

# UI GreenMetric

## World University Rankings

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Diskusi Pojok Iklim  
Ruang Rapat Utama KLHK, 19 Januari 2017



# Introduction

- What is UI GreenMetric World University Rankings?
- What is the methodology?
- What are the impacts?
- What's next?



# What is UI GreenMetric World University Rankings?





## Basic Principles of UI GreenMetric WUR

- Open to global participation
- Accessible to HEIs in both the developed and developing world
- Contribute to academic discourse on sustainability in education and the greening of campuses
- Encourage university-led social change with regard to sustainability goals.



# Objectives of UI GreenMetric WUR

## Objective 1

To encourage universities in the world to look and self assess their policies and direction in relation with the effort to combat global climate change:

- Setting and Infrastructure
- Energy
- Water
- Waste
- Transportation
- Education



## **Objective 2**

To provide the result of online survey regarding the current conditions and policies related to Green Campus and sustainability in the universities all over the world.



## **Objective 3**

Involving all stakeholders to change their behaviors in order to keep a sustainable environment.





# UI GreenMetric Team

**Chairperson**

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



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Dr. Nyoman Suwartha, S.T., M.T., M.Agr



**Expert member**

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**Communication and administration**

Arsy Imanda N.R., S.Si



**Communication and administration**

Hastin Setiani, S.Si





# What is the methodology?

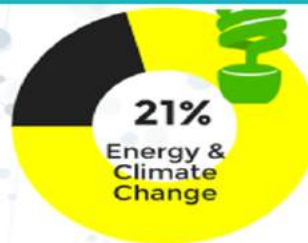
## Criteria & Indicator



In 2015, UI GreenMetric has six categories.



The aim is to trigger the participating university to provide more space for greenery and in safeguarding environment, as well as the development of sustainable energy.



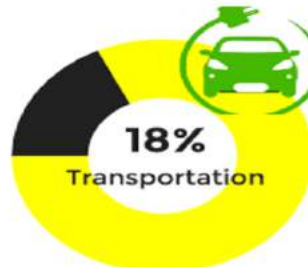
With this indicator, universities are expected to increase the effort in energy efficiency on their building and to care more about nature and energy resources.



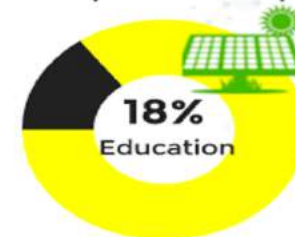
Some programs and waste treatments should be among the concern of the university, i.e. recycling program, toxic waste recycling, organic waste treatment, inorganic waste treatment, sewerage disposal, policy to reduce the use of paper and plastic in campus.



The aim is that universities can decrease water usage, increase conservation program, and protect the habitat.



Transportation policy to limit the number of motor vehicles in campus, the use of campus bus and bicycle will encourage a healthier environment.



This expansion of the criteria based on the thought that university has an important role in creating the new generation concern with sustainability.



# Scoring by criteria and indicators

No	Categories & Indicators	Points
<b>1</b>	<b>SETTING &amp; INFRASTRUCTURE</b>	<b>15%</b>
SI 1	The ratio of open space area towards total area	300
SI 2	The ratio of open space area towards campus population	300
SI 3	Area on campus covered in forested vegetation	200
SI 4	Area on campus covered in planted vegetation	200
SI 5	Area on campus covered in non-retentive surfaces	300
SI 6	University budget for sustainable effort	200



# Scoring by criteria and indicators

No	Categories & Indicators	Points
<b>2</b>	<b>ENERGY &amp; CLIMATE CHANGE</b>	<b>21%</b>
EC 1	Energy efficient appliances usage	200
EC 2	Smart building program implementation	300
EC 3	Renewable energy usage policy	300
EC 4	The ratio of total electricity usage towards campus population	300
EC 5	The ratio of renewable energy produce towards energy usage	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 towards campus open space area and population	200



