CERTIFICATE

This certificate is awarded to

Universiti Tun Hussein Onn Malaysia

as The 471st 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

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

Malaysia

Universiti Tun Hussein Onn Malaysia 86400 Parit Raja Batu Pahat Johor Darul Ta'zim MALAYSIA.

UNIVERSITY PROFILE

Name	:	Universiti Tun Hussein Onn Malaysia
Established	:	1993
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)	575	13 %	1500	38.33 %
Energy and Climate Change (EC)	775	17 %	2100	36.90 %
Waste (WS)	600	13 %	1800	33.33 %
Water (WR)	600	13 %	1000	60.00 %
Transportation (TR)	1,100	24 %	1800	61.11 %
Education (ED)	875	19 %	1800	48.61 %
Total Score	4,525	100 %	10000	45.25 %

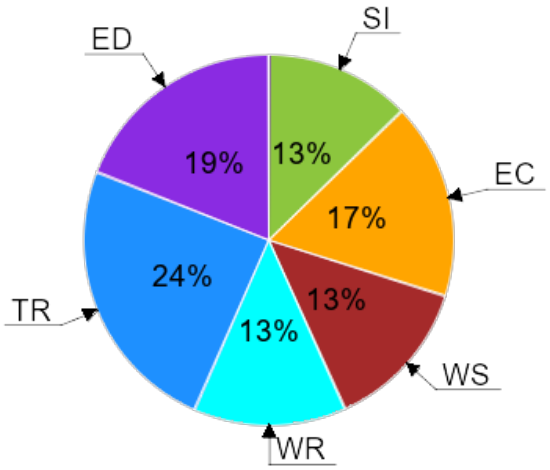


Figure 1.1 Overall Score Diagram

2. RESULTS SUMMARY

World Ranking	SI Ranking	EC Ranking	WS Ranking
471	549	547	557

WR Ranking	TR Ranking	ED Ranking
265	290	473

3. WORLD RANKINGS HISTORY

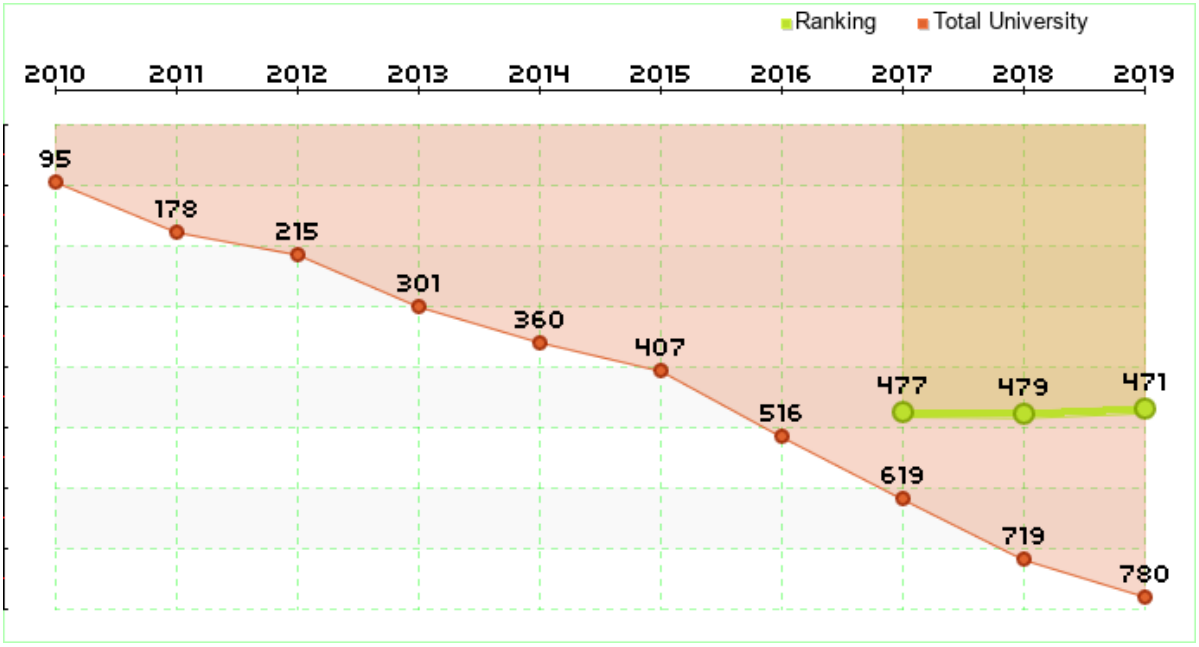


Figure 3.1 World Rankings History Diagram

4. RANKING IN MALAYSIA

Country Ranking	SI Ranking	EC Ranking	WS Ranking
16	18	12	18

WR Ranking	TR Ranking	ED Ranking
13	11	16

5. RESULTS DETAIL

Setting and Infrastructure

Indicator		Score
SI.1	The ratio of open space area towards total area	75
SI.2	Area on campus covered in forest	150
SI.3	Area on campus covered in planted vegetation	75
SI.4	Area on campus for water absorbance	100
SI.5	The ratio of open space area divided campus population	75
SI.6	University budget for sustainability effort	100

