio of sustainability research funding towards total research funding	300	25 0 20 40 60 80 100 D.2
ED.3	Sustainability publications	0	ED. 100
ED.4	Sustainability events	150	ED.3
ED.5	Sustainability student organizations	300	ED.4
ED.6	Sustainability websites	50	Figure 5.6 Percentage of Score to Maximum Score for Education
ED.7	Sustainability report	100	Waximam Coole for Education



## UI GREENMETRIC WORLD UNIVERSITY RANKINGS

#### **About UI GreenMetric**

UI GreenMetric World University Rankings is an annual publication of university rankings on sustainability. It is an initiative from the University of Indonesia that ranks universities around the world based on their commitment and actions towards sustainability. UI GreenMetric World University Rankings aims to increase university awareness towards sustainability.

#### History

UI GreenMetric World University Rankings is a non-profit initiative of University of Indonesia developed since 2010.

In 2009 the University of Indonesia hosted an International Conference on World University Rankings. The conference was attended by World University rankers such as Webometrics, HEEACT, and others. In 2010, Prof. Dr. Gumilar Rusliwa Somantri as Rector of the University of Indonesia at that time initiated UI GreenMetric World University Rankings and appointed Prof. Riri Fitri Sari as the chairperson. Soon a team consisting of Junaidi, Budi Hartono, Allan Lauder, and Prof. Dr. Ir. Gunawan Tjahjono formulated UIGM Questionnaire and introduced UI Ranking to the world. In 2011, 11 new indicators in 5 categories has been added. Subsequently Education has been added as a new category in 2012. By the year 2015, a massive improvement was introduced including carbon footprint and a more systematic data collection. In 2016 an online based review and validation system has been set for the asessors.

UIGM took Policy into Action in 2016, Global Partnership for Sustainable Future in 2017, Universities, Impacts, and Sustainable Development Goals (SDGs) in 2018 and Sustainable University in a Changing World: Lessons, Challenges and Opportunities in 2019 as its annual themes. In 2019, 780 universities from 85 countries participate in the rankings.

Table 1. UI GreenMetric Timeline

Ul	GreenMetric Timeline
2010	UI GreenMetric published
	for 95 Universities
2011	UI GreenMetric added 11
	new indicators within 5
	categories
2012	Education became one of
	the categories
2015	Introducing Carbon
	Footprint and factfile
	document
2016	Focusing on university
	action towards
	sustainability
2017	UIGWURN established
2018	Focusing on SGDs and
	enlargement of
	memberships
2019	Improving questionaire and
	data collection method

To reach and coordinate more participating universities, UI GWURN was established in 2017 with a national coordinator in each country. To make it work, Junaidi formulated strategic framework for the network. Currently, there are 35 national coordinators in Asia, America, Africa and Europe. Each voluntarily organizes national workshop inviting other universities in their country. Since its establishment in 2010, it has been increasingly recognized as the first and only universities ranking on sustainability and has been used by participating universities to benchmark and do continuous improvement in the area of sustainability.

As a member of IREG, more activities and collaboration among participating universities are expected to achieve our common goal: sustainable university for sustainable future. UI GreenMetric itself developed its own ranking system by studying other ranking systems such as: The Times Higher Education World University Rankings (THE) sponsored by Thompson Reuters, the QS World University Rankings, the Academic Ranking of World Universities (ARWU) published by Shanghai Jiao Tong University (SJTU), and the Webometrics Ranking of World Universities (Webometrics), published by Cybermetrics Lab, CINDOC-CSIC in Spain.

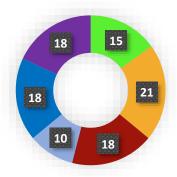
#### Methodology

UI GreenMetric collects data through online questionnaire. All participant answered some questions for some period of time. After that, UI GreenMetric expert members and reviewers validate the answers based on evidence that participants provide. This year's categories and weighting of points are shown as follows. The specific indicators and their points awarded are shown in Table 3. Each indicator has been uniquely identified by a category code and a number (e.g. SI 5).

In our list, universities with the same total score will be ranked according to the highest weighted indicators, i.e firstly based on its Energy and Climate Change (EC) score, then based on the total score for Waste (WS), Transportation (TR), Education (ED). Subsequently it will be based on its Setting and Infrastructure (SI) score, and last will depend on its Water (WR) score.

Table 2. Categories used in the ranking and their weighting

No	Category	Percentage of Total Points (%)
1	Setting and Infrastructure (SI)	15
2	Energy and Climate Change (EC)	21
3	Waste (WS)	18
4	Water (WR)	10
5	Transportation (TR)	18
6	Education (ED)	18
	TOTAL	100



The specific indicators and their points awarded are shown in Table 3. Each indicator has been uniquely identified by a category code and a number (e.g. SI 5).

Table 3 Indicators and categories

No	Categories and Indicators	Points	Weighting
1	Setting and Infrastructure (SI)		15%
SI 1	The ratio of open space area towards total area	300	
SI 2	Area on campus covered in forest	200	
SI 3	Area on campus covered in planted vegetation	300	
SI 4	Area on campus for water absorbance	200	
SI 5	The ratio of open space area divided campus population	300	
SI 6	University budget for sustainability effort	200	
	Total	1500	
	Energy and Climate Change (EC)		21%
EC 1	Energy efficient appliances usage	200	
EC 2	Smart building program implementation	300	
EC 3	Number of renewable energy source in campus	300	
EC 4	The total electricity usage divided by total campus population	300	
EC 5	The ratio of renewable energy production towards total energy usage per year	200	
EC 6	Element of green building implementation	300	
EC 7	Greenhouse gas emission reduction program	200	
EC 8	The ratio of total carbon footprint divided campus population	300	
	Total	2100	
	Waste (WS)		18%
WS 1	Recycling program for university waste	300	10 70
WS 2	Program to reduce the use of paper and plastic in campus	300	
WS 3	Organic waste treatment	300	
WS 4	Inorganic waste treatment	300	
WS 5	Toxic waste treatment	300	
WS 6	Sewerage disposal	300	
W D U	Total	1800	
	1 Utai	1000	
	Water (WR)		10%
WR 1	Water conservation program	300	
WR 2	Water recycling program	300	
WR 3	The use of water efficient appliances	200	
WR 4	Piped water consumed	200	
WK4			

	Transportation (TR)		18%
TR 1	The ratio of total vehicles (cars and motorcycles) divided by	200	
	total campus population		
TR 2	Shuttle services	300	
TR 3	Zero Emission Vehicles (ZEV) policy on campus	200	
TR 4	The ratio of Zero Emission Vehicles (ZEV) divided by total campus population	200	
TR 5	Ratio of parking area to total campus area	200	
TR 6	Transportation program designed to limit or decrease the parking area on campus for the last 3 years (from 2015 to 2017)	200	
TR 7	Number of transportation initiatives to decrease private vehicles on campus	200	
TR 8	Pedestrian policy on campus	300	
	Total	1800	
6	Education (ED)		18%
ED 1	The ratio of sustainability courses towards total courses/subjects	300	
ED 2	The ratio of sustainability research funding towards total research funding	300	
ED 2 ED 3		300	
ED 2 ED 3 ED 4	research funding		
ED 3	research funding Sustainability publications	300	
ED 3 ED 4 ED 5	research funding Sustainability publications Sustainability events	300 300	
ED 3 ED 4 ED 5 ED 6	research funding Sustainability publications Sustainability events Sustainability student organizations	300 300 300	
ED 3 ED 4	research funding Sustainability publications Sustainability events Sustainability student organizations Sustainability website	300 300 300 200	

If you have questions or suggestions about this report, please contact



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