# Scoring by criteria and indicators

No	Categories & Indicators	Points
<b>3</b>	<b>WASTE</b>	<b>18%</b>
WS 1	Program to reduce the use of paper and plastic in campus	300
WS 2	Recycling program for university waste	300
WS 3	Toxic waste handled	300
WS 4	Organic waste treatment	300
WS 5	Inorganic waste treatment	300
WS 6	Sewerage disposal	300
<b>4</b>	<b>WATER</b>	<b>10%</b>
WR 1	Water conservation program	300
WR 2	Water recycling program	300
WR 3	The use of water efficient appliances	200
WR 4	Treated water consumed	200





# Scoring by criteria and indicators

No	Categories & Indicators	Points
<b>5</b>	<b>TRANSPORTATION</b>	<b>18%</b>
TR 1	The ratio of vehicles (cars and motorcycles) towards campus population	200
TR 2	The ratio of campus bus services towards campus population	200
TR 3	The ratio of bicycles found towards campus population	200
TR 4	Parking Area Type	200
TR 5	Initiatives to decrease private vehicles on campus	200
TR 6	Parking area reduction for private vehicles within 3 years (from 2013 to 2015)	200
TR 7	Campus bus service	300
TR 8	Bicycle and pedestrian policy on campus	300



# Scoring by criteria and indicators

No	Categories & Indicators	Points
<b>6</b>	<b>EDUCATION</b>	<b>18%</b>
ED 1	The ratio of sustainability courses towards total courses	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 organizations (student)	300
ED 6	Sustainability website	300



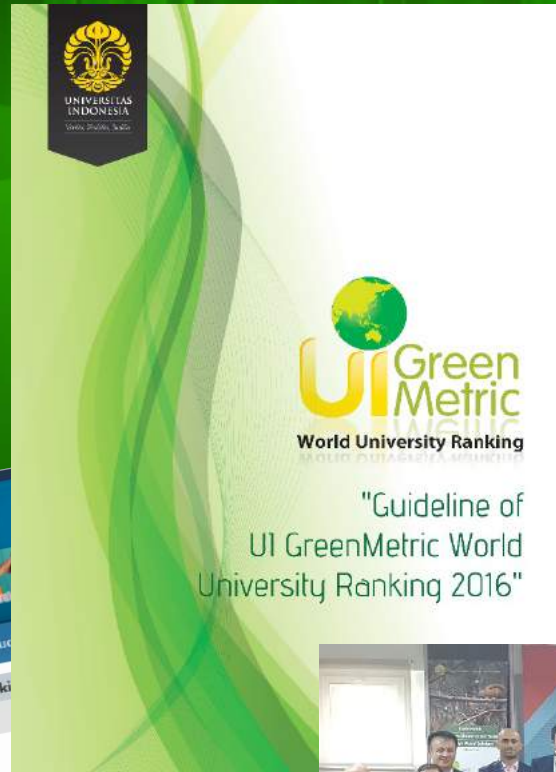
# Instrument Improvements in 2016 - More 'objective' measurement

- 54 Questions, 34 Indicators, 6 Criteria
- Self-report on the evaluation of the percentage of achievement rather than reporting on current status (in initial implementation/Program implemented with some problems/Program in full implementation)
- Keeping track of the development of:
  - types and size of renewable energy self produced by the university
  - coverage of smart buildings in campus
  - the provision of environmentally friendly transportation
  - reduction of waste produce,
  - reduction of carbon footprint
  - Efforts for Global Sustainable Campus to empower innovation for sustainability in Global Campuses
- Revision for 'most asked' questions
- 10 modified questions
- Add more information in the guidelines
- Friendly step by step with guideline data submission systems





