

AMITY UNIVERSITY

HARYANA

(Accredited with Grade 'A' by NAAC)

Report on Sustainable Development Goal



SDG 12: Responsible Consumption & Production Year 2021



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Amity University Haryana is committed to promote sustainable management practices and efficient use of resources to deliver responsible consumption and production patterns through its operations by implementing sustainable policies and practices. The University is well aware of its responsibilities in raising awareness and propagate the idea of responsible consumption and production practices in the community in an inclusive and sustainable manner that further promotes the basic tenets of SDG 12.

WASTE MANAGEMENT PRACTICES

The University Waste Management Policy is clearly focussing on reuse and recycling of different kind of waste to protect the environment and public health, conserve natural resources and minimize landfilling and/or incineration and reduce toxicity.

Amity University Haryana being an educational institution, the key operations do not significantly impact the environment. The less waste we produce, the less we have to dispose. As per UN mandate to develop university as 'live lab of sustainability', Amity University Haryana is very conscious of generating less waste and recycling it by passing it through a system that enables the substance to be reused. Many of system are integrated with development plan of university since beginning like infrastructure for rainwater harvesting, treatment of effluent and waste water, proper drainage pattern and many more. The waste generated in university is divided into three different types for their management and disposal, which is as follow:

- (a) Solid Waste
- (b) Liquid Waste
- (c) e-waste and other hazardous waste

Solid Waste: The waste is generated by all sorts of routine activities carried out in the university. It includes paper, plastics, glass, metals, foods, etc. The waste is segregated at each level and source. The administrative supervisor in each block ensures that the waste in each floor is collected at designated time intervals.

The block housekeeping staff in each floor collects the waste in the dustbins provided at each floor. The floor dustbins are emptied in movable containers/dustbins provided for each block and is taken to the dumping yard provided by the university. The University has contacted an authorized vendor who collects the waste from the designated place, segregate them, recycles them and disposes them at the landfills authorized by the government.



Garbage Shed



Open Area Dustbin



Open Area Dustbin

Open Area Dustbin

The organic waste collected from farm house is disposed through bio gas production and composting infrastructure available at campus. The by-products are further utilized locally for heating and manure.



Cow Dung based Biogas Plant at AUH

Liquid Waste: Liquid wastes generated by the University are of two types:

- (i) Sewage waste
- (ii) Laboratory, Laundry and Cafeteria effluent waste

The above waste is treated through a network of Sewage Treatment Plants (STPs) and Effluent Treatment Plants (ETPs) which is a combined arrangement of anaerobic and aerobic treatment of organic waste followed by oxidation ponds. After treatment, treated water is subject to basic filtration followed by its reuse at different use purposes including horticulture, farm irrigation, toilet flush and cooling plant. A separate treatment unit is developed to cater laundry effluent.

The operation and maintenance of sewage and effluent treatment plant is taken care by a dedicated and expert team which ensures efficient functioning of treatment unit. In winter and rainy seasons treated water is used to recharge groundwater.

The following are the details of STPs and ETPs installed in the university

| STP | Location | Capacity Litters/day | in | Type |
|------|--------------------|-------------------------|----|-----------|
| STP1 | Near Faculty Flats | 4,50,000 | | Aerobic |
| STP2 | Near Faculty Flats | 4,50,000 | | Anaerobic |

| ETP | Location | Capacity in Liters/day | Type |
|------|--------------------|------------------------|---------|
| ETP1 | Near Faculty Flats | 50,000 | Kitchen |
| ETP2 | Near Faculty Flats | 20,000 | Laundry |

