



# Certificate

This certificate is awarded to

## Universita Degli Studi Di Cagliari

as The 392<sup>nd</sup> World's Most Sustainable University in 2021 UI GreenMetric World University Rankings

Jakarta, 14 December 2021



Prof. Ari Kuncoro, S.E., M.A., Ph.D Rector of Universitas Indonesia



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





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# FACT FILE 2021 UI GREENMETRIC WORLD UNIVERSITY RANKINGS

# UNIVERSITA DEGLI STUDI DI CAGLIARI

Italy

Via Universita, 40, 09124 Cagliari, Italy



#### **UNIVERSITY PROFILE**

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Name : Universita Degli Studi Di Cagliari

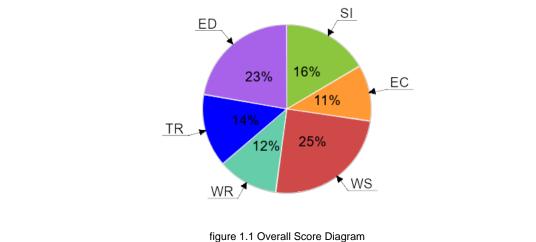
Established: 1970

Country : Italy



## 1. VERIFIED DATA

Category	Point	Maximum Point	Percentage
Setting and Infrastructure (SI)	1,000	1500	66.67 %
Energy and Climate Change (EC)	650	2100	30.95 %
Waste (WS)	1,500	1800	83.33 %
Water (WR)	700	1000	70.00 %
Transportation (TR)	850	1800	47.22 %
Education (ED)	1,375	1800	76.39 %
Total Score	6,075	10000	60.75 %
	ED 23%	16% 5I	



#### 2. RESULTS SUMMARY

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#### 3. WORLD RANKINGS HISTORY



Figure 3.1 World Rankings History Diagram

#### 4. RANKING IN ITALY

Country Ranking	SI Ranking	EC Ranking	WS Ranking
	14	29	18
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	WR Ranking	TR Ranking	ED Ranking
	17	30	19

#### 5. RESULTS DETAIL

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#### **Setting and Infrastructure**

	Indicator	Score
SI.1	The ratio of open space area towards total area	100
SI.2	Area on campus covered in forest	25
SI.3	Area on campus covered in planted vegetation	50
SI.4	Area on campus for water absorbance	50
SI.5	The ratio of open space area divided campus population	200
SI.6	University budget for sustainability effort	200
SI.7	Percentage of operation and maintenance activities of building during Covid-19 pandemic	50
SI.8	Campus facilities for disabled, special needs and or maternity care	100
SI.9	Security and safety facilities	50
SI.10	Health infrastructure facilities for students, academics and administrative staff's wellbeing	100
SI.11	Conservation: plant, animal and wildlife, genetic resources for food and agriculture secured in either medium or long-term conservation facilities	75

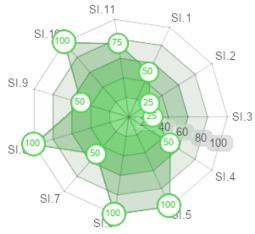


Figure 5.1 Percentage of Score to Maximum Score for Setting and Infrastructure

#### **Energy and Climate Change**

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	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	75	
EC.4	The total electricity usage divided by total campus population	0	
EC.5	The ratio of renewable energy production towards total energy usage per year	0	
EC.6	Element of green building implementation	100	
EC.7	Greenhouse gas emission reduction program	200	
EC.8	The ratio of total carbon footprint divided campus population	0	
EC.9	Number of innovative program(s) during covid-19 pandemic	50	
EC.10	Impactful university program(s) on climate change	100	

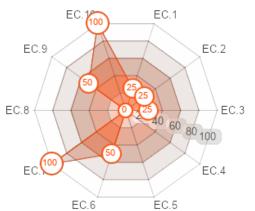


Figure 5.2 Percentage of Score to Maximum Score for Energy and Climate Change

#### Waste

	Indicator	Score
WS.1	Recycling program for university waste	225
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	75

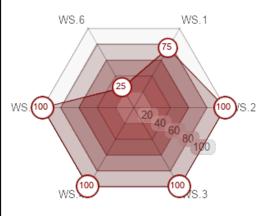


Figure 5.3 Percentage of Score to Maximum Score for Waste

#### Water

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	Indicator	Score	WR.1
WR.1	Water conservation program	100	
WR.2	Water recycling program	100	WR 100
WR.3	The use of water efficient appliances	100	50 WR.2
WR.4	Piped water consumed	200	20 40 60 00
WR.5	Percentage of additional handwashing and sanitation facilities during Covid-19 pandemic	200	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	0	TR.2
TR.2	Shuttle services	0	TR.100 TR.3
TR.3	Zero Emission Vehicles (ZEV) policy on campus	100	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	100	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	50	
TR.7	Number of transportation initiatives to decrease private vehicles on campus	200	
TR.8	Pedestrian policy on campus	300	

#### **Education**

	Indicator	Score
ED.1	The ratio of sustainability courses towards total courses/modules	225
ED.2	The ratio of sustainability research funding towards total research funding	200
ED.3	Sustainability publications	150
ED.4	Sustainability events	200
ED.5	Sustainability student organizations	200
ED.6	Sustainability websites	50
ED.7	Sustainability report	25
ED.8	Sustainability report	100
ED.9	Sustainability report	100
ED.10	Sustainability report	100
ED.11	Sustainability report	25

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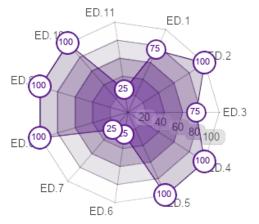


Figure 5.6 Percentage of Score to Maximum Score for Education



## 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 have 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 assessors.