# What are the Impacts?





## 2016 Network

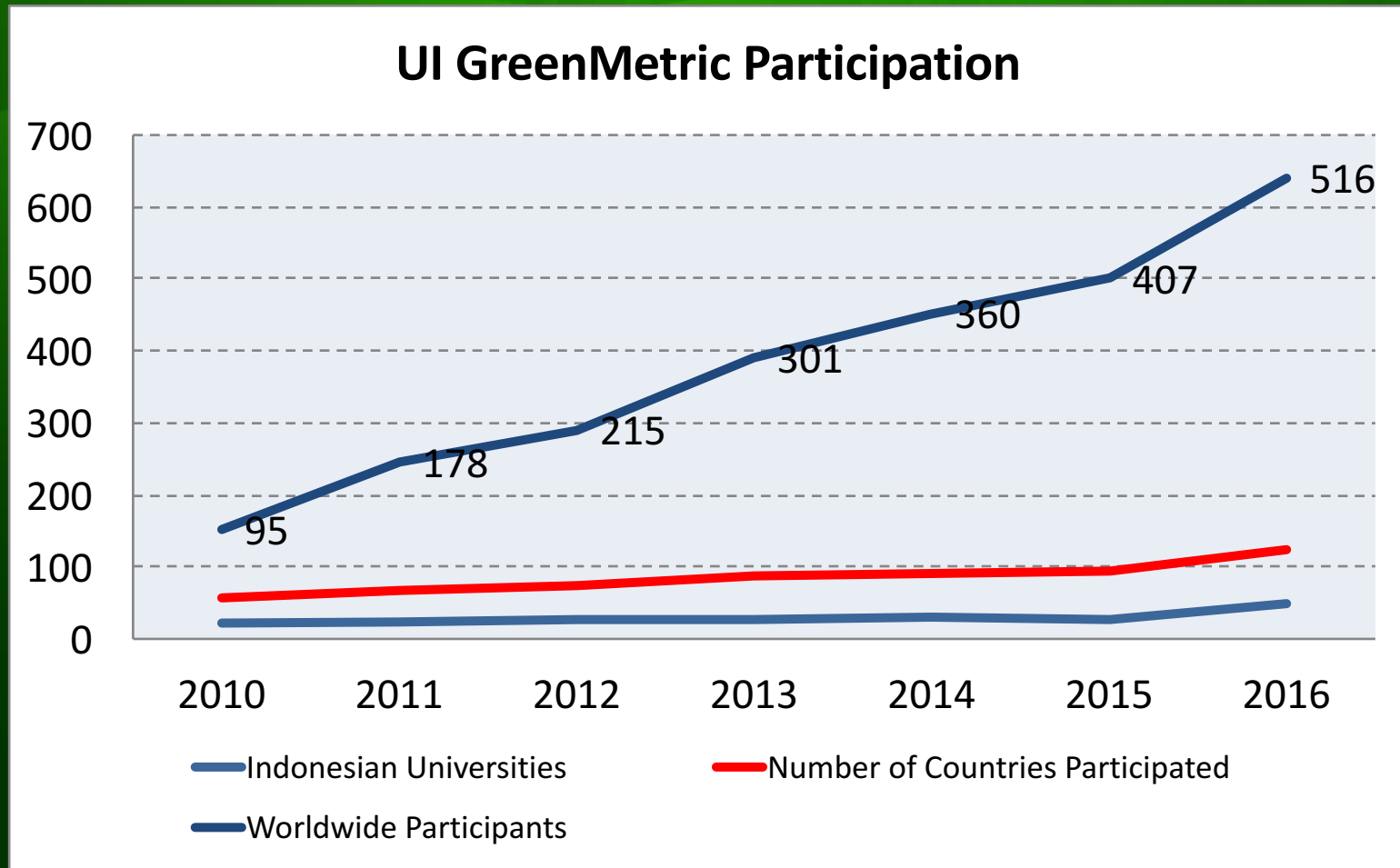
- 515 universities from 74 countries
- 1.537.789 faculty members
- 16.500.614 students
- More than US\$ 48.892.548.416 total research fund on environment and sustainability
- Participating institutions located on the dynamic, and diverse Asia, Europe, Africa, Australia, America and Oceania.



# Distribution



# Increasing Participants



# World Top 20 UI GreenMetric Rankings 2016

UNIVERSITY	NATION	TOTAL SCORE	RANKING
University of California Davis	US	8,398.24	1
University of Nottingham	UK	8,079.60	2
Wageningen University & Research	Netherland	7,658.88	3
University of Connecticut	US	7,602.26	4
University of Oxford	UK	7,591.19	5
Universitat Fur Bodenkultur Wien	Austria	7,386.60	6
Keele University	UK	7,254.52	7
University of California Berkeley	US	7,156.79	8
Nottingham Trent University	UK	7,126.41	9
Newcastle University	UK	7,081.76	10
University of North Carolina Chapel Hill	US	7,051.26	11
University College Cork	Ireland	7,036.84	12
Georgia Institute of Technology	US	7,026.94	13
Universitat Autònoma de Barcelona	Spain	6,986.14	14
University of Groningen	Netherland	6,950.72	15
Bangor University	UK	6,925.15	16
University of Bradford	UK	6,906.29	17
Université De Sherbrooke	Canada	6,906.10	18
Delft University of Technology Tu Delft	Netherland	6,892.17	19
Freie Universität Berlin	Germany	6,886.53	20



