

**LAPORAN KEGIATAN**

**PEMERINGKATAN UI GREENMETRIC  
UNIVERSITAS NEGERI MANADO  
TAHUN 2022**



**TIM UI GREENMETRIC  
UNIVERSITAS NEGERI MANADO  
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## **A. Latar Belakang**

UI GreenMetric World University Ranking merupakan pemeringkatan kampus hijau dan kelestarian lingkungan yang diprakarsai oleh Universitas Indonesia pada tahun 2010. Melalui 39 indikator dalam 6 kriteria, UI GreenMetric World University Rankings secara hati-hati menentukan peringkat berdasarkan komitmen dan inisiatif lingkungan universitas.

Pemeringkatan telah melihat peningkatan dramatis peserta dari 95 universitas di 35 negara pada tahun 2010 menjadi 956 universitas di 80 negara pada tahun 2021.

Universitas memainkan peran integral dalam upaya bersama antara pemangku kepentingan dan masyarakat dalam memerangi perubahan iklim. Dengan mempromosikan dan mengembangkan ide dan inovasi baru, kami berharap universitas dapat mempromosikan konservasi energi dan air, daur ulang limbah, dan transportasi hijau. Namun, kegiatan tersebut akan membutuhkan perubahan perilaku serta masalah ekonomi dan sosial yang terkait dengan keberlanjutan. Untuk itu, kami berharap perguruan tinggi dapat menjadi panutan bagi masyarakat dan mitra penting bagi pemerintah.

Visi pemeringkatan UI Greenmetric ini adalah menjadi Pemeringkatan Universitas Dunia yang terbuka dan dihormati yang membawa dampak berkelanjutan bagi universitas di seluruh dunia.

Dengan Misi:

- 1) Menyelenggarakan Peringkat Universitas Dunia tahunan yang berkelanjutan.
- 2) Mendorong praktik keberlanjutan di universitas di seluruh dunia.
- 3) Menyediakan layanan terkait keberlanjutan untuk universitas di seluruh Dunia.
- 4) Memfasilitasi kemitraan internasional tentang keberlanjutan.

Pada tahun 2021 Universitas Negeri Manado mendapatkan peringkat 50 di wilayah Indonesia. Tahun ini terdapat beberapa pengembangan yang dilakukan Unima, seperti mulai dibangunnya Kawasan Revolusi Mental yang menggunakan lahan seluas 200 m<sup>2</sup>, beberapa kawasan serahan air di lahan Perpustakaan Unima dan lahan Fakultas Ekonomi dan Bisnis. Selain itu, Unima sedang melakukan kerjasama dengan PT Wika Makassar dalam pembuatan Super Kapasitor Charging 4.3 Kwh. Ada juga kerjasama yang dilakukan Unima dengan pemerintah kabupaten Minahasa untuk membuat jaringan perairan yang bersumber dari Danau Tondano. Dengan adanya beberapa pengembangan tersebut diharapkan pada tahun 2022 ini Unima dapat mencapai ranking 10 besar di tingkat nasional.

## **B. Tujuan**

- 1) Menyelenggarakan Peringkat Universitas Dunia tahunan yang berkelanjutan.
- 2) Mendorong praktik keberlanjutan di universitas di seluruh dunia.
- 3) Menyediakan layanan terkait keberlanjutan untuk universitas di seluruh Dunia.

- 4) Memfasilitasi kemitraan internasional tentang keberlanjutan.
- 5) Universitas Negeri Manado menjadi percontohan kampus hijau di wilayah Sulawesi Utara.

### C. Jadwal Kegiatan

Kegiatan penginputan data UI Greenmetric Unima dilakukan secara bertahap, yaitu sebagai berikut:

- 1) Penginputan pertama dilakukan pada Hari Kamis s.d. Jumat, 27 s.d. 28 Oktober 2022 di Wisma Anggrek Tondano.
- 2) Penginputan kedua dilakukan pada Hari Sabtu, 29 Oktober 2022 di Yama Resort Tondano.
- 3) Penginputan ketiga dilakukan pada hari Senin, 31 Oktober 2022 di Yama Resort Tondano.

