



# Environmental and Sustainability Guidelines

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University of Colombo

2021

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Center for Environmental Initiatives (CEI)



Being one of the most discussed topics in the century, Climate change is growing as an imminent threat potent enough to wipe life out from the earth in the future. Besides, the natural resources fueling life are declining in quantity and degrading in quality. Amid all these growing environmental issues, there is a responsibility on everyone`s shoulder to prevent those issues from intensifying. As a deep-rooted educational institution of the country, the University of Colombo (UoC) has already entered the path of becoming a sustainable and environmentally friendly institute, inspiring its new generations of graduates and staff to become responsible individuals towards the environment. Center for Environmental Initiatives (CEI) was established in 2017 to achieve environmental protection and sustainable green development within the University premises. With the positive progress so far, the CEI expects to make every stakeholder at any level in the University aware of the exact responsibility they hold in achieving green goals. This document presents a series of guidelines recommended by the CEI for the UoC community to follow within the university premises. For explicit and more accurate understanding, this series of instructions is divided into three groups as follows:

Guidelines,

- applicable for adopting sustainable practices within **existing buildings and facilities** - **administration and relevant stakeholders**
- to consider when planning to commence **new buildings and renovations** - **administration and relevant stakeholders**
- for the **general practice** - **staff and students**

	<b>Existing buildings and facilities</b>	<b>New buildings, renovations</b>	<b>General Practice</b>
<b>E N E R G Y</b>	Conduct an energy audit and follow up action	Design to get the maximum benefit of the natural light and natural ventilation	Turn lights and fans off in empty rooms disregarding the time of the day
	Energy metering and monitoring to understand and identify large scale energy consumers	Select proper interior colours to reduce the light requirement	Unplug electronics when you are out of the office
	Use energy-efficient equipment: air-conditioners, lights, computers, photocopy, fax, printers, laboratory equipment, etc. (check energy star rating or certificates)	Use energy-efficient roofing materials, design vertical-rooftop gardening	Do not leave mobile phones, tabs and laptops for charging unnecessarily. Unplug them once they are fully charged.
	Manage water use and enhance conservation measures (e.g. reuse treated water, sensor taps)	Consider proper insulation of walls, floors, and ceilings to ensure that A/C energy is not wasted	Shut down computers and other equipment, or place them into sleep mode when they are not being used
	Monitor equipment periodically and upgrade, as needed (e.g. Compressed Air Systems for Leaks)	Use energy efficient bulbs ( CFLs and LEDs) and locate them properly	Take the stairs instead of the elevator. (an elevator consumes roughly 2.5 Wh per person to travel one floor)

	Draught-proof any gaps/openings between the interior and the exterior of the building (doors, windows, and vents)	Plan to make thermal comfort solely by fresh airflow	Maintain the A/C temperature at ~ 25 °C
	Research the possibility of utilizing renewable energy to completely or partially fulfill the energy requirement of the faculty/institute. (e.g. solar panels)	Invest in energy-efficient appliances (e.g. select computers on energy star rating) with plans for regular monitoring and maintenance	Do not let the door/windows open when the A/C is on
	Use multifunctional devices instead of many devices (e.g., multifunction printers instead of separate copier, printer, and fax machine) and reduce the requirement of more devices by increasing the number of users per device	Use renewable energy sources to completely or partially fulfill the energy requirement of the building (e.g. solar panels)	Make sure the lights in corridors and gardens are switched off in the morning.
<b>W A T E R</b>	Conduct a water audit and follow up action	Treat wastewater and use treated water for gardening and flushing toilets	Turn off the tap while lathering and scrubbing hands, then turn it back on to rinse
	Use water-efficient appliances. Install self-closing taps in common places	Harvest rainwater for gardening, flushing toilets and cooling systems	Report leaks to the relevant officers
	Check faucets, pumps, toilets, hoses and other appliances for leaks and fix them promptly	Invest in water-efficient appliances (e.g. automated taps) with plans for regular monitoring and maintenance	Consider the amount of soap you use per one wash to reduce water waste
	Treat wastewater and use treated water for gardening and flushing toilets	Install self-closing taps in common places	Assign people to inspect broken taps to be mended
	Harvest rainwater for gardening, flushing toilets and cooling systems	Fix elevators to open at selected floors to minimize frequent stoppage	
	Use eco-friendly sanitizers and soaps to reduce water consumption		
	Minimize water usage for cleaning purposes		
	Water the landscapes in the morning and prevent doing it when it is windy		