# Indonesia Top 25 UI GreenMetric Rankings 2016

UNIVERSITY	TOTAL SCORE	RANKING
University of Indonesia	6571.73	1
Institut Teknologi Sepuluh Nopember	6370.5	2
Bogor Agricultural University	6173.38	3
Diponegoro University	5995.33	4
Universitas Sebelas Maret	5960.9	5
Universitas Negeri Semarang	5738	6
Brawijaya University	5562.1	7
Universitas Padjadjaran	5341.38	8
Institute of Technology Bandung	5294.43	9
Universitas Andalas	5156	10
Telkom University	5123	11
Universitas Islam Indonesia	5112.76	12
Universitas Bengkulu	4671	13
Universitas Riau	4532.41	14
Universitas Mataram	4434	15
Universitas Multimedia Nusantara	4207.04	16
Universitas Lampung	4082.74	17
Universitas Syiah Kuala	3961.4	18
Hasanuddin University	3876.02	19
Universitas Negeri Medan	3774.96	20
Universitas Haluoleo	3646.76	21
Universitas Negeri Surabaya	3615.44	22
Universitas Teuku Umar	3547.04	23
Universitas Sam Ratulangi	3427.93	24
Universitas Sriwijaya	3373	25



# International Workshop on UI GreenMetric 2013





# The 2<sup>nd</sup> International Workshop on UI GreenMetric 2016



# Reference point for Thailand Universities



Sustainability at  
**KMUTT**

Green University 

Home

Overview

Green Infrastructure

Energy and Climate Change

Waste

Water

Transportation

Education and Learning

The use of water efficient appliances

Treated water consumed

Water conservation program

Water recycling program





# Sustainability News at UCC Ireland

Sustainability



## UCC placed second in UI Greenmetric world university ranking

20.01.2015

Categories: [Energy](#), [Renewables](#), [Waste](#), [Water](#), [Education](#)

Tags: [UCC](#)

Share: [Tweet](#) 24

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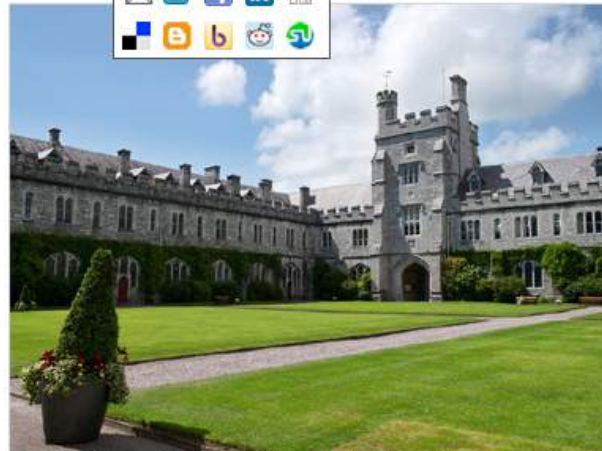
University College Cork (UCC) has been ranked second in the world overall for the second consecutive year in the Universitas Indonesia (UI) Greenmetric World University Ranking.

UCC was also placed second in the 'Urban' campus setting category.

Now in its fifth year, the UI Greenmetric World University ranking compares the efforts of universities in their campus sustainability and environment friendly university management, with 360 universities from 62 countries ranked this time around.

University of Nottingham in UK was placed first overall, followed by UCC and Nottingham Trent University in the UK in third.

Other universities making the overall top ten overall include University of California, Davis (4), University of Oxford (5), University of Connecticut (7) and University of California, Berkeley (9).



