

Directorate of Asset Management, Finance, and Infrastructure Facilities Parahyangan Catholic University





RSITAS

ARAHYANGAN









### **Meet Our Team**

#### **Pimpinan Universitas**

Wakil Rektor Bidang Kerjasama, Alumni, Inovasi, dan Bisnis
 Ir. Catharina Badra Nawangpalupi, Ph.D.

#### Direktorat Manajemen Aset, Keuangan, dan Sarana Prasarana

- Manajer Aset dan Sarana Prasarana
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- Digital Team

2

3

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#### Lembaga Penjaminan Mutu

- Kepala Lembaga Penjaminan Mutu
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- beserta tim





# 1 SETTING & INFRASTRUCTURE





### **1.3** Number of campus site







#### Description

UNPAR conducts its educational process with the philosophy of "Bakuning Hyang Mrih Guna Santyaya Bakti," which translates to "based on God, seeking knowledge to be dedicated to society." With this guiding principle, UNPAR implements a curriculum that not only fosters academic excellence but also nurtures a sense of conscience, encouraging students to use their knowledge to benefit others.

Parahyangan University facilitates both academic and non-academic activities for students, staff, and visitors across four campus locations:

### Ciumbuleuit Campus

94, Ciumbuleuit Street, Hegarmanah Sub-District, Cidadap District, Bandung City 40141

#### Aceh Campus

53, Aceh Street, Babakan Ciamis Sub-District, Sumur Bandung District, Bandung City 40117

### Merdeka Campus

30, Merdeka Street, Babakan Ciamis Sub-District, Sumur Bandung District, Bandung City 40117



2

#### **Nias Campus**

02, Nias Street, Babakan Ciamis Sub-District, Sumur Bandung District, Bandung City 40117

#### Additional evidence link

**Q** unpar.ac.id/campus-life/campus-area

unpar.ac.id/ipanorama/virtualtour/virt ual-campus-tour







Aceh **Q** Campus





















**Established Since 1955** 









Diploma III Program
 Applied Undergraduate Programs

Undergraduate Programs

- 1 Master Programs
- 4 Doctoral Programs
  - Professional Programs





### **1.4** Campus Setting



### Description

Parahyangan Catholic University (UNPAR) operates across four campus locations situated in two districts of Bandung City: Cidadap and Sumur Bandung.

- Cidadap District, located in the northern part of Bandung, covers an area of 612.3 hectares. Geographically, 60% of the district is flat to undulating terrain, with an elevation of 750 meters above sea level. The temperature in Cidadap ranges between 19-28°C, and it experiences an average rainfall of 1,000 mm/year, with around 188 days of rainfall annually.
- Sumur Bandung District, situated in the city center, has a land area of 340 hectares. It experiences a tropical climate, with an average annual rainfall of 2,400 mm and temperatures ranging from 20-30°C. Being centrally located, Sumur Bandung is close to many urban attractions and bustling areas.

In summary, UNPAR's campuses are located in urban areas with a tropical wet and dry climate, providing a diverse environment for students and staff.





### **1.5** Total Campus Area



### Description

The total area of Parahyangan Catholic University's campus dedicated to academic activities, including administrative buildings, student and staff activity buildings, classrooms, and canteens, is [total area in square meters].



178067
2416
6123
276

### Additional evidence link

**Q** unpar.ac.id/ipanorama/virtualtour/virtual-campus-tour





### **1.6** Total Campus Ground Floor Area Of Buildings



#### Description

The total ground floor area of Parahyangan Catholic University's campus is



43566
1671
3210
2760

### Additional evidence link

 ${\sf Q}$  unpar.ac.id/ipanorama/virtualtour/virtual-campus-tour





### **1.7** Total Campus Buildings Area





### Description

The total area occupied by buildings at Parahyangan Catholic University, including the total floor area of all floors (ground floors and upper floors), is [total floor area in square meters].





Jl. Ciumbuleuit 94 Jl. Aceh 53 Jl. Merdeka 30 Jl. Nias 2





### **1.8** The Ratio Open Space Area to Total Area





### Description

The ratio of open space area to total area on Parahyangan Catholic University's campus is



### Additional evidence link

**Q** kasp.unpar.ac.id/aset-dansarana-prasarana/galeri/





### **1.9** Total area on campus covered in forest vegetation



### Description

UNPAR possesses around 76+ hectares of land in the Cikamuning area of West Bandung Regency and Ujung Berung, designated for future campus development. Currently the area is fully covered in vegetation.







### **1.9** Total area on campus covered in forest vegetation



### Additional evidence link

Q unpar.ac.id/unpar-bersama-bakti-lingkungan-djarumfoundation-tanam-2-000-bibit-pohon/





University : Parahyangan Catholic University

- Country : Indonesia
- Web Address : unpar.ac.id

### **1.10** Total area on campus covered in planted vegetation



#### Description

The percentage of the area on Parahyangan Catholic University's campus covered in planted vegetation, including lawns, gardens, green roofs, internal planting, and vertical gardens, is 62.03%.







Planted Vegetation : 118,996 Total Campus Area : 191,839

### Additional evidence link

jabar.tribunnews.com/2018/04/14/mengintip-taman-keren-di-kampusunpar-bandung-instagramable-enak-untuk-kongko-dan-bisa-ngecas-hp? page=all





University : Parahyangan Catholic University Country : Indonesia

Web Address : unpar.ac.id

### **1.10** Total area on campus covered in planted vegetation







University : Parahyangan Catholic University

Country : Indonesia

Web Address : unpar.ac.id

### **1.11** Total area on campus for campus absorption besides the forest and planted vegetation



### Description

UNPAR's campus areas contributing to water absorption, aside from forests and planted vegetation, likely include:

- 1. Green Roofs & Permeable Surfaces: Roofs and pavements that absorb rainwater to reduce runoff.
- 2. Rain Gardens & Bioswales: Landscaped zones capturing rainwater and directing it into the soil.
- 3. Grassland & Natural Lawns: Open grass areas that support water absorption and ecosystem health.
- 4. Retention Ponds: Ponds managing stormwater and allowing gradual soil absorption.

5. Community Gardens: Shared garden spaces that aid absorption and promote biodiversity.

These areas help manage campus water flow while enhancing environmental sustainability.





### **1.11** Total area on campus for campus absorption besides the forest and planted vegetation



#### Description

Currently, Parahyangan Catholic University has **38,585 m<sup>2</sup>** of biopores and infiltration wells. Artificial biopores utilize soil organisms to function optimally, enabling them to absorb water into the soil while also helping to fertilize it and improve groundwater quality.

Infiltration wells are artificial structures designed to collect rainwater or surface water runoff for significant absorption into the ground. This process creates underground water reserves and increases groundwater quantity, which is especially beneficial during dry seasons. By employing these two methods, rainwater can be absorbed more quickly by the soil, enhancing groundwater reserves and quality while also enriching the soil.



Area of Ground Surface : 38,585 Total Campus Area : 191,839





### **1.17** University budget for sustainability efforts



0 —

2022

2023

Item Budget	2021	2022	2023
Budget Total	21,513,900	21,513,900	21,513,900
Sustainability Budget	408,826	608,738	552,706

2021



Source: Finance Department

#### Description

At UNPAR, the sustainability budget is dedicated to minimizing environmental impact, enhancing energy efficiency, and integrating eco-friendly practices throughout the campus. This budget may be sourced from tuition revenue, government grants, private donations, and dedicated endowment funds. Annual reports often track these investments and their impacts, ensuring transparency and accountability in reaching sustainability goals.

The average percentage university budget for our university is 14.12%





### **1.19** Percentage of operation and maintenance activities of building in one year period

#### Description

Operation and maintenance activities for buildings are comprehensive processes designed to preserve the functionality, safety, and aesthetic quality of a facility throughout the year. These activities ensure that all building systems and components operate efficiently and reliably, enhancing both the occupants' experience and the facility's longevity.

Overall, UNPAR has 17 buildings and has established standard operation and maintenance procedures to ensure that each building functions optimally. These operation and maintenance standards include structured procedures for routine maintenance, scheduled repairs, and inspections of safety and cleanliness systems.







### **1.19** Percentage of operation and maintenance activities of building in one year period

By implementing standards operation and maintenance, UNPAR can maintain the physical condition of the buildings, improve operational efficiency, and ensure safety and comfort for all users. These activities generally fall into:



#### Preventive Maintenance

Regular building inspections are essential to ensure safety, functionality, and longevity and help identify potential issues early, allowing for timely repairs and maintenance that prevent larger problems and reduce long-term costs.



#### **Corrective Maintenance**

Corrective maintenance addresses building issues as they arise, focusing on repairing faults to restore functionality. This approach ensures minimal disruption, prolongs the building's lifespan, and upholds a safe environment for occupants.



