Waste Management of UNIVERSITAS PADJADJARAN



Recycling Program

Various parties carry out waste management education, students being one of them, through various media such as Instagram posts. In addition, Universitas Padjadjaran has also published articles on strategies to increase awareness of environmental issues.





Recycling Program



Pressing Machine



Chooping Machine

Paper Reduction Program

- E- Office -

Licensing, correspondence, registration of soft file & online-based campus activities. Since 2011, Unpad has contributed to reducing paper use from 260,314 to 334,510 sheets, which is equivalent to 33 - 42 trees/year. Over the past 11 years, Unpad has saved a forest the size of 10 volleyball courts







3.2

Paper Reduction Program

- LIVE UNPAD-

Learning in Virtual Environment Universitas Padjadjaran (LIVE Unpad) is an e-learning platform that allows lecturers and students to interact such as providing learning materials, collecting assignments, conducting online exams, etc..



3.2

Paper Reduction Program

- PRAMA -

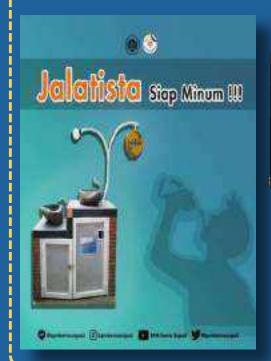
The public election at Padjadjaran University has implemented an online system using the university's email account. In addition to facilitating the public elections, it also reduces ballot papers and voting booths.



Plastic Reduction

- JALATISTA -

Independent drinking water supply system scattered throughout the campus. At Universitas Padjadjaran, Jatinangor Campus, eight independent drinking water supply systems have been installed. They are installed in various faculties and public facilities such as the Unpad Grand Mosque, Jati Padjadjaran Stadium, and Bale Santika.







Plastic Reduction

- PLASTIC REDUCTION CAMPAINGS -

To reduce the use of plastic drinking bottles – Tumblers produced by Universitas Padjadjaran



Environmental Campaign Program

- Environmental Campaign and River Clean Up Program-

One of the Universitas Padjadjaran Community Service Activities with the theme "Citarum Harum" was carried out on the Citarum River.

Activities carried out in the form of education and community service to clean the river.



Paper Reduction Program

- Application of Enterprise Resource Planning (ERP) -

Software system for every business activity carried out on campus



Paper Reduction Program

Main Process

Second Process

- MAP BUSINESS PROJECT-

Education and student Community service Research affairs **Planning and Procurement Budgeting** HR Legal Library Infrastructure and asset manajemen Secretariat **Finance Quality assurance Internal Monitoring Information System Information Technology** Other Sports and Worship/Spritit Health Recreation academic uality facilities **Facilities** facilties facilities

Other Process

Clean Air Program



PERATURAN REPORT UNIVERSITAS PADARDARAN NOMOR 45-TMR/N 2016 PEDOMAN TERMIN RETERTIBAN, HIDAMANAN, DAN KASILLAMATAN LINGSTONION KAMPUS LIMPERSONAS PADJADINISAN

> DESIGNAS PARMAT TURAN VANO MARA ESIA. REKTOR UNIVERSITAR PADJADJARAN.

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To support clean air program around the campus, Universitas Padjadjaran officially limit the smoking area in Regulation of the Rector of the University of Padjadjaran No. 45 Years of 2016 Concerning The Technical Guidelines for Order, Security, and Safety in the Campus Environment.

Organic Waste Treatment





Transport Of Organic Waste



Composting



Liquid **Organic Composs** Usage



Sorting



Enumeration



Liquid **Organic Composs**



Organic waste production: 49% of total waste (42,92 m3/month)

Organic Waste Treatment

Peat pellets wraps are prepared

The peat pellets

Weight of water and cocopeat are measured

The mixed material is pressed by a special tool

All material are mixed

The mixed material are put into container

Peat Pellet Production

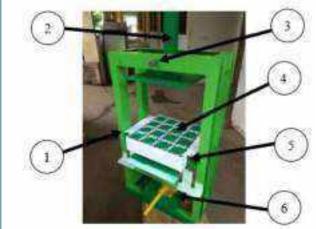
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Organic Waste Treatment