### D. Rencana Anggaran Biaya

Rencana biaya pada kegiatan ini adalah sebagai berikut:

No	Komponen Pembiayaan	Rincian	Biaya (Rp)
1	Peserta fullday meeting	20 orang x 250.000 x 1 hari	6.000.000
2	Uang harian peserta/panitia	20 orang x 130.000 x 4 hari	10.400.000
3	Baliho	1 ukuran 1x2 meter	90.000
<b>Total Biaya</b>			16.490.000

### E. Pelaksanaan Kegiatan

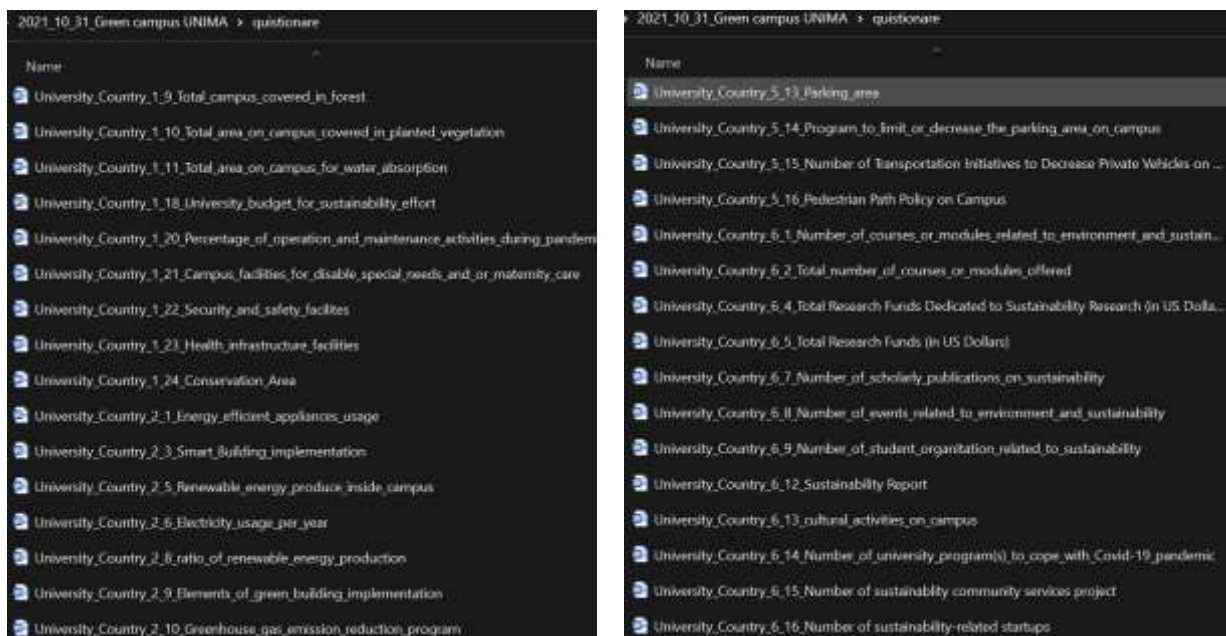
Kegiatan penginputan data UI Greenmetric Unima dilakukan selama 2 periode, periode pertama periode pertama dilakukan pada Hari Kamis s.d. Jumat, 27 s.d. 28 Oktober 2022 di Wisma Anggrek Tondano, dan tahap kedua dilakukan pada Hari Sabtu, 29 Oktober 2022 di Yama Resort Tondano. Berikut ini adalah uraian-uraian yang dilakukan perharinya.

#### 1. Persiapan Data UI Greenmetrics Unima

Pada tanggal 27 Oktober 2022, tim UI Greenmetrik Unima melakukan pengumpulan data terkait pemeringkatan UI Greenmetrik Tahun 2022, dimulai dengan mendownload Tample-tample pengisian di webside pemeringkatan ([www.greenmetric.ui.ac.id](http://www.greenmetric.ui.ac.id)). Jumlah file yang didownload sejumlah 54 item yang terdiri atas file Setting & Infrastructure, Energy & Climate Change, Waste, Water, Transportation, dan Education & Research.