### **Predictive Maintenance**

Predictive maintenance uses data to anticipate building issues before they occur, minimizing disruptions and extending asset life. Example, using radar can identify subsurface issues like foundation weaknesses, which helps predict and prevent structural failures before they become critical.





### **1.19** Percentage of operation and maintenance activities of building in one year period



#### **Routine Maintenance**

Routine maintenance involves regular, scheduled tasks to keep a building in optimal condition, ensuring safety, functionality, and preventing minor issues from becoming major repairs. Example, trash removal, helps maintain cleanliness, prevents pest issues, and ensures a safe, pleasant environment for building occupants.



# the second second

#### **Emergency Maintenance**

Emergency maintenance addresses urgent building issues that pose immediate risks to safety or functionality. This quick response minimizes damage and ensures a safe environment for all occupants. Example, generator, Ensuring it is operational and regularly tested allows for immediate power backup during outages, maintaining essential building functions and safety.

### **Deferred Maintenance**

Deferred maintenance involves postponing nonurgent repairs to manage budgets or resources. While it can reduce immediate costs, prolonged delays may lead to larger issues and increased expenses in the long term. Renovation involves upgrading or significantly improving building features, often to enhance functionality, aesthetics, or compliance with new standards.





### **1.19** Percentage of operation and maintenance activities of building in one year period





Sustainable building maintenance focuses on ecofriendly practices, using energy-efficient systems, renewable materials, and minimizing waste. This approach reduces environmental impact, promotes resource conservation, and supports a healthier environment for occupants.

#### **Capital Maintenance**

Capital maintenance involves significant investments in repairs and upgrades that extend a building's life and improve its value. This type of maintenance includes replacing major systems and area.

#### Seasonal Maintenance

Seasonal maintenance involves tasks performed at specific times of the year to prepare a building for changing weather conditions. Example inspecting gutters in the fall.









### **1.19** Percentage of operation and maintenance activities of building in one year period

LAMPIRAN	FOTO
Mesin yang diriksa uji	
Riksa uji governor elektrik mekanik	
Riksa uji di atas sangkar	

#### **Compliance Maintenance**

Compliance maintenance ensures that a building meets local codes, regulations, and safety standards. Regular inspections and updates are conducted to adhere to legal requirements, ensuring a safe environment for occupants and avoiding potential fines or legal issues.



#### **Custodial Maintenance**

Custodial maintenance focuses on the routine cleaning and upkeep of a building. Everyday tasks such as dusting, vacuuming, waste disposal, and sanitizing restrooms, ensuring a clean and healthy environment for all occupants.





### **1.19** Percentage of operation and maintenance activities of building in one year period



#### **Technical Maintenance**

Technical maintenance involves the specialized repair and servicing of building systems. Maintaining IT infrastructure involves regular updates, monitoring, and repairs of hardware and software systems to ensure reliable performance, data security, and minimal downtime, supporting the overall functionality of the building's operations.



#### **Grounds Maintenance**

Grounds maintenance involves the care and upkeep of outdoor spaces surrounding a building. Tree trimming involves pruning trees to remove dead or overgrown branches, promoting healthy growth, and preventing potential hazards, such as falling limbs. Regular tree trimming enhances the overall safety and appearance of the property.



#### **Building Services Maintenance**

Building services maintenance encompasses the upkeep of essential systems that support a building's operation, such as plumbing, elevator, electrical, heating, and air conditioning. Regular inspections and repairs ensure these services function efficiently, providing a safe and comfortable environment for occupants while minimizing downtime and operational disruptions.

1.19-6 / 6





### **1.20** Campus facilities for disabled, special needs and or maternity care



#### Description

University facilities are designed to adapt to the needs of the population, contributing to the enhancement of those needs.





### **1.20** Campus facilities for disabled, special needs and or maternity care



### Additional evidence link

🔍 kasp.unpar.ac.id/aset-dan-sarana-prasarana/galeri/ 🤇





### **1.20** Campus facilities for disabled, special needs and or maternity care



### Additional evidence link Q kasp.unpar.ac.id/aset-dan-sarana-prasarana/galeri/





### **1.21** Security and safety facilities



### Additional evidence link

Q unpar.ac.id/unpar-adakan-pelatihan-kesiapsiagaan-dan-sosialisasi-mitigasibencana/

Q unpar.ac.id/upaya-siaga-tingkatkan-keselamatan-kerja/

Q digiflip.unpar.ac.id/buku-saku-k3l-unpar





### **1.21** Security and safety facilities







### **1.21** Security and safety facilities







### **1.21** Security and safety facilities



### Description

Facility management and safety are closely intertwined, especially in fostering a strong, safe, and healthy organization amidst a pandemic. One of the most important roles of a facility manager is to ensure that employees feel safe and supported in their work environment.





### **1.22** Health infrastructure facilities for students, academics and administrative staff's wellbeing



### Description

Facility management and safety go hand in hand, playing a crucial role in fostering a strong, safe, and healthy organization, especially during a pandemic. One of the most important responsibilities of a facility manager is to ensure that employees feel safe and supported in their work environment. UNPAR also collaborates with Santo Yusup Hospital as part of its Faculty of Medicine initiatives. This partnership aims to enhance medical education, provide clinical training opportunities, and support healthcare research, benefiting both students and the broader community.







**1.23** Conservation: plant, animal and wildlife, genetic resources for food and agriculture secured in either medium or long-term conservation facilities









## **1.23** Conservation: plant, animal and wildlife, genetic resources for food and agriculture secured in either medium or long-term conservation facilities



### Description

The implementation of the live pharmacy development program aims to enhance food security and promote the cultivation of medicinal plants as alternative sources of valuable treatments.

A live pharmacy involves the cultivation of medicinal plants, which are highly beneficial as they can serve as sources of health services and alternative treatments. The live medicinal plants that have been cultivated include various medicinal and vegetable plants.







University : Parahyangan Catholic University

- Country : Indonesia
- Web Address : unpar.ac.id

# **1.24** Planning, implementation, monitoring and/or evaluation of all programs related to Setting and Infrastructure through the utilization of Information and Communication Technology (ICT)



### Planning

- Conduct surveys and interviews with stakeholders to identify current infrastructure challenges and opportunities for ICT integration.
- Establish specific, measurable goals related to sustainability and ICT utilization in infrastructure.
- Develop detailed program proposals, including technological solutions, timelines, and resource requirements.



#### Implementation

- Secure funding, personnel, and technical resources for the implementation phase.
- Install and configure necessary ICT infrastructure, such as smart building systems, monitoring software, and data collection tools.
- Conduct training sessions for staff and students on using new technologies and systems effectively.

### 3 Monitoring

- Begin collecting data on energy usage, water consumption, waste management, and other sustainability metrics.
- Assess the performance of installed technologies and their impact on sustainability goals.
- Gather feedback from users regarding the effectiveness and usability of the implemented systems.

### 4

- Evaluation
  - Analyze collected data to evaluate the success of the programs against the established goals.
  - Prepare a comprehensive report detailing findings, successes, and areas for improvement.
  - Develop recommendations for future actions based on evaluation results, and plan for ongoing monitoring and adjustments as needed.





# **1.24** Planning, implementation, monitoring and/or evaluation of all programs related to Setting and Infrastructure through the utilization of Information and Communication Technology (ICT)







Layanan ini merupakan layanan dari Direktorat Manajemen Aset, Keuangan, dan Sarana Prasarana yang dapat dimanfaatkan oleh civitas akademika Universitas Katolik Parahyangan (UNPAR) untuk melakukan permohonan perbaikan sarana prasarana di lingkungan kampus. Buku panduan mengenai layanan ini terdapat pada tautan digiflip.unpar.ac.id/building-maintenance-unpar.




# **1.24** Planning, implementation, monitoring and/or evaluation of all programs related to Setting and Infrastructure through the utilization of Information and Communication Technology (ICT)



#### Description

ICT plays a vital role in enhancing the overall efficiency and effectiveness of managing setting and infrastructure. By leveraging technologies in each phase—planning, implementation, monitoring, and evaluation—universities and institutions can create smarter, more sustainable, and user-friendly environments.











### **2.1** Energy Efficient Appliances Usage



#### Description

Parahyangan Catholic University aims to achieve greater energy savings through energy efficiency measures and a strong focus on energy management. The following activities will be implemented:

- Utilize energy modeling software to calculate energy consumption in baseline and designed buildings. [30%]
- Install LED lamps that provide more efficient lighting.
- Implement energy-saving features in elevators, such as motion sensors and sleep mode for escalators. [100%]
- Equip air conditioners with an intelligent touch manager and centralized control system. [50%]
- Manage electricity usage in the PPAG Building through a Building Automation System (BAS), which helps optimize electricity scheduling and maximize efficiency. [30%]
- Promote awareness and training programs for staff and students on energy-saving practices and sustainability.
- Implement green building certifications for new constructions and renovations to ensure compliance with sustainability standards. [on progress]



### 70%





### **2.1** Energy Efficient Appliances Usage







### **2.1** Energy Efficient Appliances Usage



Manage electricity usage in the PPAG Building through a Building Automation System (BAS), which helps optimize electricity scheduling and maximize efficiency.