Liquid Waste Disposal plan

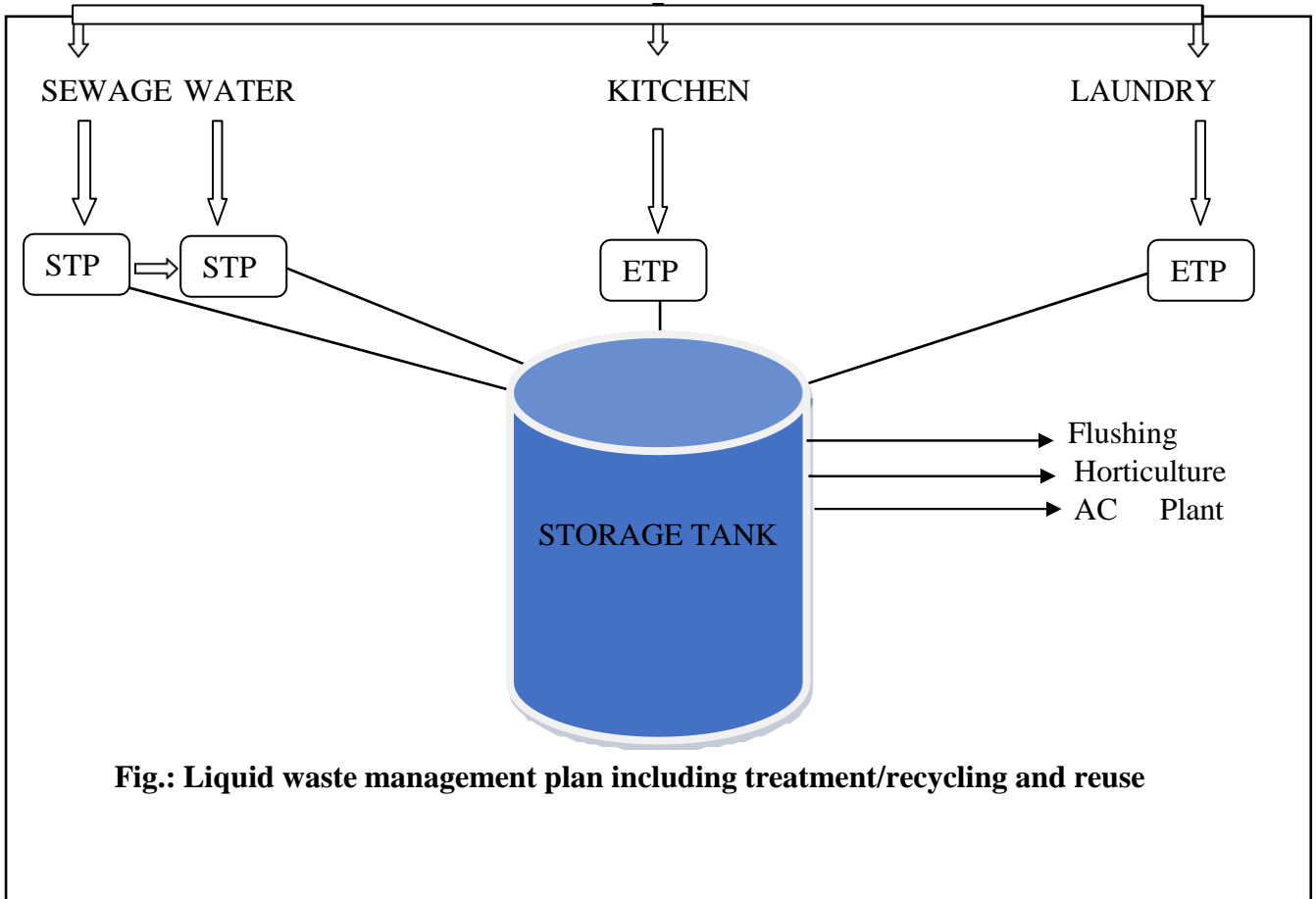


Fig.: Liquid waste management plan including treatment/recycling and reuse

e-waste : Desktop, Printer, Camera, Wi-fi devices, used Blank Cartridges, Speakers, Mouse, Keyboard, UPS, Projector Screen and Biometric Machine etc. are recycled properly. University maintains an inventory of all electronics items catered by IT departments and monitors its optimal performance and disposal after service period. Instead of buying a new machine buy-back option is taken for technology upgradation. The e-waste generated from hardware which cannot be reused or recycled is being disposed-off through authorized vendors as mentioned below.



