



Lokmanya Tilak Jankalyan Shikshan Sanstha's

Lokmanya Tilak College of Engineering

Sector-4, Vikas Nagar, Koparkhairane, Navi Mumbai

(Approved by AICTE, Affiliated to University of Mumbai, & Accredited by NAAC)



Water conservation and management policy

Water conservation and management policy of LTCE encompasses the policies, strategies and activities designed to manage water sustainably to meet current and future demands in the campus. Efficient water storage can be a viable solution to water conservation. This means that the College should take serious effort to protect the surrounding environment and available water resources. Regardless, as an institution of higher learning, LTCE shall have a moral responsibility to promote and propagate the message among the academic community and society as well. Over the past few years, the College has undertaken a number of initiatives to utilize water more efficiently and effectively within the campus. Understanding relationships between environmental and societal factors and academia's support for water conservation measures that can help planners and policy makers to identify obstacles and opportunities to increase the role of conservation and efficiency in making water supply systems sustainable. Student and staff play a major role in our water sustainability strategy. Reducing water consumption and protecting water quality shall be the key objectives of sustainable policy of LTCE. The College views water from the three inter-related dimensions of Efficient Conservation, Responsible Consumption and restoring and retaining surface and recharging groundwater. College encourages all its stakeholders to support policies and programmes for water conservation that would achieve:

- A sustainable balance between demand, management and reduce waste through accurate accounting of water volume.
- Water conservation education to all the stakeholders.
- Research and implementation of practices that promote efficient use of water.
- Coordination between water planning and other aspects of facility planning and management in association with local government body.

Goals and Plans

- Maximize water usage efficiency and minimize wastage of water.
- All existing buildings to be used for water conservation and rain water harvesting.
- Promote investment in and maintenance of efficient water infrastructure and green infrastructure in all future development plans.
- Promote appropriate innovative water and waste water management technologies and services.
- Provide training on the water conservation measures adopted by the college to all the students, staff and other stakeholders of the college and nearby community.
- Ensure awareness about the water conservation policy of the college among all the stakeholders.
- Establish waste water treatment and recycling centres.
- Create awareness about the cost-effectiveness of water conservation projects among students and local community.



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- Build relationship between environmental, societal leaders and policy makers to identify obstacles and opportunities to increase the role of conservation and efficiency in making the water supply systems sustainable.
- Community programmes: Organise various outreach programmes under the leadership of NSS, and other student bodies.
- Encourage research, development and implementation of water conservation techniques in relation to the ecological needs and responses through UG and PG projects.
- Increase understanding of water and its movement including groundwater and its interaction with surface water, and the effects of climate change on water resources among student and teaching community.
- Inform, educate and increase awareness regarding the importance of water to life, and the need for conservation and efficient use of water.
- Protect the streams, ponds and rivers and the public area surrounding the college.



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WASTE MANAGEMENT POLICY

LTCE has been making very distinctive contributions in the field of environment and sustainability, it shall pay considerable attention to minimize the production of waste in the campus. This policy envisages to guarantying the moral, social and legal responsibilities of the institute in creating an environment friendly and sustainable world devoid of waste and exploitation of nature. This policy is a guidance document to the faculty, staff and students to behave responsibly in the production of waste, waste segregation, storage, handling, transport and disposal.

Institute realizes sustainable and holistic waste management essential in reducing its environmental footprint and providing a safe and healthy work environment for teaching and non-teaching employees, students, and visitors.

Institute has a duty to ensure that all the campus wastes are disposed of responsibly by using proper waste segregation mechanism at the source and if possible, converting it into value added environment friendly product.

POLICY STATEMENT

The institute will adopt the principles of the 'best practicable environmental option' in the delivery of its waste management services.

The institute requires all the teaching and non-teaching staff, students, guests and anyone else making use of the premises to comply with this policy and associated "Institute Environmental Guidance" to ensure compliance with all waste legislations. Any solid waste generated in the campus shall be managed and handled in accordance with the compliance criteria and the procedure laid down in Municipal Solid Wastes (Management and Handling) Rules, 1999, published under the notification of the Government of India in the Ministry of Environment.

The policy envisions a community which is acutely conscious of the anthropogenic condition of the world and therefore strives to create an ecologically healthy, prospering and resource efficient community, where waste is considerably reduced, recycled, reused and disposed of using environment friendly safe method.

POLICY OBJECTIVES

The objectives of this policy are:

1. The Institute follows the principle of 3R (Reduce, Reuse and Recycle) to meet its objective of sustainable development by bringing ecological balance.
2. To ensure that waste management is performed in accordance with all waste legislative requirements, including the duty of care, and to plan for future legislative changes and to mitigate their effects.
3. To minimize waste generation at source and facilitate repair, reuse and recycling over the disposal of wastes in a cost-effective manner.
4. To provide clearly defined roles and responsibilities to identify and co-ordinate each activity of the waste management.



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5. To promote environmental awareness in order to increase and encourage waste minimization, reuse and recycling.
6. To invest into the expansion of recycling opportunities on the institute campus and transform waste into value added products.
7. To ensure the safe handling and storage of wastes in institute campus.
8. Create consciousness among faculty and students about the waste in which waste is generated and the means by which they can reduce waste generation and manage the waste they produce.
9. Maintain the campus plastic free.

TYPES OF WASTE MANAGEMENT

1. Solid Waste Management
2. Liquid Waste Management
3. E-Waste Management

Solid Waste Management

The institution is highly concerned about the solid waste generated in day-to-day activities both degradable and non-degradable. They have separate bins for degradable and non-degradable items in the cabins/rooms. Wastes from various rooms shall be collected in the waste segregation center near canteen. The institute has a dedicated collection system for segregation of wet and dry waste which is collected using colored bins Blue (Drywaste), Green (Wet waste) and Red.

In addition, dry waste includes dry leaves, paper, plastic, cardboard glass, tin cans etc. and the wet wasterefers mainly food waste generated in canteen and students/teacher's tiffin waste.

Furthermore, the non-biodegradable solid waste, mainly plastic which generates in the campus is segregated and made in to fine plastic pieces by using plastic shedder available in the campus.

Liquid Waste Management

Liquid wastage generated from canteen and toilets is letting out to sewage treatment plant (STP), of NMMC drainage lines.

E-Waste Management

Electronic waste also known as E-Waste or WEEE (Waste electrical and electronic equipment) comprises of a broad and growing range of electronic devices, ranging from large household devices such as refrigerators, electric motors, voltage stabilizers, air conditioners, cell phones, television, LED's, Computer systems and other consumer electronics which have outlived their lives and have been discarded by the users.

Robinson 2009 defines E-Waste as "any device connected to a power source that no longer satisfies the current owner to the purpose for which it was created", such as computer, television, cell phones, refrigerator and ovens. With the presence of deadly chemicals and toxic substances in the electronic gadgets, disposal of E-Waste is becoming an environmental and health nightmare. Globally only 15 – 20 percent of E-Waste is recycled while the rest is dumped into developing countries such as India, China and Nigeria.

Electronic waste generated from computer laboratories, electronic labs, physics labs, academic and



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administrative offices are separated as E-waste that includes outdated equipment of obsolete items like lab instruments, circuits, desktops, laptops, printers, charging and network cables, Wi-Fi devices, cartridges, sound systems, UPS, biometric machine, scientific instruments etc. The segregated waste can be sold the MoU signed agency for recycling.