<b>W A S T E</b>	<b>Avoid waste generation</b>		
	Ban single-use polythene lunch sheets, bags and plastic bottles on university premises. Encourage using bio-degradable material for food wrapping	Refuse unnecessary product packaging, request reusable or returnable containers or ask vendors to take packaging back	Bring a reusable lunchbox and a water bottle/cup from home
	Do not buy and distribute bottled water, food in polythene/plastic wraps, plastic straws and utensils during campus functions	Order the right amount of materials	Dine in or bring reusable containers when buying food and drinks from university canteens
	Do not allow plastic/polythene decorations during campus functions	Store materials correctly to prevent damages	Do not buy bottled water, food in polythene/plastic wraps, plastic straws and utensils
	Refuse unnecessary product packaging, request reusable or returnable containers or ask vendors to take packaging back	Make hydration stations to refill water bottles/cups	
	Make hydration stations to refill water bottles/cups		
<b>Reduce waste</b>			
<b>Minimize paper waste</b> <ul style="list-style-type: none"> <li>• Purchase light weight paper</li> <li>• Encourage double sided printing</li> <li>• Use small fonts, single spacing, and narrower margins for documents</li> <li>• Allocate page limits for reports and consider not making a cover page compulsory when possible</li> <li>• Store office files digitally</li> <li>• Communicate through e-mails</li> <li>• Maintain a notice board for announcements rather than sending copies for individuals</li> </ul>	<b>Minimize toxic/hazardous waste</b> <ul style="list-style-type: none"> <li>• Use viable sustainable construction materials minimizing concrete and steel</li> <li>• Use latex paints instead of oil-based paints</li> <li>• Use biodegradable cleaning material (e.g., Bio Clean)</li> </ul>	<b>Minimize paper waste</b> <ul style="list-style-type: none"> <li>• Do double sided printing</li> <li>• Use small fonts, single spacing, and narrower margins for documents</li> <li>• Do not include a cover page if it is not compulsory</li> <li>• Communicate through e-mails</li> <li>• Try to use your computer, laptop, mobile phone or tab to save announcements, information and other documents rather than printing to get hard copies</li> </ul>	

<ul style="list-style-type: none"> <li>Use digital boards in meeting rooms where possible to display minutes and memos without providing hard copies</li> </ul>		<ul style="list-style-type: none"> <li>Do not print drafts of large documents like theses, handbooks and academic handouts. Finalize them before printing.</li> </ul>
Stock real crockery and cutlery in the office to minimize using disposable items (The biodegradable ones can be considered for occasional use)	Paint safety signs, directions and location names on walls instead of placing sign boards or use sign boards made up of recyclable or environment friendly materials	Buy food wisely to minimize leftovers
Purchase durable appliances/equipment, use them according to manufacturer's directions and have plans for regular monitoring and maintenance	Purchase durable appliances/equipment, use them according to manufacturer's directions and have plans for regular monitoring and maintenance	Use university libraries and computer rooms more to avoid purchasing books, journals and newspapers
Use fast draft mode and monochromatic printing (black and white printing) to save ink	Plan accurately to minimize construction mistakes	Use cloth napkins and reusable sanitary items
Minimize toxic/hazardous chemicals usage in laboratories. Promote group practicals or demonstrative sessions when toxic/hazardous chemicals are used	Dispose of contaminated waste correctly	Use appliances/equipment according to manufacturer's directions and do regular monitoring and maintenance
Do bulk purchasing to reduce individual packaging		
<b>Reuse</b>		
Start an Upcycle station for office supplies such as used paper, paper clips, rubber bands and brass fasteners, old office equipment and furniture. Make it a protocol to check the Upcycle Station before re-ordering any new item	Donate extra material/equipment/furniture to needy people/institutes	Reuse paper waste <ul style="list-style-type: none"> <li>Use single side printed papers for drafts</li> <li>Reuse cardboard boxes to store items</li> <li>Use two-way or send-and-return envelopes for internal mail</li> <li>Reuse old file folders with new labels</li> </ul>