UCC placed second in Greenmetric world university ranking

Our goal is 2,000 man hours volunteered worldwide in 2014.

[To find out more](#)

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# Sustainability News at University of Connecticut

**UConn Today** Site UConn Health UConn

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## UConn Earns Top Score in Third Annual GreenMetric World Ranking

January 16, 2013 By: [Sheila Foran](#) Category: [News & Life](#)

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The University of Connecticut tops 215 universities from 49 countries listed in Universitas Indonesia's third annual GreenMetric World Ranking. UConn moved up to first place from third last year with a score of 7,569 points, and was followed by last year's 'greenest college,' the University of Nottingham, England, with 7,375, and University College Cork/National University of Ireland with 7,301.



Results were computed from information that participating universities submitted online. For 2012, responses were evaluated in six weighted categories including: green statistics (15 percent); energy and climate change (21 percent); waste management (18 percent); water usage (10 percent); transportation (18 percent); and education (18 percent).

President Susan Herbst says she is proud of UConn's top ranking on the international GreenMetric list because it reflects the University's long-term commitment to environmental stewardship.

"It's great to be number one," she says, "but our commitment is about much more than rankings. It's

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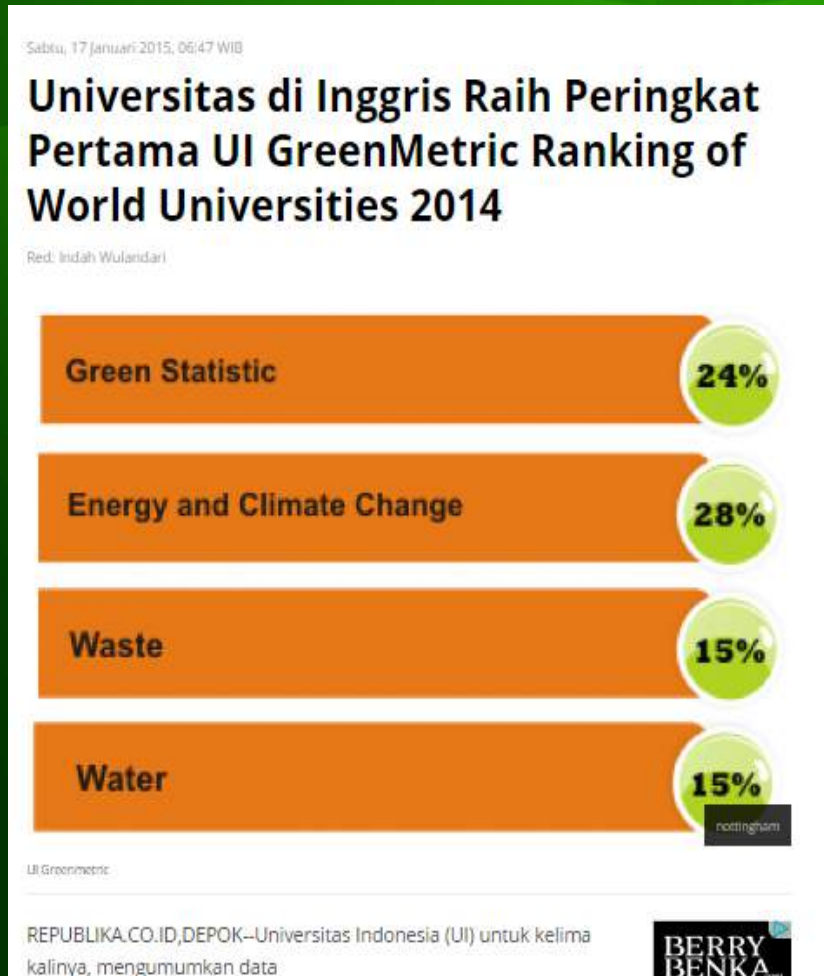
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May 22, 2015

**Common Gene Mutation May Raise Risk of Heart Disease**  
May 21, 2015





# UI GreenMetric Publication : National Media



15/01/16/65/1093255/ini-dia-kampus-terhijau-di-dunia

OKEZONE.COM NEWS FINANCE LIFESTYLE CELEBRITY BOLA HAJI MUSLIM SPORTS

## Ini Dia Kampus Terhijau di Dunia

Nottingham University dinobatkan sebagai kampus hijau terbaik di dunia versi UI GreenMetric. (Foto: dok. University of Nottingham)

Marieska Harya Virdhani  
Jurnalis

Terima kasih atas masukan Anda!  
[Kembali](#)

Kami akan meninjau iklan ini untuk meningkatkan pengalaman Anda di masa mendatang.

