



This certificate is awarded to

King Mongkuts University of Technology North Bangkok

as The 138th World's Most Sustainable University Jakarta, 19 Desember 2018



Prof. Dr. Ir. Muhammad Anis, M.Met Rector Universitas Indonesia



Prof. Riri Fitri Sari, M.M., M.Sc Chairperson of UI GreenMetric





Fact File 2018

King Mongkuts University of Technology North Bangkok

THAILAND

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UNIVERSITY PROFILE

Name : King Mongkuts University of

Technology North Bangkok

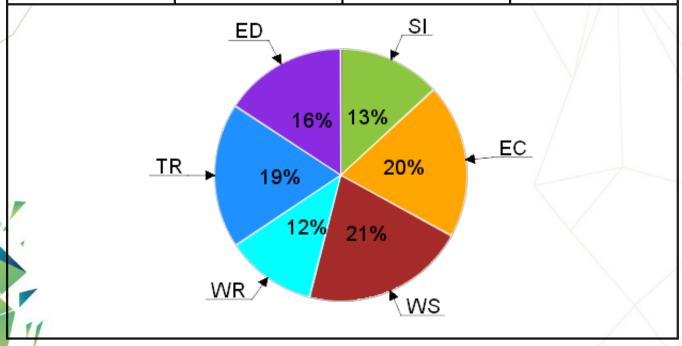
Established: 1959

Country : Thailand



VERIFIED DATA

Category	Point	Maximum Point	Percentage
Setting and Infrastructure (SI)	800	1500	53.33 %
Energy and Climate Change (EC)	1,200	2100	57.14 %
Waste (WS)	1,275	1800	70.83 %
Water (WR)	700	1000	70.00 %
Transportation (TR)	1,125	1800	62.50 %
Education (ED)	975	1800	54.17 %
Total Score	6,075	10000	60.75 %

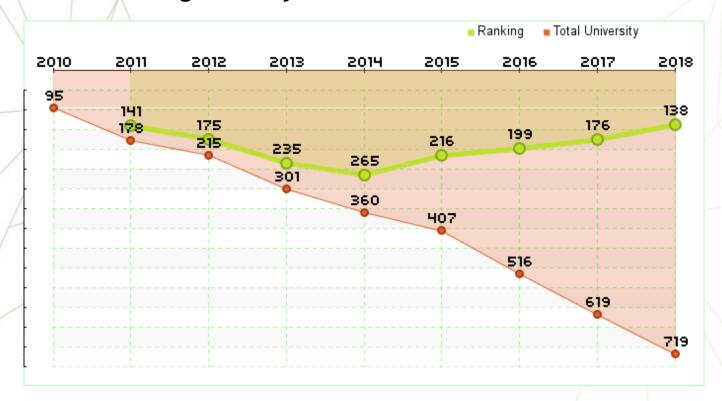


Result Summary





World Rankings History



Ranking in Thailand



SI Ranking	EC Ranking	WS Ranking	
20	3	3	
WR Ranking	TR Ranking	ED Ranking	
6	7	15	

Result Detail

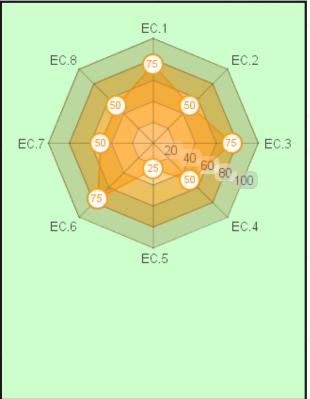
Setting and Infrastructure

Indicator		Score
SI.1	SI.1 The ratio of open space area towards total area	
SI.2	Area on campus covered in forest	100
SI.3	Area on campus covered in planted vegetation	225
SI.4	Area on campus for water absorbance	150
SI.5	The ratio of open space area divided campus population	150
SI.6	University budget for sustainability effort	100



Energy and Climate Change

Indicator		Score
EC.1	EC.1 Energy efficient appliances usage	
EC.2	EC.2 Smart building program implementation	
EC.3	Number of renewable energy source in campus	225
EC.4	EC.4 The total electricity usage divided by total campus population	
EC.5 The ratio of renewable energy production towards total energy usage per year		50
EC.6	Element of green building implementation	225
EC.7	Greenhouse gas emission reduction program	100
EC.8	The ratio of total carbon footprint divided campus population	150



Waste

	Indicator		
WS.1	WS.1 Recycling program for university waste		
WS.2	WS.2 Program to reduce the use of paper and plastic in campus		
WS.3	Organic waste treatment	150	
WS.4	Inorganic waste treatment	225	
WS.5	Toxic waste treatment	150	
WS.6	Sewerage disposal	300	