UIGM took Policy into Action in 2016; Global Partnership for Sustainable Future in 2017; Universities, Impacts, and Sustainable Development Goals (SDGs) in 2018; Sustainable University in a Changing World: Lessons, Challenges and Opportunities in 2019; Universities' Responsibility for Sustainable Development Goals and World's Complex Challenges in 2020; and Universities, UI GreenMetric, and SDGs in the Time of Pandemic in 2021 as its annual themes. In 2021, 956 universities from 80 countries participate in the rankings.

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 32 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.

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
2020	Three new questions
	on social and economic
	impacts, such as (1)
	Startup for the green
	economy; (2) Public access
	to open spaces; (3)
	Community services
2021	Introducing social, cultural,
	economic, and pandemic
	aspects in the questionaire

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. 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	CRITERIA	Point	Weighting
1	Setting and Infrastructure (SI)		15%
SI1	The ratio of open space area to total area	200*	
SI2	Total area on campus covered in forest vegetation	100*	
SI3	Total area on campus covered in planted vegetation	200*	
SI4	Total area on campus for water absorption besides the forest and planted vegetation	100*	
SI5	The total open space area divided by total campus population	200*	
SI6	Percentage of university budget for sustainability efforts	200	
SI7	Percentage of operation and maintenance activities of building during Covid-19 pandemic	100*	
SI8	Campus facilities for disabled, special needs and or maternity care	100*	
SI9	Security and safety facilities	100*	
SI10	Health infrastructure facilities for students, academics and administrative staff's wellbeing	100*	
SI11	Conservation: plant, animal and wildlife, genetic resources for food and agriculture secured in either medium or long-term conservation facilities	100*	
	Total	1500	
2	Energy and Climate Change (EC)		21%
EC1	Energy efficient appliances usage	200	
EC2	Smart building implementation	300	
EC3	Number of renewable energy sources on campus	300	
EC4	Total electricity usage divided by total campus' population (kWh per person)	300	
EC5	The ratio of renewable energy production divided by total energy usage per year	200	
EC6	Elements of green building implementation as reflected in all construction and renovation policies	200*	
EC7	Greenhouse gas emission reduction program	200	
EC8	Total carbon footprint divided by total campus' population (metric tons per person)	200*	
EC9	Number of innovative program(s) during covid-19 pandemic	100*	

EC10	Impactful university program(s) on climate change	100*	
	Total	2100	
3	Waste (WS)		189
WS1	Recycling program for university's waste	300	
WS2	Program to reduce the use of paper and plastic on campus	300	
WS3	Organic waste treatment	300	
WS4	Inorganic waste treatment	300	
WS5	Toxic waste treatment	300	
WS6	Sewage disposal	300	
	Total	1800	
4	Water (WR)		109
WR1	Water conservation program & implementation	200*	
WR2	Water recycling program implementation	200*	
WR3	Water efficient appliances usage	200	
WR4	Consumption of treated water	200	
WR5	Percentage of additional handwashing and sanitation facilities during Covid-19	200*	
TVILO	pandemic	200	
	Total	1000	
5	Transportation (TR)		189
TR1	The total number of vehicles (cars and motorcycles) divided by total campus'	200	
	population		
TR2	Shuttle services	300	
TR3	Zero Emission Vehicles (ZEV) policy on campus	200	
TR4	The total number of Zero Emission Vehicles (ZEV) divided by total campus	200	
TR5	population  Ratio of ground parking area to total campus' area	200	
TR6	Program to limit or decrease the parking area on campus for the last 3 years (from	200	
	2018 to 2020)	200	
TR7	Number of initiatives to decrease private vehicles on campus	200	
TR8	Pedestrian path on campus	300	
	Total	1800	
6	Education and Research (ED)		189
ED1	The ratio of sustainability courses to total courses/subjects	300	
ED2	The ratio of sustainability research funding to total research funding	200*	
ED3	Number of scholarly publications on sustainability	200*	
ED4	Number of events related to sustainability	200*	
ED5	Number of student organizations related to sustainability	200*	
ED6	University-run sustainability website	200	
ED7	Sustainability report	100	
ED8	Number of cultural activities on campus	100*	
ED9	Number of university program(s) to cope with Covid-19 pandemic	100*	
ED10	Number of sustainability community services project organized and/or involving students	100*	
		100*	
ED11	Number of sustainability-related startups	100	

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