



UNDIP

www.undip.ac.id

UNIVERSITAS DIPONEGORO

The excellent research university

Programs for Sustainable Campus at Diponegoro University: a Green-metric Practices

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Diponegoro University (UNDIP)



- Established in 1957
- Suburban Campus
- Area : 2,300,000 m²
- Faculties: 10
- Schools : 2
- Total active student: 43,672
- Total staffs: 1701 academic staffs+ 1173 supporting staffs



Diponegoro University (UNDIP)





The common environmental related issues of Indonesian Universities

- Infrastructure
- Waste /pollutants
- Energy and Water Utilizations
- Transportation





UNDIP practices



- The current more than 70% land area is covered by planted vegetation
- Increasing number of planted vegetation by a policy for new students to bring 1 plant for each



Environmental friendly campus



- More than 200 spots of bio-pore to increase the water capacity



Jogging/walking track





Rare Trees Park



Collection of more than 30 Indonesian rare trees



Protected Deer Park



- Given by Nature Resource Management Office
- 9 deer in 2015 and now 20 deer (2017)



UNDIP Waste Management



Waste management



We apply
Integrated Waste
Management
Policy

- Sorting solid waste into plastic, paper, glass group



Waste Management



- The facilities to treat and process the waste



HMTL 2016
IKHLAS MENGABDI
MELANGKAH MENGINSPIRASI



Input Sampah dari Undip
Volume : 11,82m³/hari

TPST Undip



Organik (43,68%)
Vol. = 5,16m³/hari

Selain Organik (56,32%)
Vol. = 6,66m³/hari

Residu Organik
tidak terolah (27%)
Vol. = 1,41 m³/hari

Organik dikomposkan(73%)
Vol.= 3,75 m³/hari

Kompos
Vol. = 1,875m³/hari
(15 sak@ 5kg)

Selain Organik (100%)
Vol.= 6,66 m³/hari

Lapak
Vol. = 3,33
m³/hari

Residu selain Organik
tidak terolah (50%)
Vol. =3,33 m³/hari



TPA Jatibarang

Sumber : Analisis tim teknis
TPST Undip , 2015

Diponegoro University
Integrated Waste
Management Diagram





Waste Management



- Laboratory waste management facilities (liquid & solid waste)



UNDIP's Energy Management



Policy on Energy Utilization



- The University encourage units to increase the use of renewable energy



The use of solar panel for lighting road





Policy implementation





Transportation



Transportation



- Number of cars entering university: 400 /day
- More than 4000 motorcycles / day



Transportation



- Supported by local government, bus from different parts of the city to Diponegoro University Campus
- Target: Reducing 25% of cars and motorcycle



Integrated parking system



- To avoid parking on the road, then an integrated parking has been built



Transportation



- Provide 700 bicycles and spread over more than 15 shelter in each faculty
- There is a bike-lane on the road of campus



In campus CO₂ emission

Sites	Absorption Capacity (tones/year)	CO2 emission (tones/year)	%
1	2629	34.9	1.33
2	1325	212	15.98
3	1403	49.7	3.54
4	4.84	5.07	104.75
5	175	48.6	27.81
6	1519	71.8	4.72
7	428	296	69.08
8	15.2	6.51	42.80
9	64.9	15.8	24.30

In average
only 32%
of the
capacity



UNDIP water conservation management



Water



- UNDIP dam or polder for water conservation
- Capacity = 85.000 m³



Education



Student organization in Environment



- More than 90 student organizations have programs in environmental related activities



Education



- Planting mangroves at coastal area of Semarang city and Jepara City
- Every year by Marine Sciences Students



Environmental education to new students



- New students have to plant at least one tree



Bird view of our main campus





UI Greenmetric International Workshop 2018



- It will be held at
Diponegoro University,
Semarang, Indonesia
- We welcome you all to
come to our green
campus



Thank You
See you all in 2018