Water

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



Transportation

		Indicator	Score	TR.1
	TR.1	The ratio of total vehicles (cars and motorcycles) divided by total campus population	150	TR.8 75 TR.2
_	TR.2	Shuttle services	150	50
	TR.3	Zero Emission Vehicles (ZEV) policy on campus	100	TR.7 75 20 40 60 90 TR.3
	TR.4	The ratio of Zero Emission Vehicles (ZEV) divided by total campus population	100	75 50 80 100 TR.6 TR.4
\	TR.5	Ratio of parking area to total campus area	100	TR.5
	TR.6	Transportation program designed to limit or decrease the parking area on campus for the last 3 years	150	
/	TR.7	Number of transportation initiatives to decrease private vehicles on campus	150	
/	TR.8	Pedestrian policy on campus	225	

Education

	Indicator	Score	ED 7
ED.1	The ratio of sustainability courses towards total courses/modules	150	ED.7
ED.2	The ratio of sustainability research funding towards total research funding	225	ED.6 50 50
ED.3	Sustainability publications	150	20 40 60 ED.2
ED.4	Sustainability events	ents 150	ED.5 50 80 100
ED.5	Sustainability student organizations	150	ED.3
ED.6	Sustainability websites	100	ED.4
ED.7	Sustainability report	50	



UI GreenMetric World University Rankings

About UI GreenMetric

UI GreenMetric World University Rankings is an annual publication of university rankings by UI GreenMetric. UI GreenMetric World University Rankings is a program from University of Indonesia that rank universities by their commitment and action towards going green and environmental sustainability. UI GreenMetric World University Rankings aims to increase awareness in universities towards sustainability.

History

In 2009 University of Indonesia hosted an International Conference on World University Rankings. The conference attended by World University rankers such as Webometrics, HEEACT, and others. In 2010, Prof. Dr. Gumilar Rusliwa Somantri as Rector of 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. Prof. Ir. Gunawan Tjahjono formulated UIGM Questionnaire and introduced UI Ranking to the world. In 2011, it added 11 new indicators in 5 categories and Education as category in 2012. By the year 2015, a massive improvement was introduced including carbon footprint and a more systematic data collection. UIGM took Policy into Action in 2016, Global Partnership for Sustainable Future in 2017 and Universities, Impacts, and Sustainable Development Goals (SDGs) in 2018 as its annual themes. To reach and coordinate more participating universities, UI GWURN was established in 2017 with a national coordinator in each country. To date, 719 universities from 81 countries participate in the rankings.

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 developed its own ranking system by studying other ranking systems such as: The Times Higher Education World University Rankings (THE) sponsored by

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

UI GreenMetric Rankings

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.

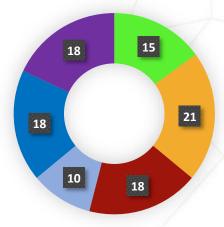
Methodology

UI GreenMetric collect data through online questionnaire. All participant answered same question for some period of time. After questionnaire close, UI GreenMetric expert member validate the answer based on evidence that participant provide.

This year's categories and weighting of points are shown as follows.

Table 1 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
1	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 2. Each indicator has been uniquely identified by a category code and a number (e.g. SI 5).

Table 2 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	
1	•••		
EC 4	The total electricity usage divided by total campus population	300	
EC 5	The ratio of renewable energy production towards total	200	
// \	energy usage per year		
EC 6	Element of green building implementation	300	
EC 7	Greenhouse gas emission reduction program	200	
EC 9		200	
EC 8	The ratio of total carbon footprint divided campus population	300	- W
	Total	2100	J.
	\		1/
	Waste (WS)		18%
WS 1	Recycling program for university waste	300	XX.
WS 2	Program to reduce the use of paper and plastic in campus	300	1 N
WS 3	Organic waste treatment	300	y \
WS 4	Inorganic waste treatment	300	
WS 5	Toxic waste treatment	300	
WS 6	Sewerage disposal	300	
112 0	Total	1800	
			\. /
	Water (WR)		10%
WR 1	Water conservation program	300	20,0
WR 2	Water recycling program	300	\ //
	1 2 2 2		- 1
WR 3	The use of water efficient appliances	200	У.
WR 4	Piped water consumed	200	
	Total	1000	A
	~ · · · · ·	1000	1
	Transportation (TR)		18%
TR 1	The ratio of total vehicles (cars and motorcycles) divided by	200	20 / 0
	total campus population	200	
TR 2	Shuttle services	200	N
TR 3	Zero Emission Vehicles (ZEV) policy on campus	200	1
TR 4	The ratio of Zero Emission Vehicles (ZEV) divided by total	200	
	campus population		. 7
TR 5	Ratio of parking area to total campus area	200	
TR 6	Transportation program designed to limit or decrease the	200	
	parking area on campus for the last 3 years (from 2015 to		
	2017)		
TR 7	Number of transportation initiatives to decrease private	300	
	vehicles on campus		/
TR 8	Pedestrian policy on campus	300	1
110	1 7 1		

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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