### **2.1** Energy Efficient Appliances Usage













Implement energy-saving features in electricity, such as motion sensors.

#### Additional evidence link

Q kasp.unpar.ac.id/inisiasi-efisiensi-energi-unpar-gunakan-sensorgerak-pada-beberapa-lokasi/





### **2.3** Smart Building Implementation





#### Description

- Integrate smart sensors to monitor occupancy and adjust lighting and climate control accordingly to enhance comfort and efficiency.
- Implement smart security systems, including access control and surveillance, to enhance campus safety and security.
- Install smart irrigation systems for landscaping to optimize water usage and maintain green spaces efficiently.
- Use smart metering to track energy and water consumption, helping to identify patterns and areas for further efficiency improvements.





### **2.3** Smart Building Implementation



Include scheduling for electricity such as lamp, fresh air, etc.

2 Safety



- Intruder Alarm System
- Fire-fighting System
- Video Surveillance

#### Energy

- Thermal Monitoring
- Electrical Sub Metering

#### Wate

- Water Metering
- Water Calculation
- Water Recycling
- Alternative Water Resource
- Water Efficiency Landscaping

#### Indoor Environment

- Environmental Tobbaco Smoke
   Control
- Eco-friendly includes air cleaners and heat recovery ventilators to improve indoor air quality

#### 5 Lighting

- high-efficiency lumainaires (LEDs)
- Automatic lighting control
- Passive systems for natural light exploitation





# **2.5** Renewable energy sources and their amount of the energy produced



#### Description

Parahyangan Catholic University utilizes the biodigester method for processing organic waste, which produces liquid fertilizer (bioslurry) that contributes to a greener environment. Additionally, the biogas generated from this organic processing provides immediate benefits, as it can be used for cooking with biogas stoves.





# **2.5** Renewable energy sources and their amount of the energy produced



#### Description

UNPAR has taken significant steps toward sustainability by installing solar panels across its campus. This initiative aims to promote the use of renewable energy among students, staff, and visitors, reinforcing the university's commitment to reducing carbon emissions and combating climate change.

The solar panels harness sunlight to generate clean energy, which contributes to powering various campus facilities. This not only decreases the reliance on fossil fuels but also helps lower utility costs, creating a more sustainable financial model for the university. By integrating solar energy into its operations, UNPAR sets an example for the community, encouraging the adoption of environmentally friendly practices.





### **2.6** Electricity usage per year (in kilowatt hour)

#### Description

The total electricity usage of Parahyangan Catholic University in 2023 is estimated to be 931000 kWh per hour. This electricity is utilized for lighting, cooling, heating laboratory equipment, and other activities.







# **2.8** The ratio of renewable energy production divided by total energy usage per year





Renewable energy sources and their amount of the energy produced : 6490 Electricity usage per year : 931000





# **2.9** Elements of green building implementation as reflected in all construction and renovation policies



#### Description

- Parahyangan Catholic University **has processed** the Greenship certification from the Green Building Council Indonesia, which also includes the Material Resources and Cycle (MRC) certification.
- The buildings at Parahyangan Catholic University meet the requirements set by the Green Building Council Indonesia and incorporate various elements of "green building," such as:
  - 1. Appropriate Site Development
  - 2. Energy Efficiency and Conservation
  - 3. Water Conservation
  - 4. Material Resources and Cycle-MRC
  - 5. Indoor Health and Comfort
  - 6. Building Environment Management







# **2.10** Greenhouse gas emission reduction program







# **2.10** Greenhouse gas emission reduction program







# **2.11** Total carbon footprint (CO2 emission in the last 12 months, in metric tons)



Electicity Usage Per Year



The Co2Co emission form electricity

- = (electricity usage per year in kWh/1000) x 0.84
- = (931000/1000) × 0.84
- = 782.04 metric tons



metric tons

#### CO2 (Bus)



= (Number of the shuttle bus in your university x total trips for shuttle bus service each day x approximate travel distance of a vehicle each day inside campus only (in kilometers)  $\times$  240/100) x 0.01 = ((5 × 6 × 4 × 0.5)/100)) × 0.01

= 0.36 metric tons

#### CO2 (Car)



(Number of cars entering your university  $\times 2 x$ approximate travel distance of a vehicle each day inside campus only (in kilometers) $\times 240/100 \times 0.02$ = (950 $\times 2 \times 0.5 \times 240)/100$ )  $\times 0.02$ 

= 45.60973151 metric tons

#### 45.60973 metric tons

28.76532

metric tons

#### CO2 (Motorcycle)



(Number of motorcycle entering your university x2 x approximate travel distance of a vehicle each day inside campus only (in kilometers) x 240/100 x 0.01) = total emission from electricity usage + transportation (bus, car, motorcycle) = (1199x 2 x 0.5 x 240)/100) x 0.01

= 28.76528219 tons

#### CO2 (total)



= total emission from electricity usage + transportation (bus, car, motorcycle)
= 782.04 + (0.36 + 45.60973 + 28.76528)
= 856.7750137 metric tons







# **2.13** Number of innovative program(s) in energy and climate change



#### Description

Climate change is increasingly affecting the Indonesian people, manifesting as changes in rainfall patterns and intensity, rising sea levels, and other ecological losses. Additionally, environmental damage caused by corporate operational activities poses significant risks, potentially leading to fines or even closure by the government, which can ultimately result in company defaults. In response to these challenges, UNPAR, as an educational institution, offers insights through public lectures, seminars, and educational programs aimed at addressing these critical issues.





# **2.14** Impactful university program(s) on climate change

#### PUBLIC LECTURE: CLIMATE CHANGE AND SUSTAINABLE FINANCE



Climate change has been felt by the Indonesian people today, such as increasing rain varieties and intensity, rising sea levels, and other ecological losses. On the other hand, the phenomenon of environmental damage caused by the company's operational activities causes the risk of the company being fined and even closed by the Government, causing the company to default. Therefore, banks currently have strict regulations regarding green loans to prevent bad debts. Based on this phenomenon, the Bachelor of Accounting Study Program has held a public lecture on the topic of Climate Change and Sustainable Finance on February 14, 2020 at 08:30-12:30 in the Hall of Building 9, Faculty of Economics, Parahyangan Catholic University. The event began with the opening by Dr. Budiana Gomulia, Dra., M.Si (Dean of the Faculty of Economics, UNPAR) and presentation of material by Ms. Poppy Ismalina, M.Ec.Dev., Ph.D (Senior Policy Advisor in Sustainable Finance at International Finance Corporation (IFC)) and Dr. Paulina Permatasari, SE, M.Ak, CMA, CSRS, CSRA (Chairperson of the Accounting Department), with moderator Mr. Agustinus Susilo, SE, M.Ak, Ak. The participants of the public lecture consisted of students who took Kapita Selekta and Advanced Management Accounting courses.



#### Description

The Earth's climate has undergone changes throughout history, primarily due to minor variations in the Earth's orbit that affect the amount of solar energy received by our planet. The current warming trend is particularly significant, as it is extremely likely (with over 95 percent probability) that most of it results from human activities since the mid-20th century, proceeding at an unprecedented rate over the past decades to millennia.

In recent decades, climate changes have impacted natural and human systems across all continents and oceans. Evidence of these climate-change impacts is strongest and most comprehensive for natural systems. While some effects on human systems can also be attributed to climate change, it is often possible to distinguish the major or minor contributions of climate change from other influencing factors.





# **2.14** Impactful university program(s) on climate change



#### Additional evidence link







University : Parahyangan Catholic University

Country : Indonesia

Web Address : unpar.ac.id

# **2.15** Planning, implementation, monitoring and/or evaluation of all programs related to Energy and Climate Change through the utilization of Information and Communication Technology (ICT)

#### Planning

- Conduct assessments to identify current energy consumption patterns and climate impact within the campus.
- Engage with stakeholders (students, faculty, and staff) to gather insights and suggestions.
- Establish specific sustainability goals related to energy efficiency and climate change mitigation using ICT.
- Define metrics for measuring progress (e.g., energy consumption reduction targets, carbon footprint).



#### 2 Implementation

- Secure funding and resources for the selected ICT solutions and programs.
- Install and configure necessary technologies, such as smart energy meters, climate monitoring sensors, and data analytics software.
- Ensure integration with existing infrastructure for seamless operation.
- Promote awareness about the importance of energy efficiency and climate action.

#### 3 Monitoring

- Begin collecting data on energy usage, emissions, and climate-related metrics.
- Utilize ICT tools to monitor and report real-time data.
- Identify any operational issues and areas for improvement.
- Gather feedback from users on the effectiveness and usability of the ICT solutions.