		<ul style="list-style-type: none"> <li>• Make your own scratch pad</li> </ul>
Check possibility of upgrading equipment to expand the lifespan before replacing them	Use construction waste like concrete, gravel, dry wall from previous projects for back filling	Check for reusable items before re-ordering any new office requirement
Reclaim reusable parts of equipment		
Donate old computers and electronic devices to schools		
Recharge empty printer cartridges instead of buying new ones		
<b>Recycle</b>		
Segregate and store waste in properly labelled bins, i.e., metal, plastic, paper and glass	Segregate waste, store them and send them for recycling	Segregate waste and dispose of them in the correct bin
Hand over paper waste, used PET bottles and glass bottles to the university Waste Storage Center (WSC). If you are located far away from the WSC, initiate a plan with the help of CEI to work with local recyclers	Name one or few employees to supervise post construction/renovation and long-term waste management and related record keeping	Do not crumple paper waste before disposing. Only unwrinkled and clean papers are accepted for recycling
Store E-waste separately until recycling	Use reclaimed, recycled and sustainable materials and products	Clean PET and glass bottles before disposing
Name one or few employees to supervise waste management and related record keeping	Purchase recycled products (e.g. printing sheets, toilet papers, tissue papers) to support recycling	
Purchase recycled products (e.g. printing sheets, paper napkins) to support recycling	Purchase recyclable material and products to support recycling	
Purchase recyclable material and products to support recycling		
<b>Waste Treatment</b>		
Compost organic (food, garden waste) waste	Install composting facilities	Dispose of hazardous waste properly
Develop proper hazardous waste management facilities in institutes where it is applicable	Develop proper hazardous waste management facilities in institutes where it is applicable	Volunteer for environmental campaigns such as 'shramadana'

B I O D I V E R S I T Y	Conduct floral and faunal surveys and develop an inventory	Maintain open spaces among buildings	Volunteer and contribute to tree surveys, conservation and tree planting programmes
	Introduce new landscaping practices which attract biodiversity that include butterflies, bees, birds and repel pests such as mosquitos	Maintain forest vegetation and minimize cutting trees for construction purposes	
	Conserve remaining trees and maintain the existing biodiversity	Design vertical and rooftop gardening	
	Plant a variety of trees with genetic diversity to improve biodiversity and to offset carbon to cover unproductive open areas	Plant a variety of trees with genetic diversity to improve biodiversity and to offset carbon to cover unproductive open areas	
T R A N S P O R T A T I O N	Buy zero emission or fuel-efficient vehicles in the future		Use public transportation
	Promote public transportation		Use active travelling if possible
	Arrange passenger-friendly shuttle services with the collaboration of CTB		
A W A R E N E S S	Conduct awareness sessions on environmental management at faculty/institute orientation programs with the collaboration of CEI	Discuss with vendors/contractors about the university concern regarding sustainable construction/renovation	Participate in awareness programs to get the knowledge on university`s environmental policy, commitments and act accordingly
	Name a panel/ group/ committee of staff to work on and keep records on the waste management and other environmental concerns	Discuss and integrate environmental protection at planning stage to minimize generating contaminated water, land disturbance, dust pollution, etc.	Initiate a division for environment conservation in your student club/society and raise awareness among students and organize relevant activities
	Make awareness sign boards where necessary (e.g. Small notice near waste bins to remind the need for proper segregation)		

	Arrange regular meetings with cleaning and canteen staff to make them aware of the university green policies and monitor their activities		
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