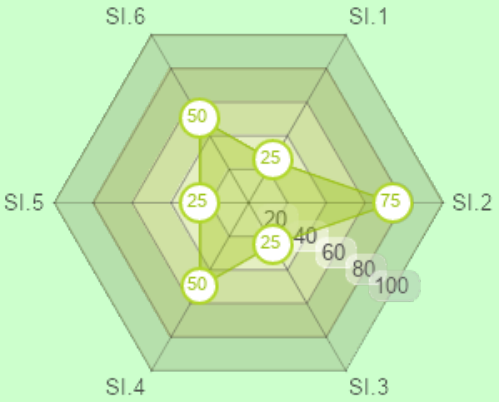


Figure 5.1 Percentage of Score to Maximum Score for Setting and Infrastructure

Energy and Climate Change

Indicator		Score
EC.1	Energy efficient appliances usage	50
EC.2	Smart building program implementation	75
EC.3	Number of renewable energy source in campus	150
EC.4	The total electricity usage divided by total campus population	75
EC.5	The ratio of renewable energy production towards total energy usage per year	0
EC.6	Element of green building implementation	150
EC.7	Greenhouse gas emission reduction program	200
EC.8	The ratio of total carbon footprint divided campus population	75

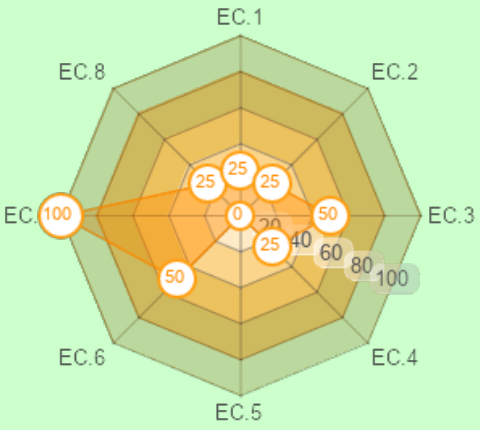


Figure 5.2 Percentage of Score to Maximum Score for Energy and Climate Change

Waste

Indicator		Score
WS.1	Recycling program for university waste	75
WS.2	Program to reduce the use of paper and plastic in campus	150
WS.3	Organic waste treatment	75
WS.4	Inorganic waste treatment	75
WS.5	Toxic waste treatment	150
WS.6	Sewerage disposal	75

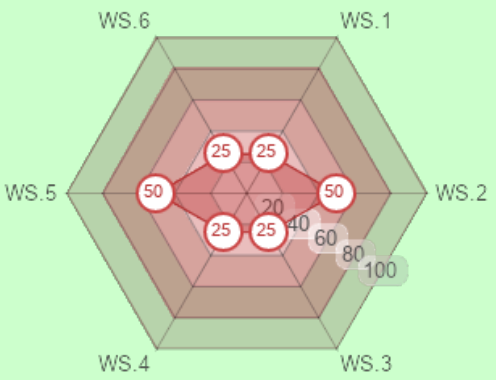


Figure 5.3 Percentage of Score to Maximum Score for Waste

Water

Indicator		Score
WR.1	Water conservation program	150
WR.2	Water recycling program	150
WR.3	The use of water efficient appliances	100
WR.4	Piped water consumed	200

Figure 5.4 Percentage of Score to Maximum Score for Water

Transportation

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

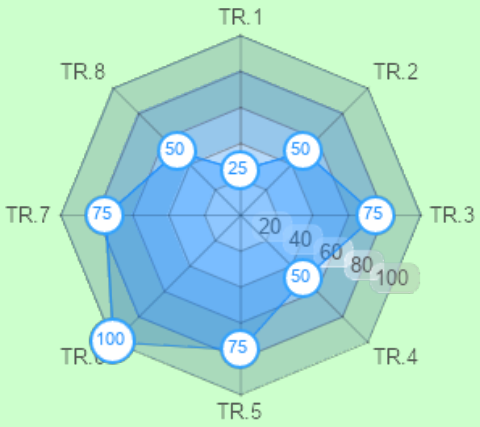


Figure 5.5 Percentage of Score to Maximum Score for Transportation

Education

Indicator		Score
ED.1	The ratio of sustainability courses towards total courses/modules	75
ED.2	The ratio of sustainability research funding towards total research funding	150
ED.3	Sustainability publications	150
ED.4	Sustainability events	150
ED.5	Sustainability student organizations	150
ED.6	Sustainability websites	100
ED.7	Sustainability report	100

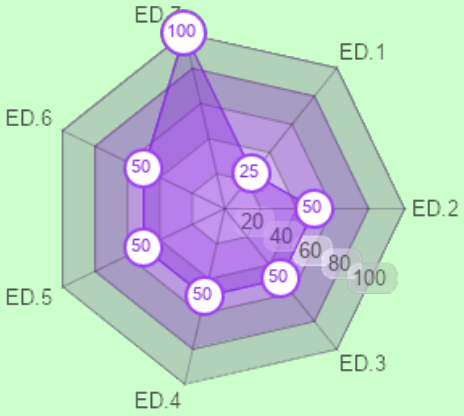


Figure 5.6 Percentage of Score to Maximum Score for Education

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

UI 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.

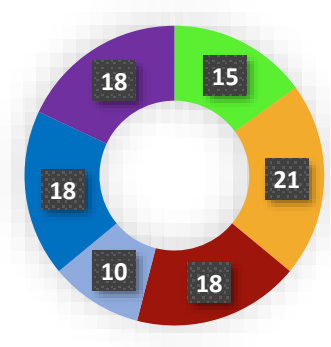
Methodology

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	
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	
	Total	**1800**	
	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	
	Total	**1000**	

	Transportation (TR)		**18%**
TR 1	The ratio of total vehicles (cars and motorcycles) divided by total campus population	200	
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 3	Sustainability publications	300	
ED 4	Sustainability events	300	
ED 5	Sustainability student organizations	300	
ED 6	Sustainability website	200	
ED 7	Sustainability report	100	
	Total	**1800**	
	TOTAL	**10000**	

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

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