Bantu kami menampilkan iklan yang lebih baik

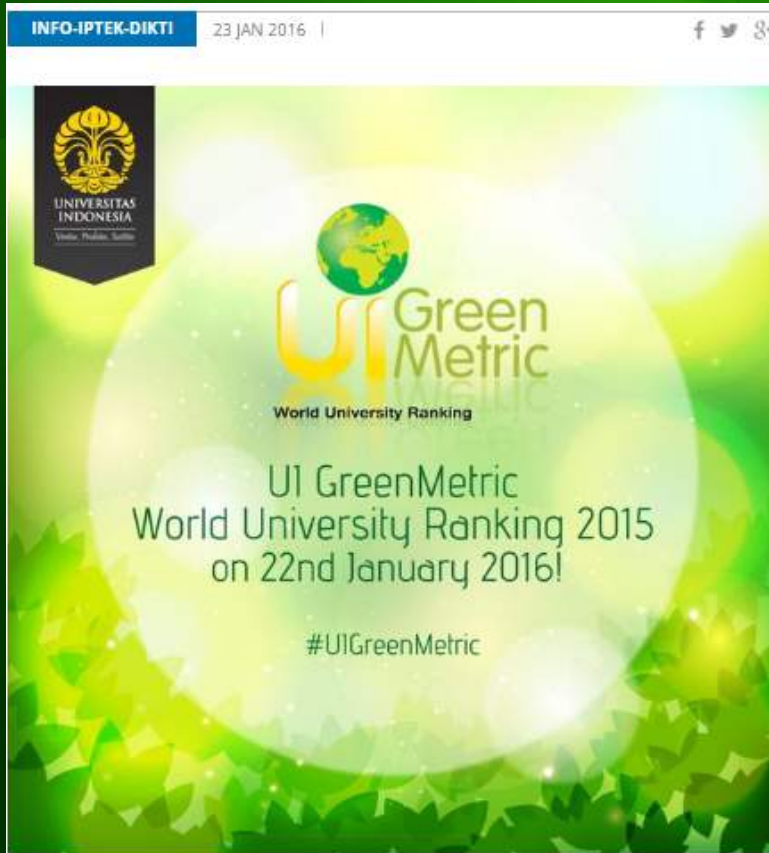
DEPOK - Universitas Indonesia (UI) mengumumkan data pemeringkatan perguruan tinggi terbaik di dunia yang memiliki komitmen tinggi dalam pengelolaan lingkungan hidup kampus, UI GreenMetric Ranking of World Universities 2014. Ini adalah tahun kelima UI menyelenggarakan pemeringkatan tersebut.

Perguruan tinggi Inggris mendominasi 10 besar dengan University Of Nottingham di puncak daftar. Raihan skor 7.803,07 menjadikan Nottingham sebagai kampus hijau terbaik di dunia. Pada peringkat kedua

0 Komentar



# UI GreenMetric Publication : National Media



Jumat (22/1/2015), bertempat di Integrated Faculty Club, Kampus UI Depok, UI mengumumkan peringkat-peringkat teratas kampus ter hijau di dunia versi UI GreenMetric.





# UI GreenMetric Publication : International Media

## UCC is world's fourth most 'sustainable university'

Global index ranks institutions based on 'environmentally-friendly' infrastructure

© Wed, Jan 27, 2016, 11:07 | Updated: Wed, Jan 27, 2016, 12:57

Olivia Kelleher



UCC is on its way to achieving energy-reduction targets of 33 per cent by 2030, according to Mark Poland, director of buildings and estates. Photograph: Matt Kavanagh



# UI GreenMetric Publication : on IREG website

## ■ University of Indonesia hosted 20 Rectors interested in Sustainability Ranking

More than 26 universities from 16 countries top officials gathered in Jakarta Indonesia, on April 21<sup>st</sup> 2016 to present their achievements in providing World Class University Infrastructure and in fostering sustainable culture. Universitas Indonesia (UI), as the initiator of the first university ranking in the world hosted this second International Workshop on UI GreenMetric entitled "Fostering Sustainable Culture in Global Universities" (<http://iwgm.ui.ac.id>). University of Indonesia is an IREG Member since 2012.