#### 4 Evaluation

- Analyze collected data to evaluate the success of energy and climate programs against the established goals.
- Assess the overall impact on campus sustainability and carbon footprint.
- Prepare a comprehensive report summarizing findings, successes, challenges, and recommendations for future actions.



# WASTE





# **3.1** 3R (Reduce, Reuse, Recycle) program for university's waste



#### Additional evidence link

Q instagram.com/reel/C1mAujUNVNv/? utm\_source=ig\_web\_copy\_link&igsh=MzRIOD BiNWFIZA==

Q unpar.ac.id/gerakan-less-plastic-morefantastic-unpar-berkomitmen-jagalingkungan/

#### Description

The issue of solid waste management presents a significant challenge not only for urban environments but also for educational institutions. Campuses, in particular, generate substantial amounts of waste due to the high volume of activities taking place. UNPAR, with approximately 10,000 active students and around 1,000 faculty and staff members, faces this challenge daily. On average, the university generates about 4.000 kilograms of waste per day.

To address this issue, the university has implemented a comprehensive waste management system designed to handle various types of waste produced by its academic community. Waste is collected from across the campus using a designated pick-up vehicle that makes regular rounds every day. Once collected, the waste is transported to a waste management facility, where it is sorted by trained personnel.

At UNPAR, trash cans are strategically divided into three categories: organic waste, inorganic waste, and residual waste. This classification system not only facilitates efficient waste disposal but also promotes recycling and responsible waste management practices among students and staff. effective By prioritizing waste management, UNPAR aims to foster a cleaner, more sustainable campus environment.





# **3.2** Program to reduce the use of paper and plastic on campus







#### Description

#UNPARHIJAU is a collaborative sustainability program at Parahyangan Catholic University (UNPAR) that reflects the institution's commitment to environmental consciousness. This initiative, held every 22nd of each month, involves active participation from students, employees, and lecturers. Its core concept is to encourage waste management through a simple yet effective exchange system: participants bring in waste, such as plastic bottles, and exchange them for items of value, like travel tumblers.

The program is designed to promote waste reduction and recycling within the UNPAR community. It aims to raise awareness about environmental issues and foster responsible behavior toward waste management. The enthusiasm and positive response from the UNPAR community have been evident since the inception of the exchange stations. These stations have successfully collected significant amounts of waste, demonstrating the collective commitment of students, faculty, and staff to environmental sustainability.

The waste collected through this program is carefully sorted. Some of it is directed towards independent plastic management, while the rest is sold to the Bank Sampah Bandung, a local waste bank that further processes the materials. This collaborative effort not only reduces waste on campus but also supports the larger waste management ecosystem in Bandung.

Overall, #UNPARHIJAU exemplifies how universities can play a pivotal role in promoting sustainability through community involvement and innovative programs.

#### Additional evidence link

Q unpar.ac.id/menciptakan-unpar-hijau-lewat-zero-waste-management/





# **3.2** Program to reduce the use of paper and plastic on campus



- Reusable Container Program: Provide or encourage the use of reusable containers at campus dining with incentives.
- Plastic-Free Campus Campaign: Ban single-use plastics and replace them with eco-friendly alternatives.
- Print Limits: Set print quotas, use double-sided printing, and recycled paper.
- Education and Training: Conduct awareness campaigns on waste reduction.
- Recycling Points: Install bins for recycling paper and plastic in key campus areas.

#### Additional evidence link

Please bring your own tumbler to reduce plastic usage

Q unpar.ac.id/menciptakan-unpar-hijau-lewat-zero-waste-management/





# **3.2** Program to reduce the use of paper and plastic on campus



#### Additional evidence link

Q kasp.unpar.ac.id/talkshow-dan-peresmian-waste-station-blu-x-rekosistem-di-lingkungan-unpar/

Q unpar.ac.id/tukar-sampah-jadi-e-money-unpar-hadirkan-waste-station-rekosistem-x-blu-by-bca/







## **3.3** Total volume organic waste produced



**3.4** Total volume organic waste treated



#### Additional evidence link

Q unpar.ac.id/kelola-sampah-kampus-wujudkan-unparhijau/

Q instagram.com/reel/CywsMYnyl70/? utm\_source=ig\_web\_copy\_link&igsh=MzRIODBiNWFIZA==

Q instagram.com/p/CyCiOggSvx-/? utm\_source=ig\_web\_copy\_link&igsh=MzRIODBiNWFIZA==





## **3.5** Organic Waste Treatment



At UNPAR, organic waste management involves the following key steps:

Waste Segregation: Organic waste is separated from general waste using dedicated bins placed around the campus.

- Composting: Collected organic waste is processed into compost, reducing waste volume and producing natural fertilizer for campus gardens and landscaping.
- Education: The university conducts programs to raise awareness about the importance of organic waste management among students and staff.
- Monitoring: The program is regularly monitored to evaluate its effectiveness and the quality of the produced compost.

Through this approach, UNPAR is committed to reducing environmental impact and promoting sustainability.

#### Additional evidence link

**Q** unpar.ac.id/kelola-sampah-kampus-wujudkan-unparhijau/

Q kasp.unpar.ac.id/sekda-kota-bandung-kunjungi-unparuntuk-tinjau-pengelolaan-sampah-apresiasi-dankolaborasi-untuk-lingkungan-bersih/

Q instagram.com/reel/CywsMYnyl70/? utm\_source=ig\_web\_copy\_link&igsh=MzRIODBiNWFIZA==

Q unpar.ac.id/gerakan-kelola-limbah-pangan-mbkm-ekologi-design-thinking-unpar-gelar-food-hero-festival/





## **3.5** Organic Waste Treatment



Universitas Katolik Parahyangan (UNPAR) recently hosted Bandung City Government Secretary, Ema Sumarna, to review the university's waste management practices, marking a step in collaborative environmental efforts. Secretary Ema praised UNPAR's initiatives as a vital contribution to sustainable waste management and provided constructive suggestions, including using maggotization for organic waste. This visit underscores the partnership between UNPAR and the city government to foster cleaner environments and aligns with UNPAR's commitment to ongoing improvements in waste management for a more sustainable Bandung.

#### Additional evidence link

- Q https://digiflip.unpar.ac.id/pengelolaan-sampah-unpar
- Q unpar.ac.id/guru-besar-kimia-unpar-prof-judy-ungkap-potensimaggot-dalam-mengelola-sampah-organik/
- Q kasp.unpar.ac.id/kunjungan-dari-stia-lan-dan-mahasiswa-unpas-terkaitpengelolaan-sampah-unpar/
- Q kasp.unpar.ac.id/unpar-menghadirkan-solusi-terbaru-untuk-mengelolalimbah-elektronik-drop-box-e-waste/

Q kasp.unpar.ac.id/unpar-menerima-kunjungan-aliansi-zero-wasteindonesia-untuk-melihat-pengelolaan-sampah-di-lingkungan-kampus/







### **3.6** Total volume inorganic waste produced



**3.7** Total volume inorganic waste treated



Additional evidence link

C

Q kasp.unpar.ac.id/talkshow-dan-peresmian-waste-station-blu-x-rekosistem-di-lingkungan-unpar/





## **3.8** Inorganic Waste Treatment



#### Description

Waste from leftovers, vegetables and plants is managed independently with several methods that can produce compost, mol (liquid fertilizer), bio pore and gas.

The results of this waste processing are used in the campus environment, for example, compost and mol will be used as fertilizer for all parks and the gas from waste processing is used for canteen traders on campus.

In addition to chopping plastic bottles for use as handicraft materials and also used as a medium for planting several trees in vertical gardens.

For the type of paper waste, after the internal census was carried out on campus, the results together with metal and cans were sold to "Waste Bank" as part of a form of cooperation with the Bandung City Sanitation Company.

#### Additional evidence link



Q unpar.ac.id/kelola-sampah-kampus-wujudkan-unparhijau/









**3.9** Total volume toxic waste produced



**3.10** Total volume toxic waste treated









## **3.11** Toxic Waste Treatment





#### Hazardous Waste Management

Parahyangan Catholic University

#### Description

At UNPAR, the handling of toxic waste is managed with careful attention to safety and environmental protection. Toxic waste generated from university activities, such as from laboratories or maintenance processes, is collected and stored in designated containers or specific areas to ensure that it does not spread or cause harm to the environment or the community.

Once the toxic waste is securely stored, the university entrusts its management to an external third-party organization specialized in handling hazardous materials. This third-party provider is responsible for the proper treatment, disposal, or recycling of the toxic waste according to environmental regulations and safety standards.

This system ensures that toxic waste is dealt with in a responsible and compliant manner, minimizing the risk to both people and the environment. By collaborating with a professional waste management service, UNPAR demonstrates its commitment to sustainability and safety in all aspects of campus operations.