Gambar 1. Interface webside UI Greenmetric



Gambar 2. File yang di Download

## 2. Pengisian Data UI Greenmetric

Pada tanggal 28 Oktober 2022, tim UI Greenmetric Unima mengisi dokumen-dokumen yang telah di download sebelumnya. Pengisian tersebut disesuaikan dengan kondisi yang ada di Unima. Pengisian data ini dilakukan dengan menimpa dokumen pada tahun 2021 dan menyesuaikan kondisi terbaru Unima seperti penambahan data tentang pembangunan Kawasan Revolusi Mental, lahan penyerahan air di Perpustakaan dan Fakultas Ekonomi dan Bisnis, dan lainnya.

Question	Answer	Evidence
1.3	Number of campus site ⓘ <input type="text" value="2"/>	1.3_docx *delete your evidence first before upload the new one
1.4	Campus setting ⓘ <input type="radio"/> Rural <input checked="" type="radio"/> Suburban <input type="radio"/> Urban <input type="radio"/> In city center <input type="radio"/> High rise building	1.4_docx *delete your evidence first before upload the new one
1.5	Total campus area (m <sup>2</sup> ) ⓘ <input type="text" value="2795626"/>	1.5_pdf *delete your evidence first before upload the new one
1.8 (SI.1)	The ratio of open space to total area. ⓘ Formula: $((1.5 - 1.6) / 1.5) \times 100\%$ <input type="radio"/> <= 1% <input type="radio"/> > 1 - 80% <input type="radio"/> > 80 - 90% <input type="radio"/> > 90 - 95% <input checked="" type="radio"/> > 95%	1.8_docx *delete your evidence first before upload the new one
1.11 (SI.4)	Total area on campus for water absorption besides forest and planted vegetation (please provide total area in square meters) ⓘ <input checked="" type="radio"/> <= 2% <input type="text" value="9.557"/> <input type="radio"/> > 2 - 10% <input type="text" value="number only, please provide total area in met"/> <input type="radio"/> > 10 - 20% <input type="text" value="number only, please provide total area in met"/> <input type="radio"/> > 20 - 30% <input type="text" value="number only, please provide total area in met"/> <input type="radio"/> > 30% <input type="text" value="number only, please provide total area in met"/>	University_Country_1_11_Total_area_on_campus *delete your evidence first before upload the new one
1.18	University's budget for sustainability effort (in US Dollars) ⓘ <input type="text" value="\$ 3.463.291,93"/>	University_Country_1_18_University_budget_for_sustainability_effort *delete your evidence first before upload the new one
1.19 (SI.6)	Percentage of University's budget for sustainability effort ⓘ Formula: $((1.17 / 1.16) \times 100\%)$ <input type="radio"/> <= 1% <input type="radio"/> > 1 - 5% <input type="radio"/> > 5 - 10% <input type="radio"/> > 10 - 15% <input type="radio"/> > 15%	
1.20 (SI.7)	Percentage of operation and maintenance activities of building in one year period ⓘ <input type="radio"/> < 25% <input type="radio"/> > 25 - 50% <input type="radio"/> > 50 - 75% <input type="radio"/> > 75-99% <input checked="" type="radio"/> 100%	University_Country_1_20_Percentage_of_operation_and_maintenance_activities_of_building_in_one_year_period *delete your evidence first before upload the new one

Gambar 3. Dokumen yang Diupload pada Pengisian Kedua













Pada tanggal 29 Oktober 2022, tim UI Greenmetric Unima melakukan pengisian dokumen-dokumen yang masih kosong. Selain itu dilakukan pengecekan kembali dokumen-dokumen yang telah di upload ke sistem.