*Participants of the 2<sup>nd</sup> IWGM Workshop in Jakarta*

## IREG Events



## IREG Initiatives



### IREG List of International Academic Awards

With the fast development of science and technology, as well as the internationalization of scientific activities, international academic awards have been more and more popular and influential. Numerous international academic awards





# UI GreenMetric Publication : on THE website

## The 20 "greenest" universities in the world

UK and US dominate GreenMetric Ranking of World Universities 2014 results

February 10, 2015



The University of Nottingham has topped a list of 360 institutions in the GreenMetric Ranking of World Universities 2014, as revealed in *Times Higher Education* earlier this month.

But which other universities make it into the top 20 of this table of "green" credentials? The University of Indonesia-produced ranking encompasses 62 categories, including transport, energy and climate change, waste management and education about green issues, and Nottingham also came top in both 2013 and 2011.



# UI GreenMetric Publication : article in Forbes

Forbes  LOG IN

## YOUR READING LIST

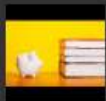


University Rankings: How Important Are They?

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Indian Budget Hotel Chain - FabHotels - Is Expanding Rapidly

development projects involving education, environment and gender.

**The newly released QS University Rankings form one of the few global rankings of universities. How many such lists exist to rank universities around the world?**

There are four or five university ranking systems that take a global approach. They are QS "World University Ranking"; Times Higher Education World University Ranking; Academic Ranking of World Universities (ARWU – often referred to as the "Shanghai Jiao Tong" ranking because it is produced by a unit at



Nello Angerilli

Shanghai Jiao Tong University); the CWTS Leiden Ranking and the Webometrics Ranking. There is also an interesting one that ranks universities around the world in terms of their environmental sustainability: the UI GreenMetric World University Ranking created and compiled by the University of Indonesia.