Source: Dinas Lingkungan Hidup Kota Bandung Keterangan Rincian Teknis Penyimpanan Sementara Limbah B3 Nomor: B/LH.04.01.02/887-DLH/III/2023





### **3.11** Toxic Waste Treatment







### **3.12** Sewage Disposal





#### Description

Liquid waste originating from toilets (floor drain, closed and sink) on all floors is collected first in the biocaps tank / Waste Treatment Plant.

Sewage Treatment Plant (STP) uses anaerobic-aerobic biofilter technology. The quality of water that has been treated before being distributed to the waterways must meet the requirements of domestic waste quality standards.

Sewage Treatment Plant in general can be described as follows:

- a. Initial Settling Tub
- b. Anaerobic (anoxic) bioreactors
- c. Aerobic Bioreactor
- d. Air Settlement Tub
- e. Bacteria Killer (Disinfection)
- f. Advanced Processing (Recycling)





University : Parahyangan Catholic University

Country : Indonesia

Web Address : unpar.ac.id

# **3.13** Planning, implementation, monitoring and/or evaluation of all programs related to Waste Management through the utilization of Information and Communication Technology (ICT)

#### Planning

- Conduct assessments to identify current energy consumption patterns and waste management practices on campus.
- Engage stakeholders, including students, faculty, and staff, to gather insights and suggestions.
- Engage stakeholders, including students, faculty, and staff, to gather insights and suggestions.
- Develop detailed proposals for ICT solutions, such as energy monitoring systems, smart waste bins, and data analytics tools.

#### 2 Implementation

- Formulate a project team to oversee the implementation process.
- Install and configure necessary technologies, such as energy management systems and smart waste monitoring solutions.
- Ensure integration with existing infrastructure for seamless operation.
- Promote awareness about energy efficiency and proper waste management practices.

#### 3 Monitoring

- Begin collecting data on energy usage, waste generation, and recycling rates using the implemented ICT tools.
- Identify any operational issues and areas for improvement.

#### **Evaluation**

- Analyze collected data to evaluate the success of energy and waste management programs against established goals.
- Prepare a comprehensive report summarizing findings, successes, challenges, and recommendations for future actions.
- Plan for the next cycle of initiatives to enhance energy efficiency and waste management.





**3.13** Planning, implementation, monitoring and/or evaluation of all programs related to Waste Management through the utilization of Information and Communication Technology (ICT)



#### Description

Utilizing ICT in waste management helps create efficient, transparent, and sustainable processes. From planning and implementing smart waste collection systems to monitoring realtime data and evaluating environmental impact, ICT enables institutions and communities to manage waste more effectively and reduce their environmental footprint. Through data-driven decisions, smart technologies, and integrated platforms, ICT enhances the entire lifecycle of waste management, leading to a cleaner, more sustainable future.

#### Source

Rekosistem Waste Station at UNPAR




# **3.13** Planning, implementation, monitoring and/or evaluation of all programs related to Waste Management through the utilization of Information and Communication Technology (ICT)



![](_page_73_Picture_0.jpeg)

![](_page_74_Picture_0.jpeg)

![](_page_74_Picture_1.jpeg)

### **4.1** Water conservation program and implementation

![](_page_74_Picture_4.jpeg)

Source

**GBCI** Monitoring

#### Description

- UNPAR operates 3 (three) active wells situated in Building 0, Building PPAG 2, and Building 9. All three wells have received the necessary approvals from the Ministry of Energy and Mineral Resources.
- Water from these wells is stored in five Ground Water Tank (GWT) locations, which are positioned next to and in front of Building 0, Building 8, Building 17, and Building 9.
- From these water reservoirs, the water is pumped to the Roof Water Tank (RWT) in each building and then distributed by gravity, assisted by pumps, to the water installation.

	Nama Area	Luas Area	Debit Air Hujan	Volume	Keterangan
1	Atap North Tower	1,247.11 m2	78 L/m2/Hari	97,274.58 L	- PA
2	Atap South Tower	1.214.70 m2	78 L/m2/Hari	94,746.601	
3	Podium	1.433.07 m2	78 L/m2/Hari	111.779.46 L	
-4	Site Plan	2,838.32 m2	78 L/m2/Hari	221,388.96 L	Update Ars 2017 08 10
5	Kanopi	254.24 m2	78 L/m2/Hari	19,830.72 L	Update Ars 2017 08 10
6		Q 2	and the second s	0.00 L	
		- K	TOTAL	545.020.321	

5% Penampungan air hujan Air hujan ditampung di gutter/selokan sebolum discharge ke saluran luar. Dhitung perkiraan panjang selokan (320m) dengan u dich (600400

Catatan

Data curah hujan menurut SNI adalah 78 L/m2/h

Tabel data iklim utk nilai max adalah 125 L/m2/hari Kebutuhan penampungan adalah 222.690 L untuk 1 point (50%) dan 378.573 L untuk 2 point (85%)

![](_page_74_Figure_14.jpeg)

![](_page_75_Picture_0.jpeg)

![](_page_75_Picture_1.jpeg)

### **4.2** Water recycling program implementation

![](_page_75_Picture_4.jpeg)

#### Description

UNPAR's water supply is sourced from groundwater, which is initially collected in a ground water tank. This water undergoes a filtration process using two types of filters—sand to remove large particles and impurities, and carbon to eliminate contaminants and improve water quality. The filtered water is then stored in a roof water tank.

To ensure its safety for consumption, the water in the roof tank is subjected to an additional filtration process, resulting in potable water that meets the required standards for drinking.

#### Additional evidence link

Q instagram.com/reel/C3mL\_GhLq2e/? utm\_source=ig\_web\_copy\_link&igsh=MzRIODBiNWFIZA==

![](_page_76_Picture_0.jpeg)

![](_page_76_Picture_1.jpeg)

### **4.3** Water efficient appliances usage

![](_page_76_Picture_4.jpeg)

#### Description

To promote water conservation across the campus, various facilities have been upgraded to incorporate water-saving technologies.

Specifically, several washbasins, toilet flush valves, toilet flush tanks, urinal flush valves, and lavatories are now equipped with motion sensor faucets. These faucets are designed to minimize water waste by only activating when needed, in compliance with established discharge capacity standards.

Furthermore, all parks on campus utilize automatic sprinklers that are programmed with timers. This ensures that water is used efficiently, allowing for optimal irrigation while preventing overwatering.

Together, these initiatives reflect the university's commitment to sustainable water management and environmental responsibility.

![](_page_76_Picture_10.jpeg)

![](_page_77_Picture_0.jpeg)

![](_page_77_Picture_1.jpeg)

### **4.4** Consumption of treated water

![](_page_77_Figure_4.jpeg)

#### Description

UNPAR has adhered to local regulations regarding water conservation, as outlined in the decision by the Head of the Investment and One-Stop Integrated Services Office of West Java Province concerning the extension of groundwater use for Parahyangan Catholic University. This document delineates the obligations that UNPAR must fulfill as compensation for utilizing groundwater and its impact on the environment.

To effectively monitor and control water usage across the campus, additional water meters have been installed in each building. This allows for precise tracking of water consumption and facilitates better management. Moreover, maintenance activities—both preventive and corrective—are being enhanced to ensure that existing water fixtures operate efficiently. The goal is to make these maintenance efforts more systematic, organized, and responsive, ultimately contributing to the university's commitment to sustainable water management.

\*[Mia Wimala, Bob Zirads, and Rindu Evelina, 2019, Water Security in Green Campus Assessment Standard]

![](_page_77_Picture_9.jpeg)

![](_page_78_Picture_0.jpeg)

![](_page_78_Picture_1.jpeg)

### **4.5** Water pollution control in campus area

![](_page_78_Picture_4.jpeg)

#### Description

Water pollution on campus can originate from various sources, including liquid waste from daily activities, the use of fertilizers and pesticides, construction activities, plastic waste, and sediment runoff.

UNPAR has implemented a Wastewater Treatment Plant (WWTP) as a storage system. At regular intervals, water pollution is disposed of using a septic tank pumping method, in coordination with the Perusahaan Umum Daerah Tirtawening Kota Bandung for the disposal of domestic waste.

#### HK.03/228-PNP.PLY/IV/2024 Contract Number

![](_page_79_Picture_0.jpeg)

![](_page_79_Picture_1.jpeg)

![](_page_79_Picture_2.jpeg)

#### Description

Universitas Katolik Parahyangan (UNPAR) has entered into a Memorandum of Understanding (MoU) with BLTEC Korea Limited and Integration Lab Service Korea Co., (donorship agreement no. III/FT/2022-08/008 and 009-MoA) formalized at the UNPAR Rectorate Building. This agreement reflects a shared commitment between the institutions to donate water quality testing equipment and facilitate its installation in UNPAR's laboratories.

To date, Korea continues to send equipment for research and teaching, making UNPAR the only university in Bandung equipped with comprehensive water quality testing tools. This unique advantage allows UNPAR to serve as a collaborative hub for other universities interested in partnering on research and educational initiatives.