Question	Answer	Evidence
2.1 (EC.1) Energy efficient appliances usage ⓘ	<input type="radio"/> < 1% <input checked="" type="radio"/> 1 - 25% <input type="radio"/> > 25 - 50% <input type="radio"/> > 50 - 75% <input type="radio"/> > 75%	2_1_Energy_efficient_appliances_usage_pdf *delete your evidence first before upload the new one
2.5 ⓘ Please specify renewable energy sources in campus and provide capacity produced in kilowatt hour ⓘ	<input type="radio"/> Not Applicable <input type="radio"/> Bio Diesel <input type="text" value="number only, in KWH"/> <input type="radio"/> Clean Biomass <input type="text" value="number only, in KWH"/> <input checked="" type="checkbox"/> Solar Power <input type="text" value="356"/>	2_5_Renewable_energy_produce_inside_cam *delete your evidence first before upload the new one
2.6 ⓘ Electricity usage per year (in kilo watt hour) ⓘ	<input type="text" value="72,248"/>	University_Country_2_6_Electricity_usage_per_ *delete your evidence first before upload the new one
2.9 (EC.6) Elements of green building implementation as reflected in all construction and renovation policies ⓘ	<input type="radio"/> None <input type="radio"/> 1 element <input checked="" type="radio"/> 2 elements <input type="radio"/> 3 elements <input type="radio"/> > 3 elements	2_9_Elements_of_green_building_implementati *delete your evidence first before upload the new one
2.10 (EC.7) Greenhouse gas emission reduction program ⓘ	<input type="radio"/> None (reduction program is needed, but nothing has been done) <input type="radio"/> Program in preparation (e.g. feasibility study and promotion) <input checked="" type="radio"/> Program(s) aims to reduce one out of three scopes emissions (Scope 1 or 2 or 3) <input type="radio"/> Program(s) aims to reduce two out of three scopes emissions (Scope 1 and 2 or Scope 1 and 3 or Scope 2 and 3) <input type="radio"/> Program(s) aims to reduce all three scopes emissions (Scope 1, 2 and 3)	University_Country_2_10_Greenhouse_gas_er *delete your evidence first before upload the new one
2.11 ⓘ Please provide the total carbon footprint (CO <sub>2</sub> emission in the last 12 months, in metric tons) ⓘ	<input type="text" value="968,261"/>	University_Country_2_11_Please_provide_tot *delete your evidence first before upload the new one
2.13 (EC.9) The number of innovative program(s) in Energy and Climate Change ⓘ	<input type="radio"/> None <input type="radio"/> 1 program <input checked="" type="radio"/> 2 programs <input type="radio"/> 3 programs <input type="radio"/> More than 3 programs	University_Country_2_13_Number_of_innovati 19_pandemic.pdf *delete your evidence first before upload the new one

2.14 Impactful university program(s) on climate change ⓘ

- None
- Program in preparation
- Provide training and educational materials for surrounding communities
- Provide training and educational materials for surrounding communities and at national level
- Provide training and educational materials for surrounding communities, at national level, and at regional and international level

University\_Country\_2\_14\_Impactful\_university\_...  
  \*delete your evidence first before upload the new one

Question	Answer	Evidence
3.1 Recycling program for university waste ⓘ	<input type="radio"/> Not Applicable <input type="radio"/> Partial (1% - 25% of waste) <input type="radio"/> Partial (> 25% - 50% of waste) <input checked="" type="radio"/> Partial (> 50% - 75% of waste) <input type="radio"/> Extensive (> 75% waste)	University_Country_3_1_Recycling_Program_F...   *delete your evidence first before upload the new one
3.2 Program to reduce the use of paper and plastic on campus ⓘ	<input type="radio"/> Not applicable. If there is no program in your university. <input type="radio"/> 1 program <input type="radio"/> 2 programs <input type="radio"/> 3 programs <input checked="" type="radio"/> more than 3 programs	University_Country_3_2_Program_to_Reduce_...   *delete your evidence first before upload the new one
3.3 Organic waste treatment ⓘ	<input type="radio"/> Open dumping <input type="radio"/> Partial (1% - 25% of treated) <input checked="" type="radio"/> Partial (> 25% - 50% of treated) <input type="radio"/> Partial (> 50% - 75% of treated) <input type="radio"/> Extensive (> 75% treated)	University_Country_3_3_Organic_Waste_Treat...   *delete your evidence first before upload the new one
3.4 Inorganic waste treatment ⓘ	<input type="radio"/> Burned in the open <input checked="" type="radio"/> Partial (1% - 25% of treated) <input type="radio"/> Partial (> 25% - 50% of treated) <input type="radio"/> Partial (> 50% - 75% of treated) <input type="radio"/> Extensive (> 75% treated)	University_Country_3_4_Inorganic_Waste_Tri...   *delete your evidence first before upload the new one
3.5 Toxic waste treatment ⓘ	<input type="radio"/> Not Managed <input checked="" type="radio"/> Partial (1% - 25% of treated) <input type="radio"/> Partial (> 25% - 50% of treated) <input type="radio"/> Partial (> 50% - 75% of treated) <input type="radio"/> Extensive (> 75% treated) or campus produces a minimum amount of toxic waste	University_Country_3_5-Toxic_Waste_Handle...   *delete your evidence first before upload the new one
3.6 Sewage disposal ⓘ	<input type="radio"/> Untreated to waterways <input checked="" type="radio"/> Treated conventionally <input type="radio"/> Treated technically for reuse <input type="radio"/> Treatment for down cycling <input type="radio"/> Treatment for up cycling	University_Country_3_6_Sewerage_Disposal...   *delete your evidence first before upload the new one