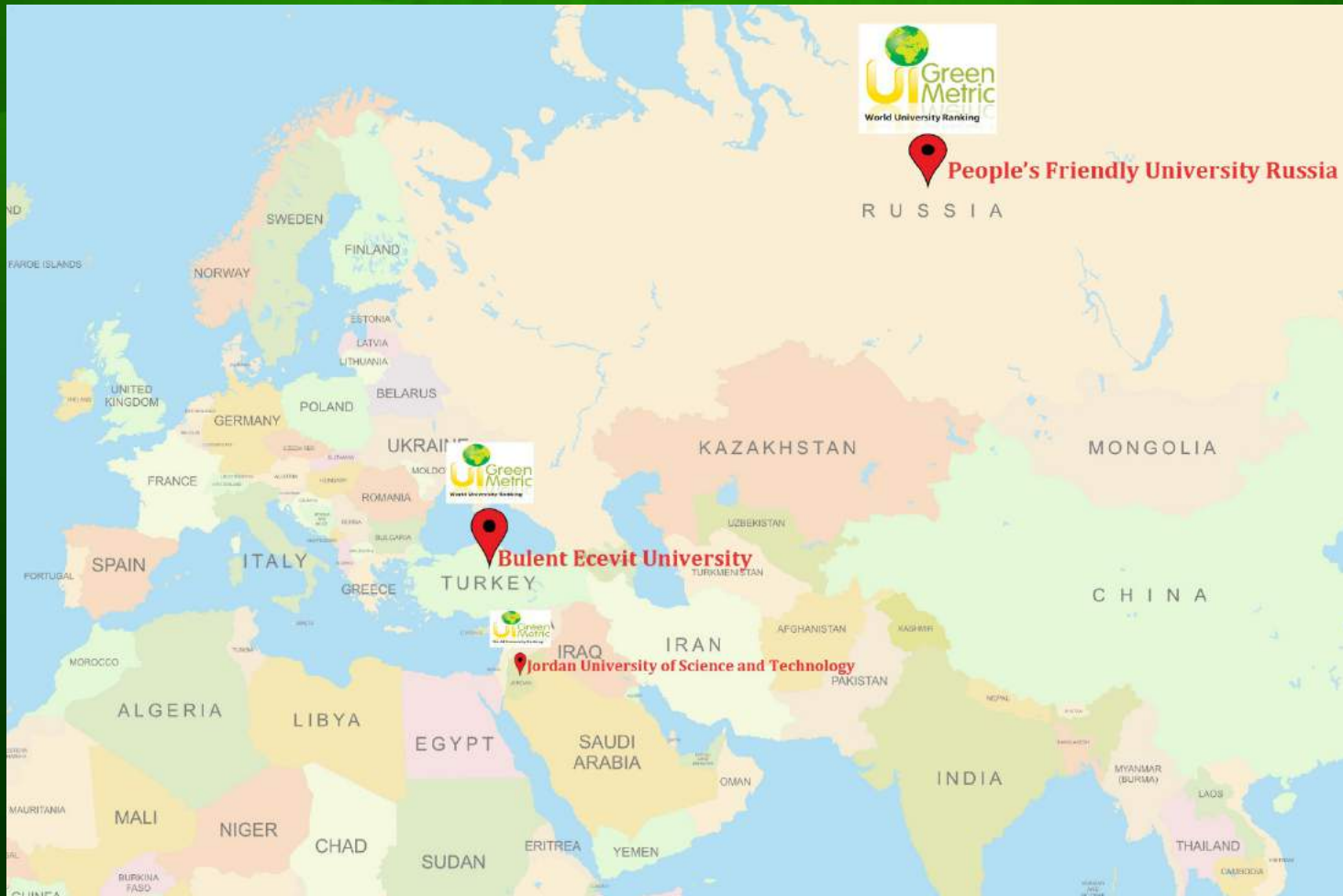
**In your opinion, which university-rankings list has the most authority, and why?**





# What's next?

## UI GreenMetric Network Hub



# UI GreenMetric Future Programme

Current Programs	Proposed (by UI GreenMetric)
UI GreenMetric World University Ranking	UI GreenMetric Steering Committee meeting to be held in concurrent with Annual International Workshop on UI GreenMetric World University Ranking .
Annual International Workshop on UI GreenMetric World University Ranking	<b>2017</b> International Workshop on UI GreenMetric World University Ranking, hosted by Bulent Ecevit University & Istanbul University, <b>Istanbul, Turkey</b>
National Workshop (s) on UI GreenMetric World University Ranking	<b>2018</b> International Workshop on UI GreenMetric World University Ranking, hosted by Universitas Diponegoro, <b>Indonesia</b>
Regional Workshop (s) on UI GreenMetric World University Ranking	<b>2019</b> International Workshop on UI GreenMetric World University Ranking, hosted by University College Cork, <b>Ireland</b>
	<b>2020</b> International Workshop on UI GreenMetric World University Ranking, hosted by University of Zanjan, <b>Iran</b>
	<b>2021</b> International Workshop on UI GreenMetric World University Ranking, hosted by Universiti Utara Malaysia, <b>Malaysia</b>
	September 8 <sup>th</sup> 2016 National Workshop and Technical Workshop on UI GreenMetric World University Ranking hosted by People's Friendship University, Russia
	September 28 <sup>th</sup> 2016 National Workshop and Technical Workshop on UI GreenMetric World University Ranking hosted by Bulent Ecevit University, Turkey
	October 5 <sup>th</sup> 2016 National Workshop and Technical Workshop on UI GreenMetric World University Ranking hosted by Jordan University of Science and Technology, Jordan
	November 17 <sup>th</sup> 2016 UI GreenMetric Technical Session at the MENA AIR Conference, organized by King Abdul Aziz University, Saudi Arabia, at the University of Sharjah, UAE



# National Workshop on UI GreenMetric 2016



**Turki**



**Jordania**



**Indonesia**



**Russia**





# Let's Go Green

*Terima Kasih...*



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