



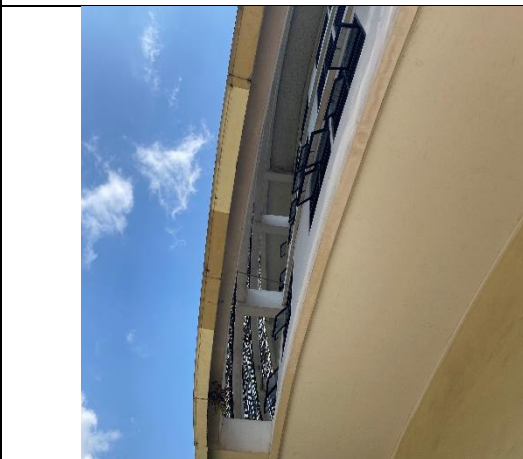
# THE Impact Ranking

University : Universitas Padjadjaran  
Country : Indonesia  
Web Address : <https://unpad.ac.id/>

## Energy and Climate Change (EC) Energy Efficient Appliances Usage



Natural Ventilation system



Full day natural lighting



Shifting to use LED Lamp



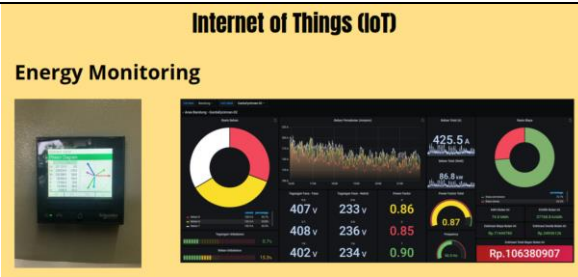
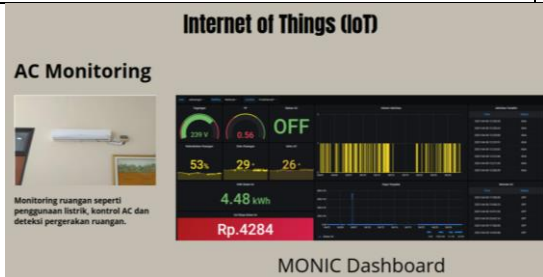
AC inverter Integrated with system



Energy Star-certified printer



Energy Star-certified computer



### MONICS - (Energy Monitoring Electronic & Sensor)




- Monitoring ruangan seperti penggunaan listrik, kontrol AC dan deteksi pergerakan ruangan
- Desain papan electronic secara mandiri / in-house
- Modular menggunakan modul - modul komponen yang mudah diganti plug & play





### ENERGY MONITORING - ELECTRICAL PASSIVE



**Implementasi**

- Panel Listrik 8 Terpasang
- Kelistrikan gedung
- AC

**Kebutuhan Informasi**

- Basic Metering
- Load Balance Metering
- Estimation Cost

Monitoring energy tools for lighting and AC [Monics system]



Shifting to Solar panel usage for several appliances

**Description:**

Universitas Padjadjaran is committed to becoming a green campus through programs and concrete actions, including conservation and energy efficiency. The action taken is the use of energy efficiency appliance.

Appliance	Total Number	Total number energy Efficient appliances	Percentage
<b>LED Lamp</b>	19,771	1720	8.70%
<b>Fan</b>	427	323	75.64%
<b>AC-AC inverter</b>	2912	455	15.63%
<b>Energy Star-certified electronic</b>			
<b>Monitoring energy tools for lighting and AC [Monics system]</b>			
<b>Shifting Projector to LCD TV</b>			
<b>Average Percentage</b>			<b>33.32%</b>

Based on the table above, it is known that the efforts made by Universitas Padjadjaran to implement the use of energy-saving appliance. In 2022 Universitas Padjadjaran succeeded in implementing up to



33.32 percent of energy Efficient appliances and it's still counting higher. Based on University's policy, replacing conventional appliance to energy-efficient appliance is carried out if the appliance is broken. Shifting to use energy-efficient appliances will continue to be carried out for all existing appliance at Universitas Padjadjaran.

The appliance on the table above, not only using LED lamp to improve energy efficiency, but also another energy-efficient appliance. There are two types of ac inverter used, split and cassette / standing. We are also using energy star-certified electronic, such as printer and computer, but the data inventing is still in counting. Nowadays, we are trying to change projector to LCD TV to improve energy efficiency. We are also starting to switch using more renewable energy, such as solar panels for some equipment like water pumps and lighting.

Universitas Padjadjaran is also using Monitoring energy tool for controlling lighting, AC, and for environment is on progress. This monitoring energy use Internet of Things (IoT) system. In general, IoT is a concept in which certain objects have the ability to transfer data over a network without human-to-human or human-to-computer interaction. This system use internet to control the things such as lighting, AC and some environment (e.g. water). IoT will turn off the unused appliance (lighting or AC in an empty room) and saving more energy.