This generous donation represents a significant contribution from both organizations to UNPAR, particularly benefiting the Faculty of Engineering and the Faculty of Industrial Engineering. The collaboration aims to empower the academic community at UNPAR to conduct research and engage in practical initiatives that address critical issues related to water pollution and waste management in Indonesia. By equipping students and faculty with advanced testing tools, the partnership seeks to enhance academic exploration and promote innovative solutions for sustainable water management.

#### Additional evidence link

Q unpar.ac.id/fasilitasi-laboratorium-teknik-unpar-teken-mou-dengan-2-lembaga-korea/

![](_page_80_Picture_0.jpeg)

![](_page_80_Picture_1.jpeg)

: Parahyangan Catholic University University : Indonesia Country Web Address : unpar.ac.id

![](_page_80_Picture_3.jpeg)

**4.6** Planning, implementation, monitoring and/or evaluation of all programs related to Water Management through the utilization of Information and Communication Technology (ICT)

![](_page_80_Picture_5.jpeg)

#### Description

ICT plays a critical role in improving water management by providing real-time data, predictive insights, and automated systems for monitoring, optimizing, and evaluating water usage. From planning through to evaluation, the use of ICT enables smarter, more sustainable water management practices, reducing waste, improving efficiency, and enhancing the overall management of water resources. By leveraging these technologies, institutions and communities can meet their water conservation goals and contribute to a more sustainable future.

![](_page_81_Picture_0.jpeg)

![](_page_81_Picture_1.jpeg)

University : Parahyangan Catholic University

Country : Indonesia

Web Address : unpar.ac.id

### 4.6 Planning, implementation, monitoring and/or evaluation of all programs related to Water Management through the utilization of Information and Communication Technology (ICT)

- Conduct assessments to identify current water consumption patterns and management practices on campus.
- Establish specific sustainability goals related to water conservation and management utilizing ICT.
- Define metrics for measuring progress, such as water usage reduction targets and water quality indicators.
- Develop detailed proposals for ICT solutions, such as smart water meters, leak detection systems, and data analytics tools for monitoring water usage.

#### 2 Implementation

Planning

- Formulate a project team to oversee the implementation process.
- Install and configure necessary technologies, such as smart water meters and sensors for real-time monitoring of water usage and guality.
- Promote awareness about water conservation practices and the importance of sustainable water management.

#### 3 Monitoring

- · Begin collecting data on water usage, quality, and conservation efforts using the implemented ICT tools.
- Identify any operational issues and areas for improvement.

### **Evaluation**

- Analyze collected data to evaluate the success of water management programs against established goals.
- Prepare a comprehensive report summarizing findings, successes, challenges, and recommendations for future actions.
- Plan for the next cycle of initiatives to enhance water management and conservation efforts.

![](_page_82_Picture_0.jpeg)

![](_page_82_Picture_1.jpeg)

![](_page_82_Picture_2.jpeg)

## TRANSPOR TATION

![](_page_83_Picture_0.jpeg)

![](_page_83_Picture_1.jpeg)

![](_page_83_Picture_3.jpeg)

### **5.4** The total number of vehicles (cars and motorcycles with combustion engine) divided by total campus' population

![](_page_83_Picture_5.jpeg)

DATA KENDARAAN YANG MASUK KE LINGKUNGAN KAMPUS UNPAR MOTOR & MOBIL 2021 - 2023

![](_page_83_Figure_7.jpeg)

![](_page_84_Picture_0.jpeg)

![](_page_84_Picture_1.jpeg)

![](_page_84_Picture_3.jpeg)

![](_page_84_Picture_4.jpeg)

![](_page_84_Picture_5.jpeg)

### Description

UNPAR operates mini buses and larger buses daily to transport students and staff between the main campus and its other locations. These vehicles are also utilized for special occasions that require additional passenger capacity, such as workshops and field trips.

To maintain a conducive environment, public access to the campus area is prohibited, ensuring safety and security for the university community.

Additionally, all buildings within the campus are easily accessible by walking, promoting a pedestrian-friendly atmosphere that encourages interaction and engagement among students and faculty.

![](_page_85_Picture_0.jpeg)

![](_page_85_Picture_1.jpeg)

### **5.9** Zero Emission Vehicles (ZEV) policy on campus

![](_page_85_Picture_4.jpeg)

#### Description

As of now, UNPAR does not have specific regulations concerning vehicle emission standards within its campus environment.

To mitigate the environmental impact of vehicular emissions, the university has designated parking areas located in open dam regions separate from the main campus. This strategic placement helps to reduce CO2 levels, ensuring that the academic community at UNPAR continues to enjoy fresh air within the campus.

Currently, there are no emission-free vehicles available on campus. The adoption of such vehicles is not feasible due to the campus's highland and hilly terrain, which poses challenges for their operation. Nonetheless, the university remains committed to exploring sustainable transportation options in the future.

#### Additional evidence link

Q instagram.com/reel/C-BxH8Qy3ix/? utm\_source=ig\_web\_copy\_link&igsh=MzRIODBiNWFIZA==

![](_page_86_Picture_0.jpeg)

![](_page_86_Picture_1.jpeg)

### **5.13** The ratio of the ground parking area to total campus area

![](_page_86_Picture_4.jpeg)

![](_page_86_Picture_5.jpeg)

Total Campus Area	191839
Total Parking Area	9796
Ratio	0.051

![](_page_87_Picture_0.jpeg)

![](_page_87_Picture_1.jpeg)

## **5.14** Program to limit or decrease the parking area on campus for the last 3 years (from 2021 to 2023)

![](_page_87_Picture_4.jpeg)

#### Description

Over the past three years, Parahyangan Catholic University has actively implemented a program aimed at limiting and reducing the parking area on campus. This initiative is part of the university's broader commitment to promoting sustainable transportation and enhancing the campus environment, including:

- 1. Offering free shuttle services for students during designated hours. This service is provided using three minibuses, each with a capacity of 15 passengers.
- 2. The university has partnered with a company specializing in parking lot management. The parking rates within the campus are calculated on an flat basis, to encourage efficient use of parking spaces.

These initiatives aim to promote sustainable transportation and reduce traffic congestion on campus.

#### Additional evidence link

Q instagram.com/reel/DAmvrVatoMf/? utm\_source=ig\_web\_copy\_link&igsh=MzRIODBiNWFIZA==

![](_page_88_Picture_0.jpeg)

![](_page_88_Picture_1.jpeg)

### **5.15** Number of initiatives to decrease private vehicles on campus

![](_page_88_Picture_4.jpeg)

![](_page_89_Picture_0.jpeg)

![](_page_89_Picture_1.jpeg)

### **5.15** Number of initiatives to decrease private vehicles on campus

![](_page_89_Picture_4.jpeg)

![](_page_90_Picture_0.jpeg)

![](_page_90_Picture_1.jpeg)

### **5.15** Number of initiatives to decrease private vehicles on campus

![](_page_90_Picture_4.jpeg)

#### Description

Over the past three years, Parahyangan Catholic University has actively implemented a program aimed at limiting and reducing the parking area on campus. This initiative is part of the university's broader commitment to promoting sustainable transportation and enhancing the campus environment.

The reduction of parking spaces encourages students and staff to seek alternative modes of transport, such as carpooling, public transportation, or utilizing the university's free shuttle service. By decreasing the available parking area, the university aims to mitigate traffic congestion and promote a more pedestrian-friendly atmosphere within the campus.

In addition to these efforts, the university has conducted awareness campaigns to educate the academic community about the benefits of reducing reliance on private vehicles. Through these combined strategies, Parahyangan Catholic University is working toward creating a cleaner, healthier, and more sustainable campus environment."

![](_page_91_Picture_0.jpeg)

![](_page_91_Picture_1.jpeg)

### **5.16** Pedestrian path on campus

![](_page_91_Picture_4.jpeg)

![](_page_92_Picture_0.jpeg)

![](_page_92_Picture_1.jpeg)

### **5.16** Pedestrian path on campus

![](_page_92_Picture_4.jpeg)

![](_page_93_Picture_0.jpeg)

![](_page_93_Picture_1.jpeg)

### **5.16** Pedestrian path on campus

![](_page_93_Picture_4.jpeg)

![](_page_94_Picture_0.jpeg)

![](_page_94_Picture_1.jpeg)

### **5.16** Pedestrian path on campus

![](_page_94_Picture_4.jpeg)

#### Description

Pedestrian comfort along the pathways of UNPAR is essential for supporting academic activities, as these paths serve as vital connections between the entrance gate and various areas of the campus.

The presence of hallways between buildings that provide protection from the elements—such as heat and rain—enhances the comfort of pedestrians, allowing them to walk between locations with ease.

Moreover, the pedestrian pathways serve multiple purposes. In addition to functioning as thoroughfares for students and faculty, they also provide open spaces for a variety of activities, including social gatherings, recreational events, and other campus activities. This multifunctional design not only facilitates movement but also fosters a sense of community and engagement among the university's academic population.

