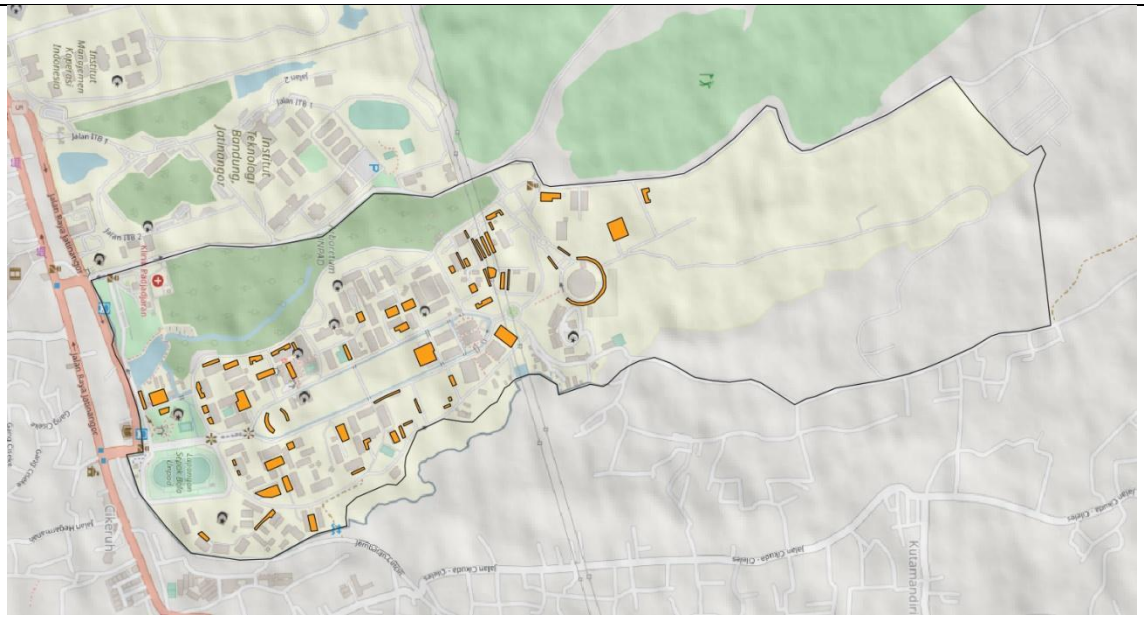
Greenhouse gas emission reduction program

1. Campus shuttle

2. Bike on campus

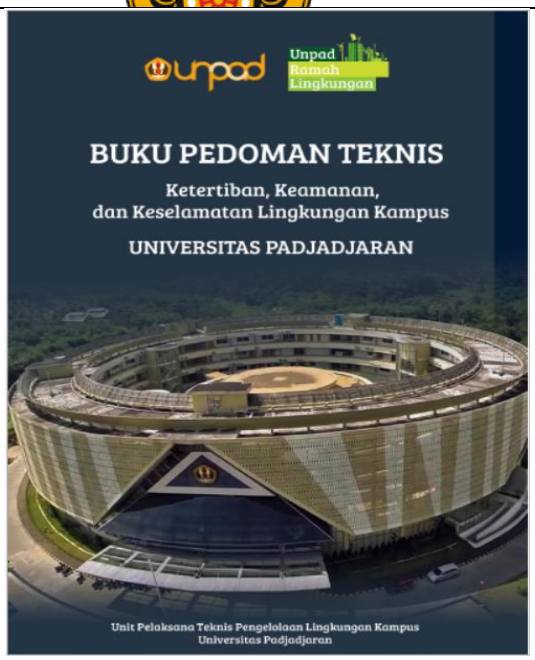
3. E-bike and E-car



Parking area

4. E-Office

5. Campaigns to reduce the use of plastic drinking bottles



PERATURAN REKTOR UNIVERSITAS PADJADJARAN
NOMOR 45 TAHUN 2016
TENTANG
PEDOMAN TEKNIS KETERTIBAN, KEAMANAN, DAN KESELAMATAN
LINGKUNGAN KAMPUS
UNIVERSITAS PADJADJARAN

