

# SUSTAINABILITY REPORT



2023.

# UNIVERSITAS NEGERI SURABAYA

# VISION

“

To become  
a **strong, adaptive, and innovative**  
educational university  
based on **entrepreneurship**

# MISSION

1. Organizing education in the educational and non-educational fields with a tough, adaptive, and innovative character based on entrepreneurship.
2. Carrying out research and improving the quality of innovation in the educational and non-educational fields based on entrepreneurship.
3. Carrying out community service and disseminating innovation in the educational and non-educational fields based on entrepreneurship for the welfare of society.
4. Organizing Tridharma activities for higher education through a multi-campus system in a synergistic, integrated, harmonious, and sustainable manner by taking into account UNESA's advantages.
5. Carry out effective, efficient, transparent and accountable governance that guarantees quality on an ongoing basis
6. Carry out productive national and international collaboration in creating, developing and disseminating innovations in the educational and non-educational fields based on entrepreneurship.





1

# SETTING AND INFRASTRUCTURE

**Type of Higher Education Institution**  
Comprehensive

**Climate**

Tropical Wet and Dry

**Number of Campus Site**

2 Sites

**Campus Setting**

Urban

**Total Campus Area**

949,314.00 m<sup>2</sup>

**Total Campus Ground Floor Area of Buildings**

180,851.00 m<sup>2</sup>

**Total Campus Buildings Area**

755,000.00 m<sup>2</sup>

**The Ratio of Open Space to Total Area.**

> 90 - 95%

**Total Area on Campus Covered in Forest Vegetation**

> 35%

**Total Area on Campus Covered in Planted Vegetation**

>40%

**Total Area on Campus for Water Absorption Besides Forest and Planted Vegetation**

> 30%



**Total Number of Regular Students (part time and full time)**  
35066 Students

**Total Number of Academic and Administrative Staff**  
1920 staffs

**The Total Open Space Area Divided by Total Campus Population**  
>20-40/person

**Total University's Budget (in US Dollars)**  
\$36,079,839

**University's Budget for Sustainability Effort (in US Dollars)**  
\$7,676,423

**Percentage of University's Budget for Sustainability Effort**  
22.67%

**Percentage of Operation and Maintenance Activities of Building  
in One Year Period**  
91%





## **Campus Facilities for Disable and Maternity Care**

Facilities are partially available and operated

## **Security and Safety Facilities**

Security infrastructure is available and fully functions and security responding time for accidents, crime, fire, and natural disasters is more than 10 minutes

## **Health Infrastructure Facilities for Students and Academic and Administrative Staff Wellbeing**

Health infrastructure (first aid, emergency room, clinic and certified personel) available

## **Conservation: Plant (flora), Animal (fauna), and Wildlife, Genetic Resources for Food and Agriculture Secured in Either Medium or Long-Term Conservation Facilities**

Conservation program fully implemented



2

ENERGY  
AND  
CLIMATE CHANGE



MORE THAN  
**75%**

ENERGY  
EFFICIENT  
APPLIANCES  
USAGE

TOTAL CAMPUS **SMART BUILDING** AREA 44,895.619 M<sup>2</sup>  
**SMART BUILDING** IMPLEMENTATION 78.74%

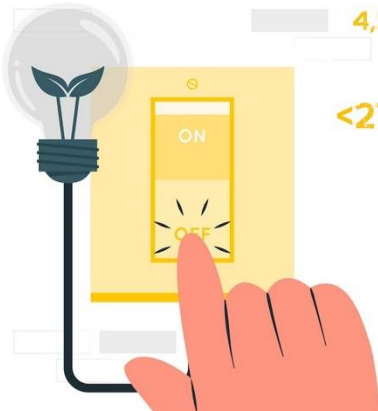
**2** RENEWABLE  
ENERGY SOURCES  
IN CAMPUS

AMOUNT OF  
THE ENERGY PRODUCED

**9.640 KWH**  
**CLEAN BIOMASS**

+

**59.400 KWH**  
**SOLAR POWER**



4,515,278.67  
KWH

ELECTRICITY USAGE  
PER YEAR

<279 KWH

TOTAL ELECTRICITY USAGE  
DIVIDED BY  
TOTAL CAMPUS POPULATION

5.3%

RATIO OF RENEWABLE  
ENERGY PRODUCTION  
DIVIDED BY  
TOTAL ENERGY USAGE  
PER YEAR



# 3 ELEMENTS



OF GREEN BUILDING IMPLEMENTATION  
AS REFLECTED IN ALL CONSTRUCTION  
AND RENOVATION POLICIES



**UNESA**  
GREENHOUSE GAS EMISSION  
REDUCTION PROGRAM

AIMS TO REDUCE  
ALL **THREE SCOPES EMISSIONS**  
(SCOPE 1, 2 AND 3)



**4,566.56**  
METRIC TONS

TOTAL CARBON FOOTPRINT

**> 0.10 - 0.42**  
METRIC TON

TOTAL CARBON FOOTPRINT  
DIVIDED BY  
TOTAL CAMPUS POPULATION

**MORE THAN 3**  
INNOVATIVE PROGRAMS  
IN ENERGY AND CLIMATE CHANGE

**UNESA**  
PROVIDE TRAINING AND  
EDUCATIONAL MATERIALS  
FOR SURROUNDING COMMUNITIES,  
AT NATIONAL, REGIONAL,  
AND INTERNATIONAL LEVEL





Unesa provides **bicycles** for students and locals to ride in order to help the movement to limit the usage of motorized cars. This step can be used to start a healthy lifestyle by cycling. Cycling is undoubtedly highly essential and has a significant impact on lowering air pollution in Surabaya.