The Peat Pellets Maker



- I. Engine Frame
- 2. Backstop Rod
- 3. Locking Shaft
- . Pressure Rod
- 5. Pressure Rod
- 6. Hydraulic Jack



Comparison of self-produced peat pellets (right) with product sold in the Market (left)

Peat Pellet Production

3.1

3.2



Inorganic Waste Treatment

Collection

1



Transport
Of Inorganic
Waste

3



Bottom ash

5



Using the ash as mixture of bricks



Sorting



Incinerator

Inorganic waste production: 17% of total waste (14,89 m3/month)

3.1

3.2

3.3

upad

Toxic Waste Treatment

F. Pharmacy

F. Agriculture

F. Veterinary

F. Nursery

F. TG

F. TIP

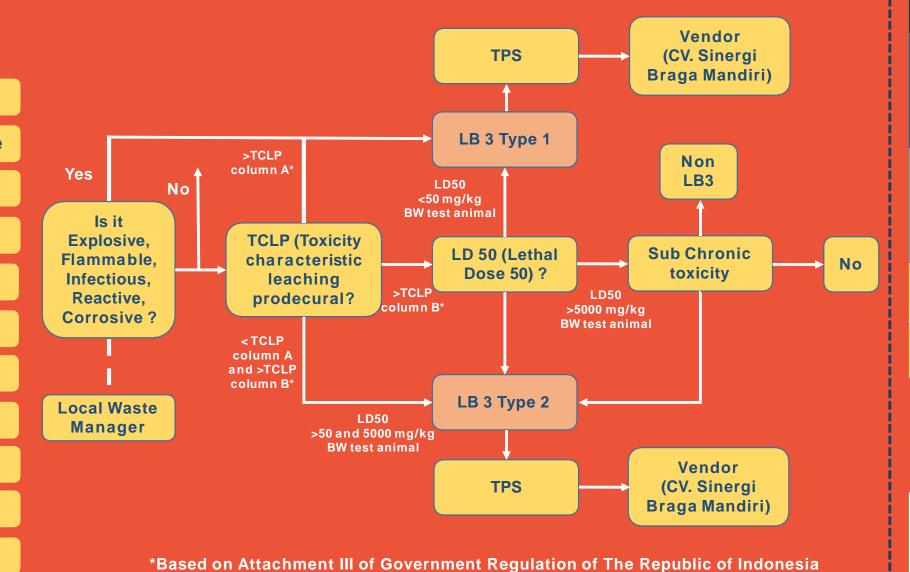
F. PIK

F. Nursery

F. Medicine

F. Dentistry

Central Lab.



No. 101 Year 2014 concering management of Hazardous and Toxic Waste

3.1

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upad

Toxic Waste Treatment

F. Pharmacy

F. Agriculture

F. Veterinary

F. Nursery

F. TG

F. TIP

F. PIK

F. Nursery

F. Medicine

F. Dentistry

Central Lab.

Toxic Waste Identification

Toxic Waste Handling Toxic Waste Transport Toxic Waste Storage

Third Party (CV. Sinergi Braga Mandiri) 3.1

3.2

3.3

Λ

Types of Hazardous and Toxic Waste





B326-1 = 1 kg/month

Toxic

B321-4 = 1 kg/month



Infectious - Hazardous and Toxic Waste

Reactive

Corrosive



A337-3 = 0,05 kg/day

Modified Musee et al, 2006

A337-2 = 0.1 kg/day

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Toxic Waste Treatment

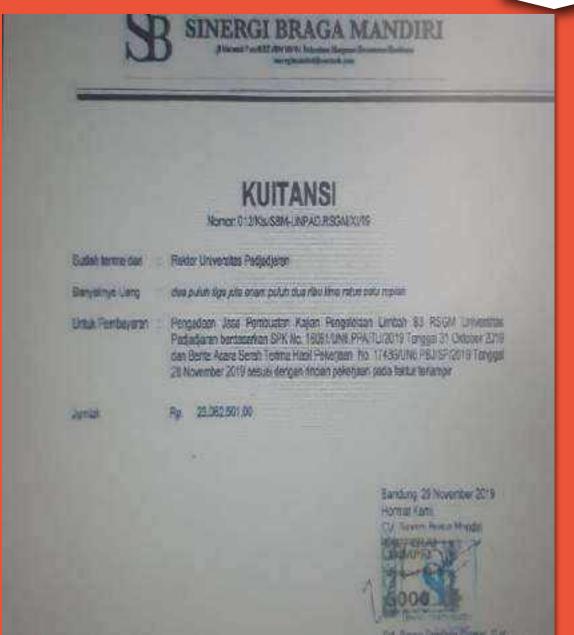




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Evidence Carrying of Toxic Waste