Fig.: Wastewater treatment

PROGRAMMES AND COURSES

The University is committed to promoting sustainable consumption and production through several modules contained within courses delivered.

| Sr No | Programme Name | Level | URL |
|-------|--|---------------|---|
| 1. | MBA (Sustainable Management) | Post Graduate | https://www.amity.edu/gurugram/mba-sustainability-management |
| 2. | Executive MBA (Sustainable Management) | Post Graduate | https://www.amity.edu/gurugram/executive-mba-sustainability-management |
| 3. | M.Tech. (Solar & Alternate Energy) | Post Graduate | https://www.amity.edu/gurugram/mtech-solar-and-alternate-energy |
| 4. | M.Sc. (Renewable Energy) | Post Graduate | https://www.amity.edu/gurugram/msc-renewable-energy |
| 5. | M.Tech (Atmospheric Technology and Climate Management) | Post Graduate | https://www.amity.edu/gurugram/mtech-atmospheric-technology-and-climate-management |
| 6. | M.Sc. (Environmental Sciences and | Post Graduate | https://www.amity.edu/gurugram/msc-environmental-sciences-and-management |

| | | | |
|----|--|----------------|---|
| | Management) | | |
| 7. | B.Sc. (Hons) - Earth Sciences | Under Graduate | https://www.amity.edu/gurugram/bsc-hons-earth-sciences |
| 8. | Ph.D. (Earth and Environmental Sciences) | PhD | https://www.amity.edu/gurugram/phd-earth-and-environmental-sciences |

A) Minor Specialization Elective Track offer to all Under Graduate Programmes

| Sl. No. | Track with details of courses |
|---------|--|
| 1. | <p>Climate Science Semester 1- AST2151- Basics of Climate Science Semester 2- AST2251- Introduction to Earth System Science Semester 3- AST2351- Cloud Microphysics and Chemistry Semester 4- AST2451-Climate Change: Impact, Vulnerability and Adaption Semester 5- AST2551- Primer of Oceanography Semester 6- AST2651- Fundamentals of Climate Variability and Modeling</p> |
| 2. | <p>Disaster Management & Sustainable Built Environment Semester 1-DSM2151-Introduction to Disaster Management Semester 2-DSM2251-Resilience Building for Built Environment Semester 3-DSM2351-Emergency Management Semester 4-DSM2451-Rehabilitation Reconstruction and Recovery Semester 5-DSM2551-Climate Change Adaptations and Sustainable Development Semester 6-DSM2651-Geoinformatics in Disaster Management</p> |
| 3. | <p>Dietetics & Nutrition Semester 1-DAN2151-Principles of Nutrition Semester 2-DAN2251-Family Meal Management Semester 3-DAN2351-Basics Dietetics Semester 4-DAN2451-Advanced Dietetics Semester 5-DAN2551-Community Nutrition Semester 6-DAN2651-Food Chemistry</p> |
| 4. | <p>Environmental Management Semester 1- ENV2151- Environmental Studies-I * Semester 2- ENV2251- Environmental Studies-II * Semester 3- ENV2351-Environmental Pollution and Waste Management Semester 4- ENV2451-Environmental Management and Industrial Safety Semester 5- ENV2551-Environmental Economics and Globalization</p> |

| | |
|----|--|
| | Semester 6- ENV2651-Sustainable Development Practices |
| 5. | <p>Entrepreneurship</p> <p>Semester 1-MGT2152-Orientation Programme in Entrepreneurship</p> <p>Semester 2-MGT2252-Exploring Business Opportunity Semester 3-MGT2352-Developing a Business Model</p> <p>Semester 4-MGT2452-Translating Business Model into Startup Semester 5-MGT2552-Advanced Programme in Entrepreneurship: Growth Semester 6-MGT2652-Advanced Programme in Entrepreneurship: Expansion</p> |
| 6. | <p>Environmental Health & Climate</p> <p>Semester 1-AST2152-Linkages between Environment and Health</p> <p>Semester 2-AST2252-Climate Change and Implications on Public Health</p> <p>Semester 3-AST2352-Diseases in Contemporary Society Semester 4-AST2452-Air, Water and Soil Pollution,</p> <p style="text-align: center;">Environmental Health Professions</p> <p>Semester 5-AST2552-Ground-based and Satellite Remote Sensing</p> <p>Semester 6-AST2652-Instrumentation Lab</p> |
| 7. | <p>Polymer Technology</p> <p>Semester 1-PTE2151- Polymerization</p> <p>Semester 2-PTE2251-Waste Plastic Recycling Semester 3-PTE2351-Polymer Technology</p> <p>Semester 4-PTE2451- Rubber & Tyre Technology</p> <p>Semester 5-PTE2551-Polymeric Nano Composites</p> <p>Semester 6-PTE2651-Bio-Medical Plastics</p> |
| 8. | <p>Renewable Energy</p> <p>Semester 1-SAE2151- Renewable Energy Conversion Systems Semester 2-SAE2251- Introduction to Solar Thermal</p> <p style="text-align: center;">Engineering</p> <p>Semester 3-SAE2351- Introduction to Solar Photovoltaic Semester 4-SAE2451-Energy from Wastes</p> <p>Semester 5-SAE2551- Renewable Energy for Heat Applications</p> <p>Semester 6-SAE2651- Energy Audit and Energy Management</p> |

