



# THE Impact Ranking

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

## Waste (WS)

### Inorganic Waste Treatment



Electronic waste separation



Inorganic waste from Universitas Padjadjaran, Jatinangor Campus area



Plastic bottle chopping machine



The final result of inorganic waste in the form of plastic pieces



Inorganic waste incinerators

### Electronic waste and batteries

The electronic waste and battery produced by academic activities of Universitas Padjadjaran are not delivered to TPS 3R Unpad Ciparanje, but **we send them to other company that collaborate with Universitas Padjadjaran to recycling waste**. Electronic waste such as un using computers, refrigerator, batteries, microscope lamp, etc. will be stored in the storage warehouse in a special bin for further processing **integrated with other company**.

### Inorganic waste produced by Universitas Padjadjaran activities, Jatinangor Campus Area

The amount of **inorganic waste** at Universitas Padjadjaran, Jatinangor Campus is around **20% of the total waste (4385.84 kg/month)**, that means around **2.109,16 kg inorganic waste is produced by Universitas Padjadjaran activities in one month**. In 2001-2015, the number of Universitas Padjadjaran students was 42.183 students with an estimated volume of waste **produced around 105.458 kg/day**. Universitas Padjadjaran Campus buildings include 16 faculties and offices such as the Rector, Library, Central Laboratory and others. The monitoring data was carried out between 2015 and 2019, while in 2020 and 2021 it was not carried out due to the pandemic, and data for 2022 had not been carried out. However, this amount is an estimate because the amount of waste processed does fluctuate depending on activities on campus. The total amount of inorganic waste collected is as much as the total amount waste that is managed (4385.84 kg), then the amount of waste that **goes into the incinerator is 1426.11 kg/month (32,52%/ months)**.

Additional link master plan unpad 2022:

<https://drive.google.com/drive/u/2/folders/1ghIEERdmEb-Hira9LQpUijA6Ry7z7MmF>



### **Plastic bottle chopping machine**

The plastic bottle **chopping machine** at TPS 3R Unpad Ciparanje is **working well**. This machine can process plastic bottles and cups in a very fast time. The last product from the enumerator is a piece of plastic (chopped plastic) that has been **wrapped** and **has the potential to be sold**. Based on UNPAD master plan data, in the process of separating plastic using a chopping machine, almost **15,21% of the types of plastic-based waste can be reduced**.

(<https://docs.google.com/presentation/d/1d9epPRv1jvSnVvaTihyktAARwLpjJgDz/edit?usp=sharing&oid=111706908590528060685&rtpof=true&sd=true>)

### **Inorganic waste incinerators**

The inorganic incinerator machine at TPS 3R Unpad Ciparanje **need maintaining more** because it had been used for several years for the process of managing solid inorganic waste, most of the components of the machine needed maintaining. Previously, the solid waste management from this incinerator was managed by PT. Bumeresik until 2016, but now is managed independently by PK3L UNPAD. The Solid waste residue can be destroyed using an incinerator with a temperature range of 800-1000°C./ (Burning furnace), the **capacity of incinerator is around 1.426,11 kg or 24 %** and continues to decline after the policy of reducing the use of single-use plastic packaging. Inorganic waste management using incinerators is currently managed by TSA 3R Ciparanje with an area of around 2000 m<sup>2</sup>.