Question	Answer	Evidence
4.1 Water conservation program and implementation ⓘ	<input type="radio"/> None (Conservation program is needed, but nothing has been done) <input type="radio"/> Program in preparation (e.g. feasibility study and promotion) <input checked="" type="radio"/> 1 - 25% implemented at early stage (e.g. measurement of potential surface runoff volume) <input type="radio"/> > 25 - 50% water conserved <input type="radio"/> > 50% water conserved	University_Country_4_1_Water_Conservation_]...   *delete your evidence first before upload the new one
4.2 Water recycling program implementation ⓘ	<input type="radio"/> None (Water recycling program is needed, but nothing has been done) <input type="radio"/> Program in preparation (e.g. feasibility study and promotion) <input checked="" type="radio"/> 1 - 25% Implemented at early stage (e.g. measurement of waste water) <input type="radio"/> > 25 - 50% water recycled <input type="radio"/> > 50% water recycled	University_Country_4_2_Water_Recycling_Proj...   *delete your evidence first before upload the new one

Question	Answer	Evidence
6.1 ☹️ Number of courses/subjects related to sustainability offered ⓘ	1617	University_Country_6_1_Number_of_courses_... 👁️ 👤 🗑️ *delete your evidence first before upload the new one
6.2 ☹️ Total number of courses/subjects offered ⓘ	6506	University_Country_6_2_Total_number_of_cou... 👁️ 👤 🗑️ *delete your evidence first before upload the new one
6.4 ☹️ Total research funds dedicated to sustainability research (in US Dollars) (average per annum over the last 3 years). ⓘ	457382.06	University_Country_6_4_Total_Research_Fu... 👁️ 👤 🗑️ *delete your evidence first before upload the new one
6.5 ☹️ Total research funds (in US Dollars) (average per annum over the last 3 years). ⓘ	687373.67	University_Country_6_5_Total_Research_Fu... 👁️ 👤 🗑️ *delete your evidence first before upload the new one
6.7 (ED.3) Number of scholarly publications on sustainability published. (average annually for the past 3 years) ⓘ	<input type="radio"/> 0 <input type="radio"/> 1 - 20 <input checked="" type="radio"/> 21 - 83 <input type="radio"/> 84 - 300 <input type="radio"/> > 300	University_Country_6_7_Number_of_scholarl... 👁️ 👤 🗑️ *delete your evidence first before upload the new one
6.8 (ED.4) Number of events related to sustainability. (average annually for the past 3 years) ⓘ	<input type="radio"/> 0 <input type="radio"/> 1 - 4 <input checked="" type="radio"/> 5 - 17 <input type="radio"/> 18 - 47 <input type="radio"/> > 47	University_Country_6_8_Number_of_events_... 👁️ 👤 🗑️ *delete your evidence first before upload the new one
6.9 (ED.5) Number of student organizations related to sustainability ⓘ	<input type="radio"/> 0 <input type="radio"/> 1 - 2 <input type="radio"/> 3 - 4 <input checked="" type="radio"/> 5 - 10	University_Country_6_9_Number_of_student... 👁️ 👤 🗑️ *delete your evidence first before upload the new one
6.14 (ED.9) Number of university program(s) to improve teaching and learning ⓘ	<input type="radio"/> None <input type="radio"/> 1 Program <input type="radio"/> 2 Programs <input type="radio"/> 3 Programs <input checked="" type="radio"/> More than 3 Programs	University_Country_6_14_Number_of_univers... 👁️ 👤 🗑️ *delete your evidence first before upload the new one

Gambar 4. Dokumen yang Diupload pada Pengisian Ketiga

## F. Penutup

Demikian laporan ini dibuat dengan penuh tanggung jawab, yang dapat menjadi bukti pertanggung jawaban pelaksanaan kegiatan.



## Dokumentasi Kegiatan