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Medical Waste Treatment



Collecting and Sorting

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Labelling and Register



Incineration

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Sewage and Treatment Disposal



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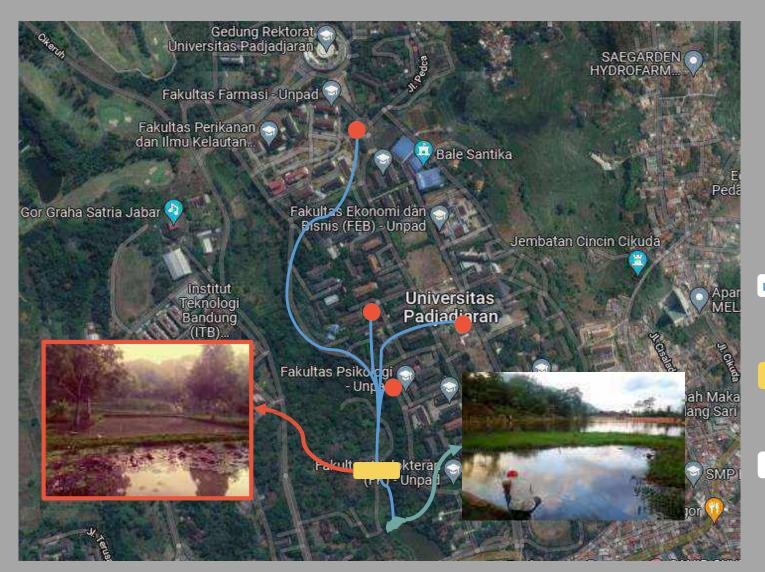
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wheel |

Sewage and Treatment Disposal





Sludge Pond



Sludge Pipeline



Control Pond



Storage Tank

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Sewage Disposal Monitoring





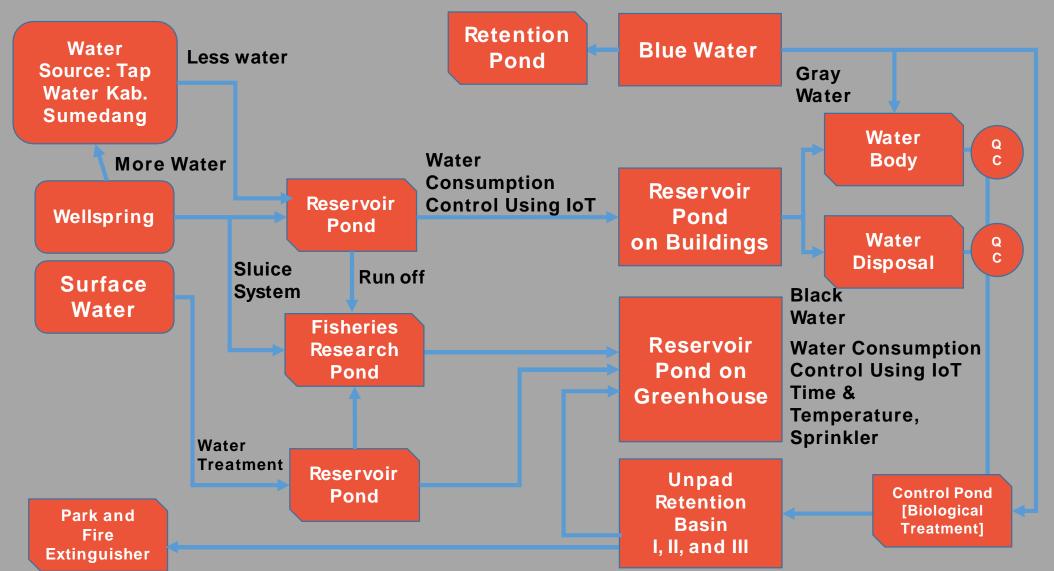
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Re-Use and Re-Cycling Water Scheme In Unpad





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