![](_page_95_Picture_0.jpeg)

![](_page_95_Picture_1.jpeg)

University : Parahyangan Catholic University

Country : Indonesia

Web Address : unpar.ac.id

# **5.18** Planning, implementation, monitoring and/or evaluation of all program related to Transportation through the utilization of Information and Communication Technology (ICT)

### Planning

- Conduct assessments to identify current transportation patterns, issues, and opportunities for improvement on campus.
- Engage stakeholders, including students, faculty, and staff, to gather insights and suggestions regarding transportation needs.
- Define metrics for measuring progress, such as reductions in single-occupancy vehicle usage and increases in public transport usage.
- Identify necessary resources (technology, funding, personnel) for successful implementation.

![](_page_95_Picture_11.jpeg)

### Implementation

- Formulate a project team to oversee the implementation process.
- nstall and configure necessary technologies, such as smart transportation management systems, mobile applications, and user-friendly websites.
- Promote awareness about sustainable transportation options, such as carpooling, cycling, and the use of electric vehicles.

### 3 Monitoring

- Begin collecting data on transportation usage patterns, vehicle emissions, and the effectiveness of implemented solutions.
- Utilize technology to monitor real-time transportation metrics and user feedback.
- Identify any operational issues and areas for improvement.

### 4 Evaluation

- Analyze collected data to evaluate the success of transportation programs against established goals.
- Prepare a comprehensive report summarizing findings, successes, challenges, and recommendations for future actions.
- Plan for the next cycle of initiatives to enhance sustainable transportation options on campus.

![](_page_96_Picture_0.jpeg)

![](_page_96_Picture_1.jpeg)

# **5.18** Planning, implementation, monitoring and/or evaluation of all program related to Transportation through the utilization of Information and Communication Technology (ICT)

![](_page_96_Figure_4.jpeg)

#### Description

UNPAR collaborates with PT Jasa Marga Tollroad Operator in managing transportation systems, leveraging the expertise of the toll operator to optimize campus transit and related infrastructure. This partnership helps enhance transportation services on campus, ensuring efficient planning, implementation, and monitoring through the integration of Information and Communication Technology (ICT). By working together, both entities contribute to more streamlined traffic management and sustainable transport solutions for the university community.

#### Additional evidence link

Q getpark.jmto.co.id

Q unpar.ac.id/unpar-teken-mou-bersama-jasa-margasepakati-pengembangan-teknologi-dan-inovasi/

![](_page_97_Picture_0.jpeg)

![](_page_97_Picture_1.jpeg)

![](_page_97_Picture_2.jpeg)

## EDUCATION & RESEARCH

![](_page_97_Picture_4.jpeg)

![](_page_98_Picture_0.jpeg)

![](_page_98_Picture_1.jpeg)

### **6.1** Number of courses/subjects related to sustainability offered

![](_page_98_Picture_4.jpeg)

### Description

Sustainability courses at Parahyangan Catholic University delve into the environmental, economic, and social dimensions of sustainability, focusing on society's capacity to innovatively utilize, develop, and protect natural resources and ecosystems. These courses aim to address the needs of both current and future generations.

### 318

Courses specifically centered on sustainability provide an in-depth examination of one or more topics related to all three dimensions—environmental, economic, and social—allowing students to analyze complex interconnections and develop comprehensive solutions.

In contrast, sustainability-related courses focus on one or more aspects of sustainability but may not encompass all three dimensions. In these courses, sustainability or environmental considerations are incorporated as discrete elements within the curriculum, although they may not serve as the primary focus. This distinction allows for a broader range of topics to be explored while still promoting awareness and understanding of sustainability issues.

Source

**UNPAR Repository** 

![](_page_99_Picture_0.jpeg)

![](_page_99_Picture_1.jpeg)

### **6.2** Total number of courses/subjects offered

#### Description

Total of courses/subjects offered at UNPAR yearly are:

### 2.712

UNPAR plays a pivotal role as a center for teaching and learning, dedicated to meeting the diverse needs of all learners. Beyond its educational mission, UNPAR also serves as a community hub, actively promoting sustainability initiatives.

By fostering an environment that encourages collaboration and engagement, the university not only enhances the academic experience but also cultivates a sense of responsibility toward environmental stewardship among students and faculty. Through various programs, workshops, and community outreach activities, UNPAR aims to inspire sustainable practices and create a lasting impact on both the university community and the wider society.

Throughout its journey, UNPAR actively collaborates with community members and fosters partnerships with various stakeholders. This collaborative approach is crucial in shaping policies and promoting sustainable environmental, social, and economic planning for both learning and research purposes.

By engaging with local organizations, government agencies, and industry partners, UNPAR aims to integrate diverse perspectives and expertise into its sustainability initiatives. This engagement not only enhances the relevance and impact of academic programs but also empowers the university community to contribute to meaningful solutions that address pressing sustainability challenges. Through these partnerships, UNPAR strives to create a holistic framework for sustainable development that benefits both the university and the broader community.

![](_page_99_Picture_11.jpeg)

Source UNPAR Repository

![](_page_100_Picture_0.jpeg)

![](_page_100_Picture_1.jpeg)

### **6.4** Total research funds dedicated to sustainability research (in US Dollars)

![](_page_100_Figure_4.jpeg)

![](_page_101_Picture_0.jpeg)

![](_page_101_Picture_1.jpeg)

### **6.4** Total research funds dedicated to sustainability research

![](_page_101_Figure_4.jpeg)

Additional evidence link

**Q** repository.unpar.ac.id

![](_page_102_Picture_0.jpeg)

![](_page_102_Picture_1.jpeg)

### **6.5** Total research funds (in US Dollars)

![](_page_102_Figure_4.jpeg)

![](_page_103_Picture_0.jpeg)

![](_page_103_Picture_1.jpeg)

Parahyangan Catholic University University Country : Indonesia Web Address : unpar.ac.id

#### 6.7 Number of scholarly publications on sustainability published

![](_page_103_Picture_4.jpeg)

![](_page_103_Picture_5.jpeg)

![](_page_103_Picture_6.jpeg)

Q journal.unpar.ac.id/

Q lppm.unpar.ac.id/

![](_page_103_Picture_9.jpeg)

![](_page_103_Picture_10.jpeg)

### Description

UNPAR has made significant contributions to the field of sustainability through a growing number of scholarly publications. Over the past few years, the university has published [insert number] scholarly articles, research papers, and journals focusing on various aspects of sustainability, including environmental, economic, and social dimensions.

These publications reflect UNPAR's commitment to advancing knowledge and fostering academic discourse on sustainability issues. By engaging faculty and students in impactful research, the university aims to contribute to the global conversation on sustainable development and address the challenges faced by communities in Indonesia and beyond.

![](_page_104_Picture_0.jpeg)

![](_page_104_Picture_1.jpeg)

![](_page_104_Picture_3.jpeg)

### Number of events related to sustainability (environment)

![](_page_104_Picture_5.jpeg)

![](_page_105_Picture_0.jpeg)

![](_page_105_Picture_1.jpeg)

![](_page_105_Picture_2.jpeg)

![](_page_106_Picture_0.jpeg)

![](_page_106_Picture_1.jpeg)

### **6.9** Number of activities organized by student organizations related to sustainability per year

![](_page_106_Picture_4.jpeg)

#### Additional evidence link

**Q** kemahasiswaan.unpar.ac.id/kemahasiswaan/unit-kegiatan-mahasiswa/

![](_page_107_Picture_0.jpeg)

![](_page_107_Picture_1.jpeg)

### 6.9

### Number of activities organized by student organizations related to sustainability per year

![](_page_107_Picture_5.jpeg)

Q unpar.ac.id/mahasiswa-unpar-bersihkan-pantai-sekaligus-tanam-bibitcemara-laut-di-cianjur/




## **6.9** Number of activities organized by student organizations related to sustainability per year



### Description

UNPAR boasts 24 student organizations and 17 student associations, each playing a vital role in promoting sustainability on campus. Every year, these groups are required to organize at least one program focused on sustainability campaigns and initiatives.

These programs range from awareness campaigns addressing environmental issues to practical projects that promote sustainable practices. Student organizations often host workshops on topics like waste management and energy conservation, collaborating with local environmental groups to enhance their impact.

The sustainability initiatives organized by student organizations at UNPAR exemplify the university's commitment to fostering responsible citizenship and a sustainable future. Through meaningful engagement and action, these programs prepare students to be conscientious leaders and advocates for sustainability.

### Additional evidence link

Q kemahasiswaan.unpar.ac.id/kemahasiswaan/persatuan-mahasiswa/

Q unpar.ac.id/menelisik-pemanfaatan-mekanika-dan-bahan-materialdalam-upaya-arsitektur-berkelanjutan/





## **6.12** Sustainability Report



### Description

Implementing a comprehensive university sustainability initiative requires a number of changes, including individual changes or routines that have been carried out so far.