DENGAN RAHMAT TUHAN YANG MAHA ESA
REKTOR UNIVERSITAS PADJADJARAN,

Menimbang : bahwa untuk melaksanakan ketentuan Pasal 25 Peraturan Pemerintah Nomor 51 Tahun 2015 tentang Statuta Universitas Padjadjaran dalam hal menciptakan ketertiban, keamanan, kenyamanan, serta keselamatan, kesehatan kerja dan lingkungan di Kampus Universitas Padjadjaran, perlu menetapkan Peraturan Rektor tentang Pedoman Teknis Ketertiban, Keamanan, dan Keselamatan Lingkungan Kampus Universitas Padjadjaran;

Mengingat :
1. Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2012 Nomor 158, Tambahan Lembaran Negara Republik Indonesia Nomor 5336);
2. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi Dan Pengelolaan Perguruan Tinggi;

SALINAN

PERATURAN REKTOR
UNIVERSITAS PADJADJARAN

NOMOR 22 TAHUN 2021

TENTANG

PENGELOLAAN KAMPUS RAMAH LINGKUNGAN
UNIVERSITAS PADJADJARAN

DENGAN RAHMAT TUHAN YANG MAHA ESA
REKTOR UNIVERSITAS PADJADJARAN,

Menimbang :

a. bahwa Kampus Ramah Lingkungan merupakan wujud dari lingkungan kampus yang aman, nyaman, tertib, menjalankan keamanan dan keselamatan kerja serta melakukan konservasi air dan energi; guna mendukung dinamika perkembangan kehidupan kampus dalam iklim akademik yang kondusif membentuk pola perilaku baru masyarakat kampus yang dinamis, mendunia, dan berkelanjutan;
b. bahwa Universitas Padjadjaran sebagai lembaga Pendidikan Tinggi memiliki kapasitas untuk mengembangkan Ilmu Pengetahuan, Teknologi dan Seni berkelanjutan yang membutuhkan dukungan lingkungan kampus yang ramah lingkungan dan sosial dalam mengemban pelaksanaan Tridarma Perguruan Tinggi;
c. bahwa untuk pelaksanaan sebagaimana dimaksud pada huruf a dan b di atas perlu ditetapkan Peraturan Rektor.

Mengingat :

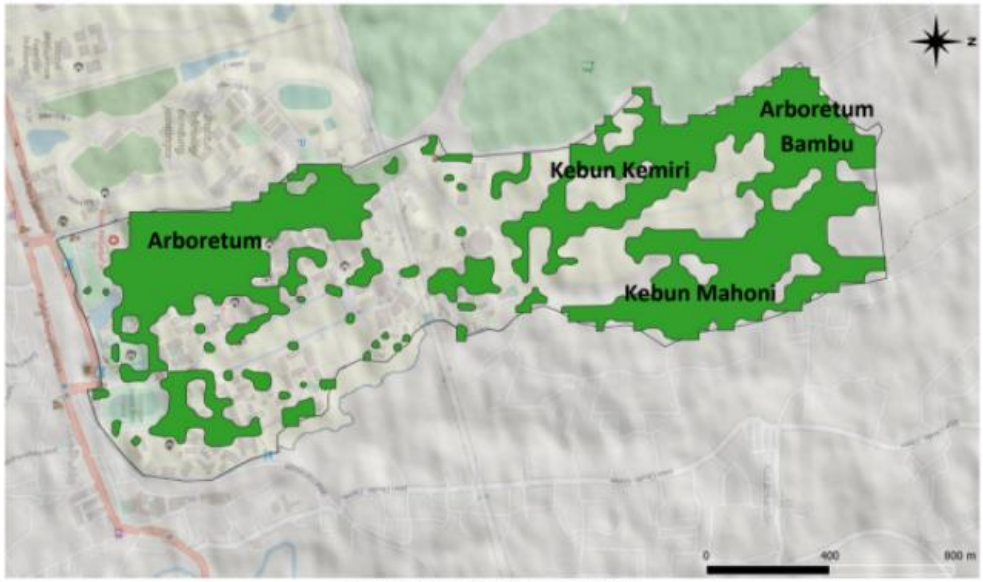
1. Undang-Undang Nomor 28 Tahun 2002 tentang Bangunan Gedung;
2. Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional;
3. Undang-Undang Nomor 17 Tahun 2004 tentang Pengesahan Konvensi Perubahan Iklim;
4. Undang-Undang Nomor 26 Tahun 2007 tentang Penataan Ruang;
5. Undang-Undang Nomor 30 Tahun 2007 tentang Energi;
6. Undang-Undang Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup;
7. Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2012 Nomor 158, Tambahan Lembaran Negara Republik Indonesia Nomor

6. Manual Book and policy

Description:

(*Please describe the elements of green building implementation on your campus. The following is an example of the description. You can describe more related items if needed*.)