PLASTIC FREE CAMPUS

The campus is trying its best to minimise the use of plastic. In this concern the stores and even the food stalls are motivated to use paper and jute bags for packing.

EVENTS/ACTIVITIES

Webinar on ‘BIO-WARFARE, BIO-TERRORISM AND BIO-SECURITY’

Amity Law School organized a Webinar on the topic ‘Bio-Warfare, Bio-Terrorism and Bio-security’ on May 14, 2020. The idea behind this Webinar was to enlighten the participants on the topic and provide them with an assessment of the present crisis being faced as well as similar future crisis that may arise so that correct and authentic information is available to all on the crucial yet not so common subject. Proper information generation and awareness on impending dangers arising out of bio-warfare, bio-terrorism and bio-security are very important for building a responsible society that in turn has to promote responsible consumption and production practices in conformity SDG 12. The Speaker for the said Webinar was **Col. (Dr) Ram Athavale**, a proud military veteran and a CBRN Security Specialist. The Webinar highlighted the alarming threats of Bio-Warfare and Terrorism and acquainted the participants with the meaning and scope of terminology like CBRN, HAZMAT and various hazard signs. Col Athavale highlighted the CBRN threats existing today and categorized them under two heads viz, natural and manmade. Bio-Terrorism as explained by the esteemed Panelist is deliberate and not the accidental release of manmade Bio-Warfare agents. The Webinar equipped and enlightened the participants about the crucial issue of Bio-Warfare, Bio-Terrorism and Bio-Security and addressed the need of development of a Bio Secure environment and promote responsible social practices that necessarily entails responsible consumption and production practices as envisaged by SDG 12.

The poster features the Amity University Haryana logo at the top left. The main title is 'AMITY LAW SCHOOL WEBINAR on Bio-Warfare, Bio-Terrorism and Bio-Security'. The date and time are 'May 14, 2020 14:30-15:30 HRS'. The speaker is 'Col. (Dr.) Ram Athavale, CBRN Security and Incident Management Consultant', with a circular portrait of him. Moderators are 'Maj. Gen. P.K. Sharma (Retd.), Director & Dean, Amity Law School' and 'Ms. Toshi Rattan, Assistant Professor'. A WebEx platform link is provided at the bottom: <https://amity.webex.com/amity/onstage/g.php?MTID=e9dc81d22f99db5732e1c3306e22308db>. The background is red with white virus-like icons.

12 May 2020 | Gurugao (Manesar)

E-WASTE MANAGEMENT: PROBLEMS AND SOLUTIONS

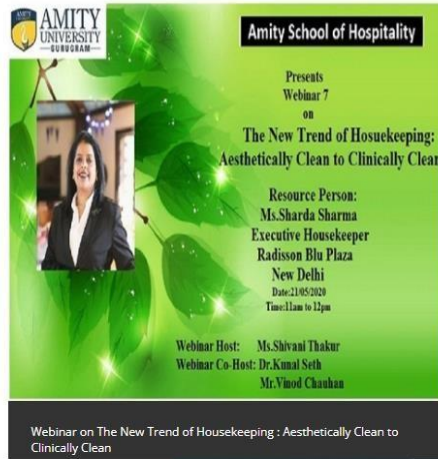


Dr Anwasha Borthakur, Marie Sklodowska Curie Postdoctoral Researcher at Leuven International and European Studies (LINES), KU Leuven, Belgium delivering her talk on E-WASTE MANAGEMENT PROBLEMS AND SOLUTIONS



21 May 2020 | Gurgaon (Manesar)

Webinar on The New Trend of Housekeeping : Aesthetically Clean to Clinically Clean on 21st May 2020



01 May 2020 | Gurgaon (Manesar)

Nanocomposite materials for waste water remediation and environmental sustainability



Nanocomposite materials for waste water remediation and environmental sustainability