Higher education institutions play a role in education, research and social contributions are integrated together which are then promoted and strengthened in the process of institutionalization.

This integrated approach to achieving university sustainability can help universities improve the efficiency of their operations, learning processes and other processes, raise awareness of environmental impacts and build an image of sustainability.

### Additional evidence link

- Q unpar.ac.id/keberlanjutan
- **Q** isustain.unpar.ac.id
- Q digiflip.unpar.ac.id/communication-of-engagement-2024/





## 6.14 Number of cultural activities on campus





### Description

UNPAR trying to build the modern university institution means to put contemporary university spirit (including pursuit of science, advocacy of truth, academic freedom, encouragement of innovation, rational criticism and cooperation and competition) in the form of institutional culture, and carry forward it; to advocate a favorable school atmosphere featuring hard-work, courage of innovation, devotion to research and prudence; to build an innovational culture featuring contention of a hundred schools of thought, encouragement of innovation and toleration of failures; to stick to academic morals, overcome fickleness and frauds, and academic create а democratic, open, forward-looking and harmonious academic environment and atmosphere.

### Additional evidence link

Q ikkou.id/work/67th-unpar-dies-natalis-ft-mr-president-ChPUjukBFA

Q unpar.ac.id/international-bandung-choral-festival-2023-berlangsung-di-unpar/

Q unpar.ac.id/misi-budaya-listra-unpar-dalam-festival-budaya-internasional-diyunani/





## 6.14 Number of cultural activities on campus



### Additional evidence link

- Q unpar.ac.id/integrated-arts-unpar-gelar-seminar-internasional-soroti-sejarahbuku-budaya-jepang/
- Q unpar.ac.id/kolaborasi-mahasiswa-integrated-arts-dan-filsafat-budaya-unpardalam-pameran-karya/
- Q unpar.ac.id/menjelajah-bersama-parahyangan-orchestra/
- Q unpar.ac.id/gelar-pamit-listra-jelang-misi-budaya/





## **6.15** Number of university program(s) international collaborations



### Description

An international environment is also continuously maintained at Unpar through a collaborative network and active role with various partners abroad, for example the International Network of Universities (INU), The Association of Christian Universities and Colleges in Asia (ACUCA), and the Association of Southeast and East Asian Catholic Colleges and Universities (ASEACCU). Apart from that, international networks are built on the initiative and follow-up of collaboration between lecturer groups, for example the Global Entrepreneurship Monitor (GEM) in the form of international collaboration and cooperation with many universities such as TU Dortmund in Germany; Maastricht School of Management in the Netherlands; Hiroshima University in Japan; Flinders University, and The University of Notre Dame in Australia. The learning process at Unpar also increasingly includes lecturers and researchers from well-known universities from abroad, for example as visiting professors and for joint research (research fellows).

### Additional evidence link

Q unpar.ac.id/pacis-dan-lab-hi-gelar-seminar-bertajuk-environmentalgovernance-and-the-politics-of-sustainability/

Q unpar.ac.id/konferensi-internasional-u20-di-unpar-ketahanan-pangan dunia-jadi-perhatian/

Q unpar.ac.id/kerja-sama-sinergis-wujudkan-internasionalisasi-unpar/

Q unpar.ac.id/icohdes-2023-upaya-bersama-tangani-limbah-makanan/

Q ecogreenproject.org/

Q in2food-project.net/





# **6.16** Number of community services related to sustainability organized by university and involving students



### Description

UNPAR demonstrates its commitment to sustainability through numerous community service initiatives involving students each year. These programs encompass educational outreach and practical engagement aimed at promoting environmental awareness and sustainable practices. Students participate in workshops on topics like waste management and energy conservation, empowering local residents with the knowledge to adopt sustainable habits.

Additionally, hands-on projects, such as clean-up drives, tree-planting events, and support for local farmers in sustainable agriculture, enhance community engagement while fostering a sense of social responsibility among students.

Collaborating with local organizations and government bodies, UNPAR ensures that these initiatives align with broader sustainability goals. Overall, the university's community service programs illustrate its dedication to integrating sustainability into the student experience, nurturing environmentally conscious individuals ready to advocate for sustainable development.

### Additional evidence link

- Q instagram.com/kamayang2023/?g=5
- **Q** instagram.com/p/CwxL1s8LS00/?img\_index=1
- Q instagram.com/p/Cv4CrWjrLTr/?img\_index=1

Q unpar.ac.id/satgas-ppks-unpar-terbitkan-buku-saku-pencegahandan-penanganan-kekerasan-seksual/

Q unpar.ac.id/mahasiswa-unpar-bantu-warga-kampung-tjibaranibersihkan-sisa-material-longsor/





# **6.16** Number of community services related to sustainability organized by university and involving students



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### Additional evidence link

Q unpar.ac.id/unpar-dan-loreal-paris-kampanye-lawan-kekerasanseksual-di-ruang-publik/

Q unpar.ac.id/ikatan-alumni-4-perguruan-tinggi-luncurkan-programbandung-raya-zero-waste/





## 6.17 Number of sustainability-related startups



Program Inkubator Bisnis Teknologi dari Direktorat Pengelolaan Bisnis, Inovasi, dan Kewirausahaan is a comprehensive and integrated form of guidance and development for selected entrepreneurs to help them grow into successful and thriving business owners. The small business service center and training programs are designed to support entrepreneurs in becoming resilient and independent, ultimately accelerating their business development.

### Additional evidence link

Q dpbik.unpar.ac.id

Q unpar.ac.id/sambut-hari-umkm-internasionalunpar-gelar-expo-libatkan-80-pelaku-umkm/







## **6.18** Total number of graduates with green jobs







- Pertambangan dan Penggalian
- 7 Industri Pengolahan
- Pengadaan Listrik, gas, uap/air panas, dan udara dingin
  - Pengadaan air, pengelolaan sampah dan daur ulang, pembuangan dan pembersihan limbah dan sampah
- 108 Konstruksi dan pembangunan
- 27 Real Estate, developer dan property

Source

UNPAR Tracey Study Team





# **6.19** Availability of unit(s) or office(s) that coordinate sustainability on campus



Parahyangan Catholic University (UNPAR) envisions itself as a humanum academic community, with a noble goal of promoting human dignity and the integrity of all creation. In Pope Francis' encyclical letter "Laudato Si," there is a call for a renewed dialogue on shaping the future of our planet, emphasizing that today's environmental challenges affect and involve everyone.

The United Nations (UN) has introduced the Sustainable Development Goals (SDGs) as a reference for governments and communities to pursue development that respects sustainability's pillars: social, economic, and environmental aspects. Currently, the European Union (EU) has also launched the "Green Deal" policy, prioritizing sustainable initiatives, including the Erasmus+ CBHE (Capacity Building of Higher Education) program.

Through this program, UNPAR coordinates projects like IN2FOOD (Interdisciplinary Approach Towards Fostering Collaborative Innovation in Food Waste Management) and ECoGREEN (Empowering Transdisciplinary Collaboration and Green Entrepreneurial Education Towards Sustainable Campus and Micro, Small, and Medium-sized Enterprises in Indonesia).

### Additional evidence link

Q isustain.unpar.ac.id

Q unpar.ac.id/unpar-kembali-pimpin-project-erasmusecogreen-bersama-7-universitas-lain/





: Parahyangan Catholic University University

Country : Indonesia

Web Address : unpar.ac.id

## 6.20 Planning, implementation, monitoring and/or evaluation of university governance through the utilization of Information and Communication Technology (ICT)

### Planning

- Conduct a comprehensive assessment of current governance structures, processes, and practices within the university.
- Establish specific governance goals that promote sustainability, transparency, and stakeholder engagement.
- Define metrics for measuring progress, such as the number of governance processes digitized and stakeholder satisfaction levels.
- Identify required resources (technology, funding, personnel) for successful implementation.

#### 2 Implementation

- Assemble a project team responsible for overseeing the implementation process.
- Install and configure necessary technologies, such as e-governance systems, online consultation platforms, and document management systems.
- Ensure integration with existing university systems for seamless operation.

### 3 Monitoring

- Begin collecting data on governance processes, stakeholder engagement, and user feedback on implemented ICT solutions.
- Regularly evaluate the performance of implemented technologies and their effectiveness in improving governance processes.
- Conduct surveys and focus groups to assess user experience and satisfaction with governance initiatives.

### **Evaluation**

- Analyze collected data to evaluate the success of governance programs against established goals.
- Prepare a comprehensive report summarizing findings, successes, challenges, and recommendations for future actions.
- Share the report with stakeholders and the university community to promote transparency and accountability.
- Plan for the next cycle of initiatives to enhance governance practices and stakeholder engagement.



## **Please kindly** contact us at

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