**Eco-enzyme** accelerates the biochemical processes in nature to manufacture usable enzymes from fruit or vegetable waste. Enzymes from "garbage" is one method of waste management that turns kitchen scraps into something very useful. In this situation, the eco-enzyme function will be used as a hand sanitizer, dish soap, and floor cleaning soap



UNESA supports and facilitates these organizations in instilling environmental awareness. One concrete example of activities conducted by these organizations includes **tree planting** by REE and UNESA. By planting trees, it will bring about broader benefits, both for humans and the environment





3

WASTE

# 3R

**Partial**  
(> 50% - 75% of waste)  
program for  
university's waste



## MORE THAN 3 PROGRAMS

to **reduce** the use of **paper and plastic**  
on campus

# WASTE TREATMENT



### ORGANIC

**4192 TON**  
Organic Waste  
Produced

**3563 TON**  
Organic Waste  
Treated

**Treatment Partial**  
(>50%-75% of Treated)



### INORGANIC

**838 TON**  
Inorganic Waste  
Produced

**766 TON**  
Inorganic Waste  
Treated

**Treatment Partial**  
(>50%-75% of Treated)



### TOXIC

**0.15 TON**  
Toxic Waste  
Produced

**0.108 TON**  
Toxic Waste  
Treated

**Treatment Partial**  
(>50%-75% of Treated)



**Eco-enzyme** is a multifunctional solution or liquid created through fermentation from organic waste such as fruit and vegetables. Pouring these compounds into lake water offers numerous advantages, including cleaning and breaking down harmful contaminants in the water.

**Eco-bricks**, a product created from plastic mineral water bottles filled with sorted plastic sachets that have been cleaned with soap. Following that, the plastic sachets are chopped into small pieces to aid in the drying process. The dried sachet pieces are then placed and crushed in a plastic drinking bottle until it is completely full. Unesa students will be required to collaborate in the collection, sorting, and processing of waste in this waste recycling program



**Compost** is made at Unesa from organic waste in the form of dried leaves and branches, which are cut and then placed in the composter. Water will be poured to the composter, and the compost will be allowed to mature for 2-3 months

**UNESA**  
**Sewage Disposal**  
Treated with  
Tertiary Treatment





4

**WATER**



**> 50%**

 Water Efficient  
Appliances Installed

 Water Recycled

 Water Conserved

**> 75%**

 Treated Water  
Consumed





Policy and programs for water pollution control are **fully implemented & monitored regularly**

Universitas Negeri Surabaya **prevents and reduces all sorts of water pollution**, particularly those caused by land-based activities. UNESA manages the lake environment (reservoir) jointly at both the Lidah Wetan and Ketintang campuses. The management strategy is to sustain the biotic and abiotic quality of the lake ecosystem through a variety of activities.



Water Efficient Appliances



Drinking Water Treatment  
(Air Minum Unesa)

Water Recycling Programs







# 5 TRANSPORTATION



**82 Cars**

Actively Used and Managed  
by University

**372 Cars**

Entering the University  
Daily

**5882 Motorcycles**

Entering the University Daily



**> 0.045 - 0.125** Total number of vehicles

(cars and motorcycles) divided by total campus's population



**Shuttle service** is provided

by university and the university contributes  
a part of the cost.



## Zero Emission Vehicles (ZEV)

are **Available**, and **Provided** by University for **Free**

with Average Number of **110 ZEV** on Campus Per Day



The total number of Zero Emission Vehicles divided by total campus population is **0.00297**

## 19.525 m<sup>2</sup> Ground Parking Area

Available, with **Ratio** of Parking Area to Total Campus Area are **2.06%**



**Less than 10% decrease** from Transportation program designed to limit or decrease the parking area on campus for the last 3 years with **> 3 transportation initiatives** to decrease private vehicles on campus

## Pedestrian paths are available,

designed for safety, convenience,

and in some parts provided with **disabled-friendly features**





6

# EDUCATION AND RESEARCH

24.1%

Ratio of Sustainability Course

1608 Courses/Subjects Related to Sustainability Offered From 6656 Total Courses/Subjects Offered

53.3%

Ratio of Sustainability Research Funding

\$1,175,954 Total Research Funds Dedicated to Sustainability Research From \$2,204,987 Total Research Funds



1020

Scholarly Publications on Sustainability Published for The Past 3 Years



18-47

Events Related to Sustainability for The Past 3 Years



>10

Activities Organized by Student Organizations Related to Sustainability Per Year





**UNESA** sustainability website is available, accessible, and updated occasionally at [sustainability.unesa.ac.id/](https://sustainability.unesa.ac.id/)

Sustainability Report is Published Annually



## MORE THAN 3

- 📌 Events of Cultural Activities
- 📌 University Programs with International Collaborations
- 📌 Sustainability Community Services Project Organised and Involving Students



**UNESA** Has >15 Sustainability-related Startups