1. **Policy**
   The rules regarding the green campus are in accordance with the Rector's decree and the occupational health and safety manual
   - SK Rektor no. 45 Th 2016
   - SK Rektor no.22 Th 2021
   - Buku Pedoman Teknis Ketertiban, Keamanan, dan Keselamatan Lingkungan Kampus Universitas Padjadjaran
2. **Replantation program**



Forest Area for Conservation

In an effort to reduce greenhouse gas production, Padjadjaran University has a replanting program. This planting is carried out in the Padjadjaran University campus area. This planting is also carried out in order to maintain biodiversity, one of which is by planting a collection of bamboo, rare plant species and local fruit plants.

3. **Zero Emission Policy**
    1. Campus shuttle
    2. Campus Bike community [I-Go]
    3. Electric car
    4. Pedestrian
    5. centralized parking lot

4. **Program to Reduce the Use of Paper and Plastic on Campus [waste management]**
    - E-office
    - Campaigns to reduce the use of plastic drinking bottles

5. **Shifting to use LED lamp, solar panel and efficiency water**


Solar panel




Efficiency appliances

6. Bale Tatnen

Bale Tatanen Padjadjaran is a regeneration of hydroponic garden. Bale Tatenen Padjadjaran was reformed in 2021 under full supported by Prof. Dr. Rina Indiastuti as rector of Universitas Padjadjaran. The green house is also equipped by smart farming technology as the result of collaboration between Faculty of Agriculture, Universitas Padjadjaran and Habibi Garden.
This white box is a sensor for environmental such as temperature and relative humidity, also for this sensor we could control related watering system

7. Waste management Program

a. Biogas

Biogas technology at Unpad is still limited to livestock manure. Biogas uses an anaerobic system, which is a closed system. Organic materials that are inserted into the biodigester are broken down by special bacteria that produce methane through a modification mechanism to produce biogas. The produced biogas will be used as a fuel for cooking, chicken brooder, and electrical energy.

next management carried out by the UPT. Environmental Management of Unpad Campus and Faculty of Animal Husbandry, namely the manufacture of biogas (Biomethagreen). Biomethagreen is the concept of on-site waste management, with the aim of being environmentally friendly and useful specifically for the campus environment.

Biogas is a method of managing livestock waste that is collected in an airtight tube. From this airtight tube, the bacteria produce methane gas which is then accommodated in a plastic tube (gas container). This tube is then streamed to a generator generator or directly to the stove hose. This biogas is beneficial for the prevention of LPG and power plants. The following is an illustration of the biogas installation process.

b. Universitas Padjadjaran liquid organic fertilizer product [composting program]

In Universitas Padjadjaran the volume of waste is also influenced by the waste generated from 28 canteens / stalls on Unpad. The leftovers from canteen on Unpad are collected on trash bags, which then processed to fish food. The activity of utilizing leftover food from the canteen is actually part of the remaining waste can be handled by the use for fish feed.

Waste management in Unpad currently produces 200 kg compost per month. Compost production in the past could reach more than 1 ton in the past. However, it tends to decrease now because the compost raw materials from livestock manures are reduced greatly, and the leftover food waste are used by catfish breeders. The composts are sold to communities around the campus. In Unpad, this waste-compost system has started since 2002 at the Jatinangor Campus. Most of the raw materials are from cows dung that are produced by the Faculty of Animal Husbandry (FAPET) livestocks. The livestock waste from the shed of FAPET cows is used for composting. Currently, FAPET has

approximately 5 cows. Previously, FAPET had 1,000 cows but due to certain policies the numbers have decreased drastically.

Compost processes is carried out in an area of 2,000 square meters within the Jatinangor campus area. Currently there are 15 workers who sort and process the waste. All workers come from residents around the Jatinangor campus.

One of the knowledge learned from composting activities is to build student awareness in separating organic waste and inorganic waste. Unpad Jatinangor is equipped with separate organic and inorganic trash bins, but in reality, the bins are not used properly. The composting process requires additional time at the composting site for separation between organic and inorganic waste.